

Surf Storage Product

5 April 2025 Charlotte
244

2025

A portable surf storage product to take to the beach efficiently, whilst ensuring organisation.



OVERARCHING PROBLEM + BRIEF

Damage from sand and moisture often leads to the **premature disposal of beach equipment** not built to withstand harsh coastal conditions. Sand causes micro-tears in towels, wetsuits, and swimwear, while saltwater corrodes metal parts like goggle clips and zippers, especially on surfboard bags, which frequently break. In my own garage, a lack of dedicated, organised storage has resulted in tangled leashes, warped boards, and clutter. This disorganisation, combined with environmental wear, increases waste and accelerates the need for replacement. (WIDECAS, 2018). In particular, the images highlight my family's chaotic garage and broken surfboard bag zippers.

What do you think?

CNS ENEG12007 @ 2025.04.09 1:06 PM

Hi Charlotte, I think this is a brilliant idea! It addresses such a common problem for so many people living by the beach. The pull-up rack is also a great addition to the idea. Could you make components of the bag (rack, board holder, etc.) removable/attachable so people can use based on their gear needs?

Jared @ 2025.04.10 6:15 AM

Hi Charlotte, it appears you have come up with an effective solution to prevent premature failures of beach equipment. For the rack, a metal such as aluminium may be preferable as it is light and will not rust, and a waterproof material such as PVC or waterproof canvas will make a durable and splashproof bag. Velcro flaps instead of a zipper could also be used as zippers can corrode or seize in a saltwater environment. As for the wheels, I suggest a much larger set of wheels that will not sink into the sand when the bag is pulled along the beach- large rubber wheels as seen on a wheelbarrow or trolley may be suitable.

Harrysteel @ 2025.04.17 7:35 AM

Hi Charlotte,

This looks like it would be a practical and user-focused solution, however it may face issues with corrosion, sand ingress, stability of the rack in windy or uneven conditions, and water pooling in the bag. To improve the design, you could use marine-grade materials, adding drainage ports, ventilated panels, and reinforcing the rack with locking mechanisms would enhance durability and performance. Incorporating lightweight, sand-resistant fabrics and modular compartments could further increase user convenience and product longevity.

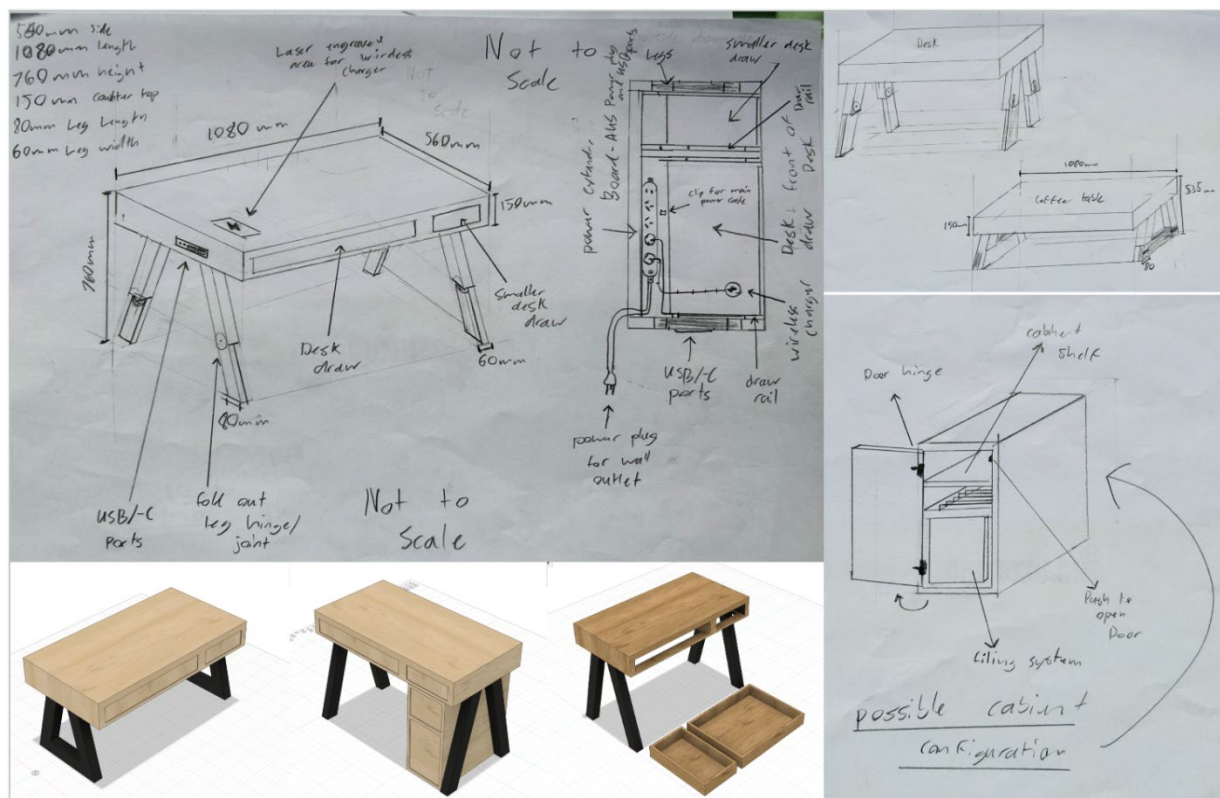
IP Australia @ 2025.04.30 10:48 AM

Hi Charlotte,

What a clear problem statement and creative problem-solving. Best of luck with the project!

Kali, Project Support Officer, IP Australia

Multi-Purpose Convertible Coffee Table to Working-From-Home Desk



As working from home has increased since the COVID-19 lockdowns, there is a genuine need for furniture that is office/work friendly and can be multi-purpose in a home. My major design project will address this issue as I will develop a piece of furniture that will convert from a modern coffee table into a work-from-home desk with an attachable side cabinet. I will also integrate and incorporate a range of modern technology in my design to ease working from home. The interior of the cabinet will also be customisable to a person's liking.

What do you think?

UpRising @ 2025.03.24 10:29 AM

Great idea Angus. A lot of city offices are now very much supporting staff to work from home for a few days a week. So even with out Covid, having a flexible space / furniture to accommodate work from home is a great idea.

What are three things that you need assistance with?

ronisha @ 2025.04.09 11:26 AM

I like this Multi-Purpose Convertible Coffee Table concept because it addresses the growing need for flexible work-from-home solutions. Like this design, our Smart Study Lamp for ENEG12007 also focuses on improving productivity in small or shared environments. One idea to enhance this table further could be integrating built-in lighting or USB charging for added functionality. – Ronisha Magar, ENEG12007

CNS ENEG12007 @ 2025.04.09 4:13 PM

This is a great idea and is so functional. I think it is not only relevant to those working from home, but also students like myself in small living spaces. The idea to integrate the charging ports and power board makes it even more appealing. I suggest to aim for super light weight materials without compromising durability for an easy transition from coffee table to desk, as this might be difficult for people to do by themselves. Good luck!

Matt Wood @ 2025.04.09 6:49 PM

Hi Angus,

This is a great idea that would be beneficial for many people.

More and more people are working from home these days, and with the current housing crisis, free space in households and apartments is getting harder and harder to find. A multiuse coffee table that transforms into a desk kills two birds with one stone. A multipurpose desk and coffee table also help the worker differentiate from work to home at the end of the day as well.

A recommendation I have to consider is incorporating the use of an artificial intelligence system into the desk like an Amazon Alexa etc. We are living in a booming generation of artificial intelligence. The use of artificial intelligence is an invaluable tool that companies around the world are using. 35% of Americans use artificial intelligence on a daily basis. The AI assistant will help the users of the desk work more efficiently whether they are students studying or workers.

Another recommendation would be to ensure that the product is made out of sustainably sourced materials. Sustainable products appeal to consumers and will help promote the product to extended target audiences.

All of the best.

Kind regards,

Matthew Wood

(CQU Engineering Student - ENEG12007)

Riley @ 2025.04.10 7:27 AM

Hey Angus, you are certainly right that during COVID, many people started working from home and often relied on kitchen tables, coffee tables and other general home commodities to enable some home office space. Have you thought of researching some general specifications of lounges or living area chairs that the collapsible coffee/office table could slide underneath whilst not being used? This way, you could design the table to be within certain dimensional constraints for flat pack storage whilst not being used.

Regards, Riley Harney.

CQUniversity

Undergraduate Mechanical Engineer

SarahHardy @ 2025.04.10 12:09 PM

This is a great idea Angus, especially as so many people are working from home now. The addition of a filing system is convenient and the charging station would be very useful to those who require the use of a laptop and phone for work/study. This idea could have some extra functions incorporated to make it even more useful, such as more adjustable height settings for those who like to stand while working. Standing desks have been increasing in popularity over the last few years, due to proven health benefits. The desk could also come with a built-in pencil/stationary holder for ease of storing supplies when not in use. Another suggestion is to make the desk from recycled materials, to make it more environmentally sustainable. The final element which could improve ease of use would be to make the table from lightweight materials, making it easy to switch between a desk and a coffee table.

Regards,

Sarah H, CQUniversity student

Geofrey Garcia @ 2025.04.11 10:57 AM

Hello Angus. I like the potential of your idea. As many have already mentioned, versatility and flexibility are so important, especially in today's fast-paced and ever-changing work environment.

I see that flexibility is a big part of the concept of the table, and as others have commented, there is added potential for this table by adding more features to it, such as integrating AI and lighting and charging facilities. However, not all people need all these features. I believe there is an opportunity to better capitalise on the flexibility of the table by making it more MODULAR. Could a jigsaw-puzzle-like structure be an option to promote flexibility? Maybe integrate MagSafe (as used in iPhones) to hold a few selected jigsaw pieces together? For example, part of the table top of the desk (shaped like a jig-saw puzzle) can be taken out and replaced with an AI module (Matt Wood @ 2025.04.09 6:49 PM) or instead of the AI module, a pencil holder or lamp (SarahHardy @ 2025.04.10 12:09 PM & ronisha @ 2025.04.09 11:26 AM). Another example is that the standard A-shaped legs that come with the base model of the desk can be EASILY swapped out for legs that can rise and lower (SarahHardy @ 2025.04.10 12:09 PM), or maybe you could even add easily attachable table extensions to make it bigger.

This is also where lightweight and strong materials can become very important (CNS ENEG12007 @ 2025.04.09 4:13 PM). Modularity will add a lot more joints to the desk, which ultimately decreases the stability and structural integrity of the desk. But I believe that with sufficient engineering and creativity, a solution can be found. The Idea of the Multipurpose table is Brilliant, and it is a real opportunity. I hope you continue to pursue this idea.

All the best!

Geofrey Garcia

Cody Hamilton @ 2025.04.13 1:10 PM

Great Idea Angus.

I was just wondering if you have given any consideration to the standards or guidelines surrounding the design of office desks/tables. I am currently working on a modular storage project for ENEG12007, which will supposedly integrate into different office desks/tables, and have run into several issues regarding the ergonomic and accessibility standards laid out by Standards Australia and the Queensland government.

I would recommend applying ergonomic standards such as those outline in AS 4442:2018, to ensure comfort during long work sessions as well as complying with regulations. For example, you may design the desktop height to be between 700 - 750mm when in "working mode" to provide adequate leg room.

Your customizable interior cabinet concept aligns well with user-focused design, although this can be strengthened by a modular focused design. Potentially consider using a modular insert system with removable dividers or 3D-printed customizable trays for different stationary. I would recommend referring to Tencom's website to optimize the design for both production and useability.

Tencom - Benefit of Modular Design in Manufacturing: <https://www.tencom.com/blog/the-benefits-of-modular-design-in-manufacturing?srltid=AfmBOoo-mCRg7T3PYbwptWlku0AyQomQ4WHaC2DL82Xv1b9gvkrjF0hG>

- Cody Hamilton from ENEG12007 Creative Engineering CQUniversity.

IP Australia @ 2025.04.30 10:47 AM

Hi Angus

Great to see such creative thinking! I can tell you work hard on these detailed drawings to incorporate all your ideas.

Kali, Project Support Officer, IP Australia

Future Foundations: Affordable housing for young Australians

Future Foundations: Affordable housing for young Australians (Addressing the Housing Crisis in Australia for Ages 17–30)



My Solution:

- I am designing a tiny home housing estate tailored for ages 17–30, focusing on:
- Affordability – Cost-effective designs to reduce housing expenses.
- Community – Shared spaces to encourage social connections.
- Efficiency – Space-saving layouts that maximize comfort in small homes.

What I Need Help With:

- Expert feedback on modern, space-efficient home designs.
- Advice on cost-effective materials & construction techniques.
- Connections to urban planners, architects, or housing experts.

10 February 2025 by **William2404**

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2025

This project aims to tackle housing challenges for Australians aged 18 to 30 by developing affordable, community-centered tiny homes. Designed to reduce stress from the housing crisis, these homes will use sustainable materials, renewable energy, and waste reduction strategies. Shared spaces will foster social connections, financial relief, and mental well-being. The goal is to create high-quality, eco-friendly living environments that meet the needs of young adults. By promoting affordability and sustainability, this project provides an innovative solution tailored to the generation's preferences, ensuring a supportive and inclusive community while addressing long-term housing and environmental concerns.

What do you think?

CameronW17 @ 2025.02.11 4:05 AM

Great idea William! it looks great. Such a good idea to try provide affordable housing for the newest generation of adults.

Declan @ 2025.02.12 3:32 AM

Wow, greatest invention I've seen in a while. This is a real world solution and can help the future generation and the growing issue of over population and the housing crisis. @William2404 should win a noble peace prize for this outstanding creation. The prize money would help kickstart this entrepreneurs career to change the world. 10/10 would like again if I could.

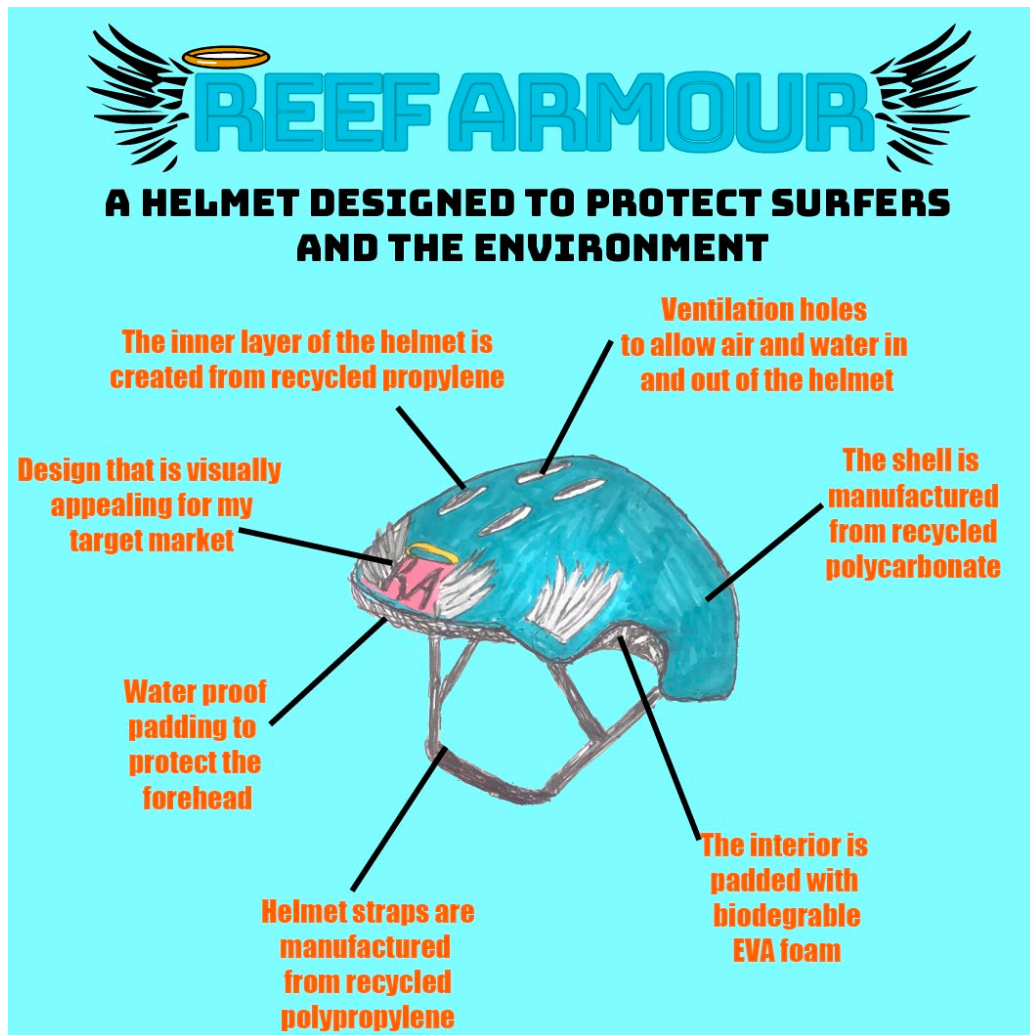
IP Australia @ 2025.04.29 8:30 AM

Hi William,

I love how much you've thought about the challenges facing young Australians, and how solutions-focussed you are. Keep up the great work!

Kali, Project Support Officer, IP Australia

Reef Armour



10 February 2025 by Liam 8192

30

2025

Surfing makes up 26% of head injuries as a percent of sports injuries in Australia and 72.7% of my target market believe wearing a helmet surfing has been stigmatised. Additionally, everyday around 8 million pieces of plastic make their way into our oceans. These and many other shocking statistics has inspired me to design a helmet manufactured from recycled plastics and design it's appearance based off what my target market deems 'cool' so that they feel safe and confident wearing a helmet surfing. I am seeking advice from anyone who has experience in molding helmets or putting the components of a helmet together.

What do you think?

You must be [logged in](#) to post a comment.
Comments

UpRising @ 2025.02.22 12:41 PM

Great concept Liam. You have captured so many overlapping issues here, protecting your safety whilst looking after the oceans, brilliant! The helmet design could also act as a great visual message to help create awareness for both issues.

Do you have contacts with high pressure molding? These guys may also be of interest, <https://www.epa.nsw.gov.au/your-environment/plastics/sustainability-partnerships/case-studies/great-plastic-rescue>

Looking forward to seeing you project in action.

Liam_8192 @ 2025.02.23 1:37 AM

Thanks Uprising,

I have got two contacts, one contact is helping me get recycled material and the other **might** be helping me 3D print or vacuum form my helmet.

Injection moulding is off the table for me due to how expensive it is to do it. However blow moulding, vacuum moulding or 3D printing will probably be how I want to manufacture my helmet.

Kind regards,

Liam

Amelie E @ 2025.04.09 1:24 PM

Hi Liam,

Unfortunately I don't have any knowledge on constructing helmets however I think this is a great idea which will significantly improve the safety of surfers and also seems like it is sustainable from your material selection. With your material selection, do you think that sea water and the waves will affect your overall design and remain durable? Also, looking at the straps for the helmet, can you ensure that it's adjustable for all users and also won't snap open while surfing? Aside from that I think this is a great idea and so much room to be customised. Great work!

Regards,

Amelie CQU Engineering Student

Jared @ 2025.04.10 6:26 AM

Hi Liam, your design looks suitable and appealing for a surfer and using recycled materials is an effective way to prevent material waste. Regarding the helmet straps, a strong buckle is necessary for safety during a wipe-out to prevent the helmet falling off, a motorcycle helmet buckle in stainless steel (to prevent corrosion) may be suitable. Chin padding where the strap lies will also make the helmet more comfortable to wear.

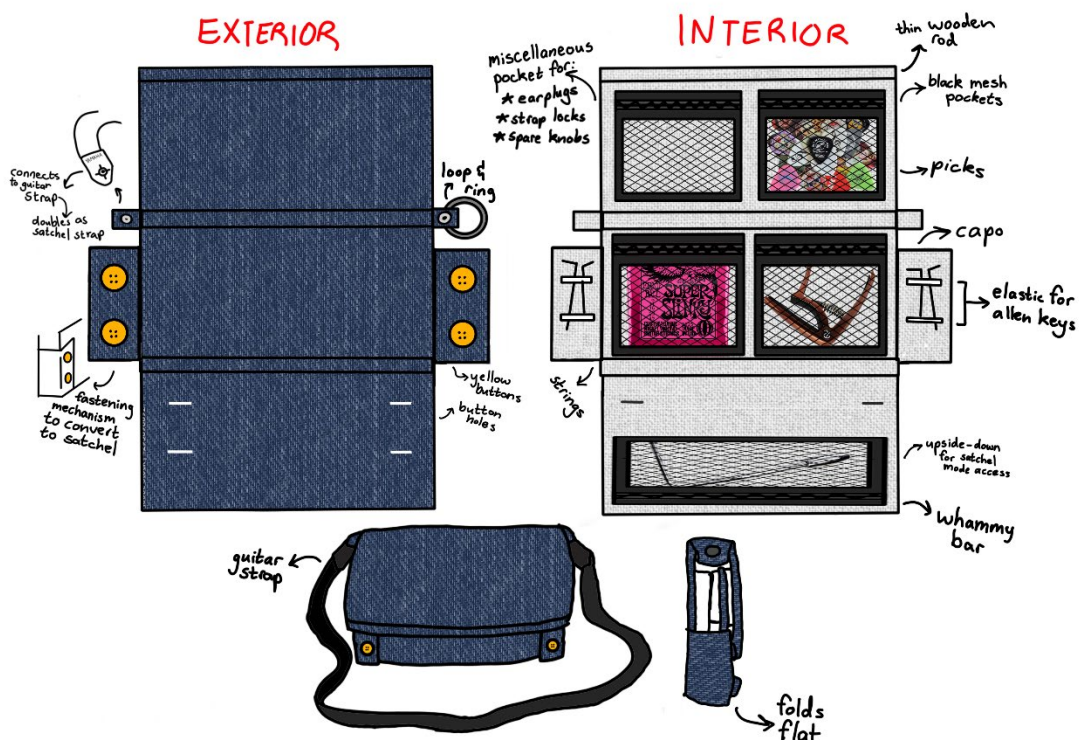
Jared, CNS 2, CQU ENEG12007 Creative Engineering Class

Hi Liam,

It's clear you have put a lot of thought into your project. I love the use of colour in your drawings—very artistic!

Kali, Project Support Officer, IP Australia

Portable guitar accessory storage solution



8 February 2025 by emiliasr97

25

2025

The average guitarist wastes an estimated \$50 per year due to losing guitar picks, a figure that doesn't even include losing important guitar accessories such as capos or slides. Additionally, guitar players who travel for performances require a universal storage solution that can hold everything they need, eliminating the stress of losing equipment on the road. This project aims to enhance the on-the-road gig experience by designing a practical, portable organiser to keep essentials secure and easily accessible, with the option for a long-term wall hanging design in the studio or to convert into a pocketed satchel!

What do you think?

You must be [logged in](#) to post a comment.
Comments

UpRising @ 2025.02.21 10:01 AM

Great idea Emiliars. Love the mock ups and the portability of your design. I wonder if you could incorporate old guitar parts into the bag, as buttons etc? What are some of the challenges you are facing? How can we help with your next steps?

Looking forward to seeing your design on the streets!

Isaac Jansen from ENEG12007: Creative Engineering @ 2025.04.11 6:47 AM

Great idea [emiliars97](#)!

However, I can see a few main problems.

Firstly, more sensitive equipment such as electric tuners could get easily damaged in this as opposed to a conventional hard case for a guitar. Do you have a solution for this? otherwise I might suggest a padded or shelled area for such sensitive equipment.

Secondly, conventional buttons can get tedious, especially if four of them are needed to close the bag. Additionally, such buttons can get worn and loose, even fall off. Have you considered using a secondary adhesion option, like velcro for security? Have you considered snap buttons? They would be much faster to clip and unclip.

Finally, the only problem I see with using a guitar strap as your strap is that some guitarists prefer a very long strap, which would be very inconvenient to shorten and lengthen between performances. While I think the guitar strap idea is fun, it won't be convenient for everyone, so at least offer the option of a conventional strap if you do sell this.

Once again, brilliant idea! Take my opinions with a grain of salt, I'm not an expert, just an engineering student who has to do this for an extra mark. Good luck, and keep prototyping!

Isaac Jansen from ENEG12007: Creative Engineering

Patrick Mattes from ENEG12007: Creative Engineering @ 2025.04.13 1:06 PM

Hi Emiliars,

Wonderful idea! Incorporating this type of organisation within a guitarist's ecosystem is a phenomenal idea. I particularly like the simple to use design, utilising a guitar strap for carry, serving as storage and being functional for the satchel.

I do have some potential recommendations for you:

Primarily, integrating some sort of sealing system between the outside of the bag and the inside. As is, using the netting material to hold accessories within the satchel would allow dust, dirt, and potentially fluids to enter in, particularly when travelling on the road. Being an open design, copious amounts of dust and dirt would be able to enter the guitar satchel, which particularly if electronic equipment is stored within the satchel, wouldn't be ideal.

I would also suggest using some other material for the outside of the satchel. As is, the jean-type material that the satchel appears to be made from would also soak in dirt and fluids over time. Potentially opting for some hydrophobic material would further reduce the dirt and grime accumulated over time.

These are just my thoughts and overall I really like your idea. I think it is a system well worth exploring, particularly as more people begin to peruse a career in music.

Good luck with your prototyping journey!

Regards.

Patrick Mattes from ENEG12007: Creative Engineering

IP Australia @ 2025.04.29 5:37 AM

Hi Emiliars,

Your attention to detail and thoughtful planning is really great to see, keep up the good work!

Kali, Project Support Officer, IP Australia

Shearify

Shearify

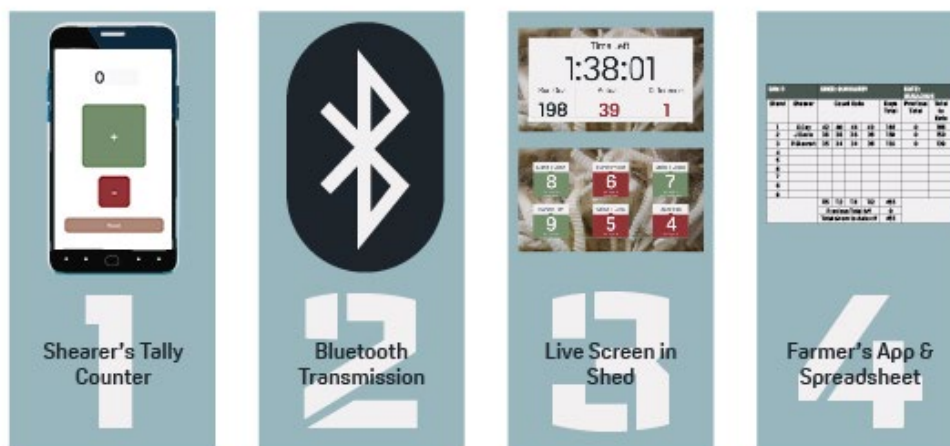
Smarter Shearing, Better Results

Shearify is a Shearing Management System solution designed to enhance productivity through motivation, accountability, and efficiency in shearing operations. Each shearer's tally counter updates a live display in the shed, showing countdowns for each run, team and individual targets, and real-time progress (color-coded for performance). Farmers/accountants can access data through an app, which consolidates tallies into a digital spreadsheet, replacing manual records. Shearify has the potential to integrate an API with WoolClip, an app developed by the Australian Wool Exchange (AWEX). WoolClip integrates with eBale technology, allowing for tracking of individual wool bales through the supply chain using RFID tags, shearify would compile data about mob numbers to provide feedback to the farmer on kg of wool shorn per sheep.

Key Features

- 
Real-Time Updates
 Shearer's tallies instantly appear on the shed screen.
- 
Automatic & adjustable Targets
 Automatically calculates personalised run target as well as allowing individuals to alter targets.
- 
App & Spreadsheet Sync
 Data is recorded in an online tally book for easy management.

- 
Performance Metrics
 Track individual and team shearing counts and concondates them into performance graphs.
- 
Potential WoolClip Integration
 Connects to industry-standard apps enabling traceability and providing feedback to the farmer from throughout the supply chain



7 February 2025 by **Penny**

25

2025

High input costs place significant financial pressure on farmers. Improving wool farmers' economic efficiency—maximizing returns relative to the cost of establishing, running, and maintaining the system—is essential. Shearify is an innovative solution that enhances

productivity to reduce shearing costs. Further, Shearify aims to integrate with WoolClip to enhance traceability and provide feedback to the farmer.

What do you think?

You must be [logged in](#) to post a comment.
Comments

Amelia Boag @ 2025.02.07 11:47 AM

This is a great idea would love to know more

#farmlife

#countrygirlshkeitformegirl

#famousfarmer

UpRising @ 2025.02.07 11:47 AM

A great concept Penny. Have you received any feedback from shearers or farmers about your app? Wondering if links to mental health support and financial assistance services could be a benefit?

If you could list one or two key areas that you need some help with that would be great.

Looking forward to seeing your project come alive.

Penny @ 2025.02.08 12:06 PM

Thanks for your interest. I am currently waiting for feedback from the industry body AWEX and will have clearer answers on areas I need help with after that. I have received some survey feedback from wool growers and interest from shearers.

IP Australia @ 2025.04.29 5:33 AM

Hi Penny,

Your hard work really shines through in this project. It's clear you've put a lot of effort into designing your solution for improving efficiencies. Good luck with the rest of the project!

Kali, Project Support Officer, IP Australia

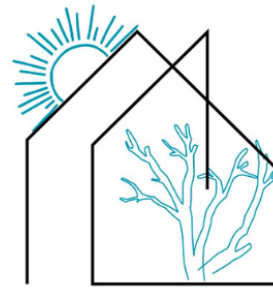
GeoGlow – Geothermal Distribution Networks

GeoGlow - Geothermal Distribution Networks

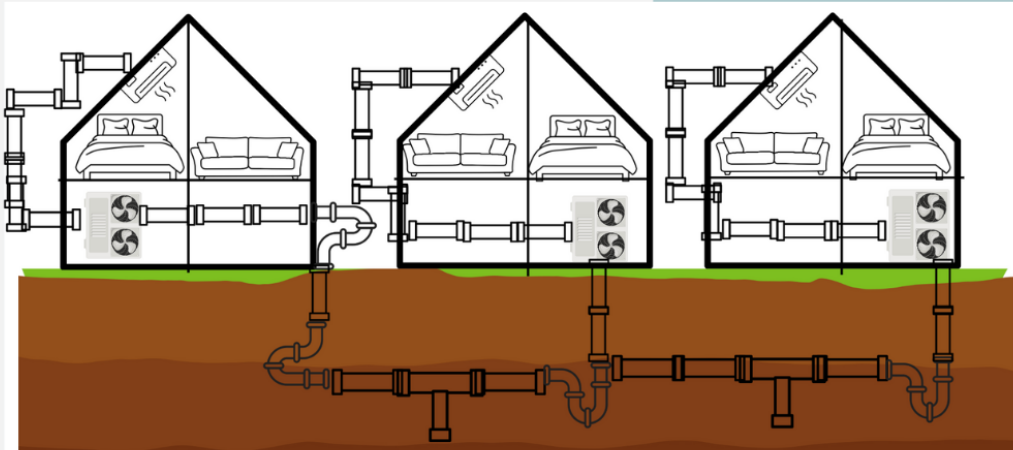
Building sustainable communities, one geothermal connection at a time.

- ☐ Eco Friendly and Cost Effective
- ☐ Clean, neutralising and regaulating
- ☐ Reduction on the powergrid

Gathering natural heat from the ground, where it travels through pipe work while the air regulates itself to support ideal home temperatures.



GeoGlow
Heating and Cooling



7 February 2025 by **Billie1209**

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2025

Across the world, geothermal heating and cooling systems are used in many homes. The idea emerged from recognising the underrated potential of geothermal technologies in Australia. My point of difference is producing this idea into communities of residential homes. Geothermal energy gathers the earth's natural heat from the ground, offering an eco-friendly alternative solution for maintaining comfortable inside home temperatures while also relieving the strain on electricity infrastructure.

What do you think?

You must be [logged in](#) to post a comment.
Comments

UpRising @ 2025.02.07 4:39 AM

Such an interesting idea Billie. Loved the point of difference statement. Also clever use of metaphor of connection, great symbolic gesture of commitment to creating for the common good.

How can we help make this happen?

Billie1209 @ 2025.02.11 4:39 AM

Thank you,

I would love help with industry connections that have contemporary research and even academic journals regarding factors like best pipe systems for houses, ideal sources for the main system and proper simulation capabilities.

Also I would appreciate if there is support in creating simulations to test for the best solution.

IP Australia @ 2025.04.29 5:32 AM

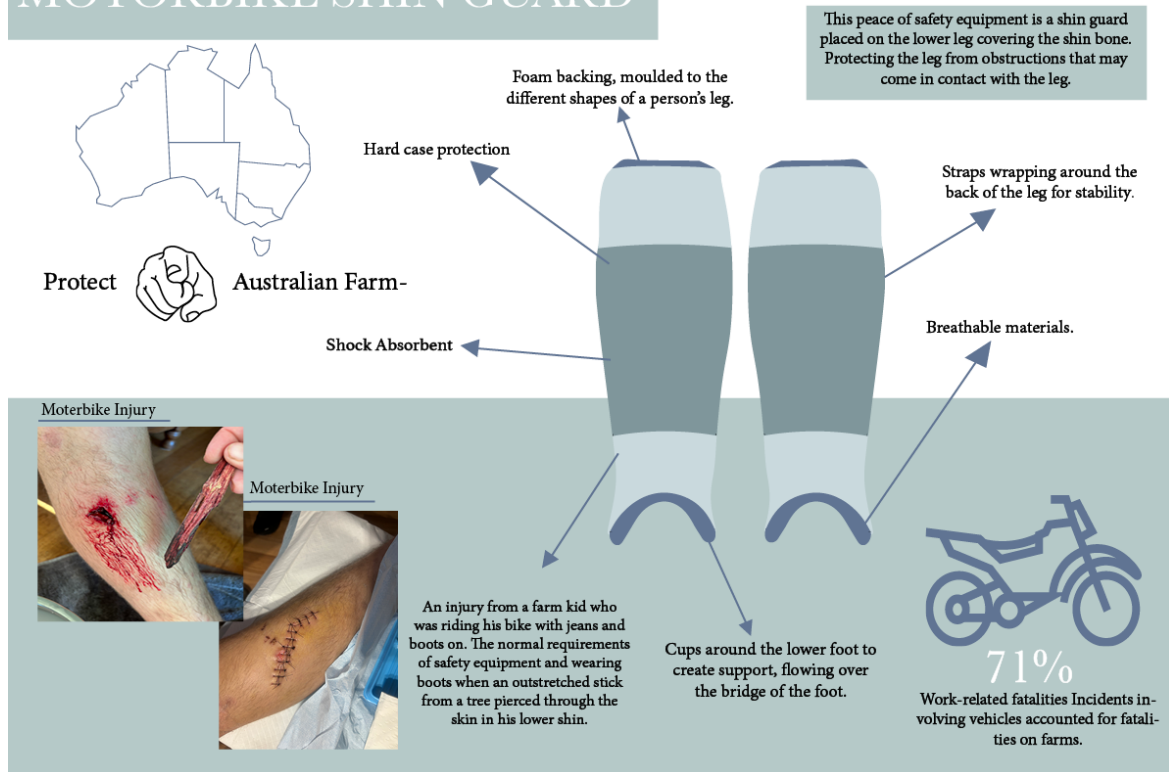
Hi Billie,

I love how much you have thought about the environmental challenges facing Australia and how you have focused on eco-friendly, renewable solutions. Keep up the great work!

Kali, Project Support Officer, IP Australia

Motorbike Shin Guard

MOTORBIKE SHIN GUARD



7 February 2025 by **Abrown**

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2025

In Australia, almost 22,000 people were hospitalised in the period from 2010–11 to 2014–15 as a result of injury which occurred on a farm; over three-quarters of them (77%) were males. Involving motorcycles and quad bikes accounted for 21% of hospitalisations in people aged 15 and over. Injuries occur frequently on farms with lack of safety equipment, my design was created to expand the protected area of farms when using motorbikes on stations. To decrease injuries as well as create a safe environment for farm users, who supply stock and food to our world tables, Protect your Australian farmers.

What do you think?

Amelia Boag @ 2025.02.07 2:28 PM

#Staysafe

#Speeddemon

#middleofnowhere

UpRising @ 2025.02.07 2:28 PM

A fantastic idea ABrown. Such a necessary product, can not believe this doesn't exist already, which means great justification and needs identification.

What are the next steps, are you ready to start prototyping?

Let us know what we can do to help get this out there.

katrinapienava @ 2025.03.11 9:47 AM

This is so innovative and amazing. I'm very impressed!!!

CamM @ 2025.04.10 2:30 PM

Hi ABrown,

This is a great initiative and a solution to a real problem.

Have you thought about material and how the straps could work?

Velcro would be an easy option but it could be possible for the ends to catch on things and come loose.

Canvas or leather or a synthetic material with a pin buckle like a belt could be a way around this.

Good luck with your project!

Regards, Cameron Miller

Undergrad Engineer, CQUniversity

Myles @ 2025.04.11 9:40 AM

Hi ABrown,

As someone who frequently rides motorcycles and does motocross , I believe this is a great idea, albeit I usually do road or track riding and don't spend too much time on farms, however I can still see how useful this idea would be.

As far as I know farm workers are going to be inclined to keep putting on and taking off proper motorcycle or dirtbike protective pants and are often dressed in jeans or sometimes shorts, so having just a lower leg fitting accessory makes it much easier to put on or take off over the top of or under their usual apparel.

The only downside I can see is if the shin guards are needing to be worn for extended periods I can imagine how sweaty and abrasive they may be due to direct contact with skin, potentially causing blisters and/or rashes that will cause discomfort. There are a few ways to help combat the sweating issue, such as using mesh type materials to help with breathability, and maybe some under sleeve that is a compact fit to stop the guard from being in contact with skin directly, however this will reduce breathability ever further.

King regards

Myles

2nd year Engineering student, CQU

IP Australia @ 2025.04.29 4:57 AM

Hi Abrown,

Great work! You have clearly put so much thought and effort into this project. Keep it up!

Kali, Project Support Officer, IP Australia

SKIN SAFE, PLANET HAPPY



7 February 2025 by Alice Hansen

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2025

I am designing refillable sunscreen bottles that can be refilled at chemists and dispensers located in areas with high foot traffic and busy suburban locations.

What do you think?

Amelia Boag @ 2025.02.07 7:19 AM

#Skincancer

#Summerisover

#Slipslopslap

curtis.farrell @ 2025.04.09 6:31 PM

Hi Alice,

This is a great concept. Recyclable products are becoming much more popular with increased environmental trends, and I strongly believe this idea would be supported by many others.

There are multiple points that I believe you should consider while developing this concept. Firstly, would this concept of a sunscreen dispenser be a self sufficient process? If so, how would the payment for the refill be made? Perhaps, a digital card reader could be used - like a drinks dispenser or a car wash. Another point to consider is the mess that sunscreen can make. This could potentially be monitored by some sort of drainage system or bucket/sink system. I anticipate that the sunscreen would dispense post payment, so that people cannot take advantage of the products for free.

Overall, this is a great concept and I would be interested to hear how you are progressing.

Kind Regards,

Curtis Farrell (CQU Engineering Student - ENEG12007 Creative Engineering)

Sylvian MC @ 2025.04.11 12:21 PM

Hi Alice,

I really support this idea. Skin cancer is preventable with sun safety and yet it is widespread, especially here in Queensland where we have some of the highest rates globally. Making sunscreen readily accessible in populated areas would be extremely beneficial.

My first suggestion would be to have the containers and dispensers manufactured from recycled material. The fact that they can be refilled is fantastic and this would only make them more sustainable.

Also, for hygiene purposes, I assume that the dispensers would be motion-activated, similar to hand sanitiser dispensers around shopping centres, etc?

This is an amazing concept, and I would love to see this installed around cities!

Cheers,

Sylvian MC, (ENEG12007) Creative Engineering student at CQU

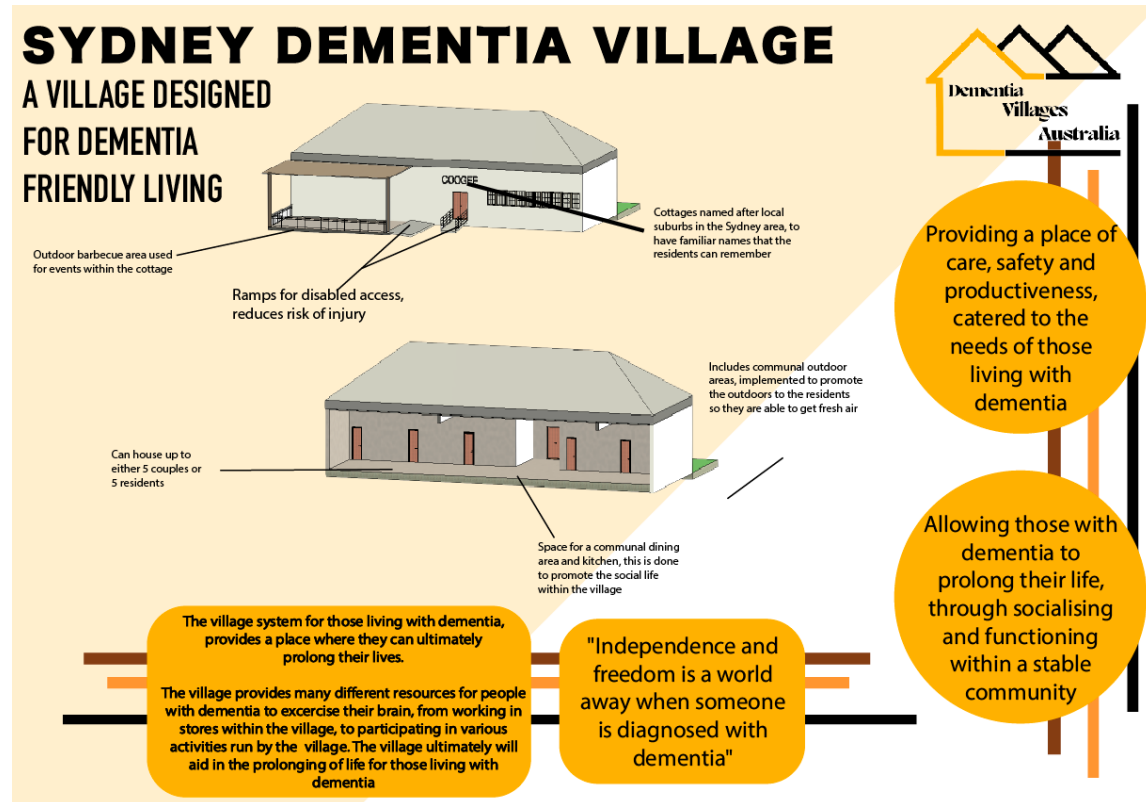
IP Australia @ 2025.04.29 4:53 AM

Hi Alice

Great to see such creative thinking in relation to an issue that is relevant for many Australians. Best of luck with the project!

Kali, Project Support Officer, IP Australia

Sydney Dementia Village



6 February 2025 by **Toby F**

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2025

In 2024, by age 80 years, 1 in 3 people are diagnosed with dementia. Dementia is a rising non-communicable disease, and in Australia there is not enough adequate living conditions that fit the needs of those with dementia. My solution is to design a village catered to the needs of people with dementia, including a functioning community, 24/7 help and constant activities to exercise the brain. The village will be using the area of long bay jail, it will use half the area for the village and the other half will be sold to a private development company to fund.

What do you think?

You must be [logged in](#) to post a comment.
Comments

IdeaSpies @ 2025.02.06 1:12 PM

Great idea Toby. IdeaSpies featured it a few years ago and this info may be helpful to your design:

"Korongee village is a \$25 million project being built in the suburb of Glenorchy in Hobart, which is expected to change the way we help dementia sufferers. It will feature a village structure based on a typical Tasmanian cul-de-sac streetscape that allows residents to feel at home and wander freely within a safe and supported environment for ageing". <http://mobile.abc.net.au/news/2017-07-19/australian-first-dementia-village-set-to-open-in-tasmania/8724772?pfmredir=sm>

UpRising @ 2025.02.07 6:06 AM

Great idea Toby. It is a massive concept.

Has your research uncovered any significant cultural value in this land? Wondering if there is an opportunity to connect with the traditional owners and if there is a way that this connection could be incorporated into the layout and design of your buildings? Esp if you are interested in developing a functioning community.

Keen to learn more about your idea and how we can help. What would be three things that you need assistance with this term?

UpRising

Toby F @ 2025.02.07 5:32 AM

Hello, thanks for your comment.

The three things I would need help with this term is connecting with professionals within the architecture/property field to help me with the design of buildings and their features, within the village. I would also need extending my existing skills of Autodesk Revit, in terms of attention to detail my skills are good but can be refined and improved. I would also need help learning how to make the project as suitable for dementia as it can be, such as different aesthetic features or different functions that can help people .

In terms of my research, I have not uncovered any significance about the cultural value in the land. I'm sure there will definitely be an opportunity connecting with the traditional owners of the land, in terms of incorporating it in the layouts of the buildings, I was thinking to possibly include a cultural building that educates the residents on the significance of the land to the traditional owners.

Thank you so much for your comment, keen to continue working on this project.

Angus Peshos @ 2025.02.11 3:35 AM

Toby this is an amazing Idea, I don't think anyone else could think of this idea, great job. Good luck!!!

Estela @ 2025.02.12 2:03 PM

The benefits of this Dementia community is far-reaching and vitally needed. Dementia comes in so many forms, affects people in so many ways and has such a variety of durations that it is important to ensure that people living with Dementia are given the opportunity to live the remainder of their life in a way that is most productive and pleasureable, instead of being confined to a death bed. Great concept. Best of luck.

Steve O @ 2025.02.12 2:21 PM

Toby,

A dementia village in Sydney is needed to provide a safe, supportive, and familiar environment for individuals with dementia, promoting independence, dignity, and quality of life in a community-based setting.

Your project highlights the increasing volume and demand, but also focuses on the commercial reality that land allocations and design & construction costs are primarily in the private sector. Wouldn't it be great to lobby government to support more of these vital villages on a public-private funding basis. Food for thought.

Overall, an exemplary project covering absolutely every aspect to ensure success.

Wishing you success!

Steve

scott spanton @ 2025.02.14 4:47 AM

Great stuff Toby. Surely there is huge demand for something like this? Get you old man to run a few feasons!

Nelson F @ 2025.02.15 7:43 AM

Great idea Toby

Kylie D @ 2025.02.16 7:43 AM

What a fabulous idea! To provide the support & care so many need. Well done Toby.

Anna E @ 2025.02.16 7:43 AM

What a great idea! Dementia is on the rise, however patients are placed in nursing homes where their needs are not met, are not a priority and staff lack the skills to support them. This village type living would mean that patients have some sort of living independence whilst in a controlled environment!

Costa Mihail @ 2025.02.16 3:20 AM

Well done to Toby F for focusing his project on a Sydney dementia village. So so important and offering ideas and solutions that needs a lot more attention from our government. Best of luck to you and congratulations on all your hard work.

Alissa Turinui @ 2025.02.16 7:43 AM

How clever! This would be an amazing concept Toby! Good luck with it

Helena @ 2025.02.16 3:22 AM

Hi Toby, This is a wonderful idea to provide more care to the dementia. You have considered communal dining, outdoor areas etc which is great! If the cost and space permitted, you can also design the communal area for more activities such as music, arts, game and so on. A well designed garden will also help the recovery as to provide more spaces for dementia sufferers to talk to nature. Wishing you achieve great success Toby!

Helena @ 2025.02.16 3:22 AM

Hi Toby, This is a wonderful idea to provide more care to the dementia. You have considered communal dining, outdoor areas etc which is great! If the cost and space permitted, you can also design the communal area for more activities such as music, arts, game and so on. A well designed garden will also help the recovery as to provide more spaces for dementia sufferers to talk to nature. Wishing you achieve great success Toby!

Belinda @ 2025.02.17 3:22 AM

Well done Toby,

A great concept & something that would be in high demand, and for many, a more dignified & independent alternative than just going into a nursing home.

Have you also considered an area that could house some resident pets like cats & dogs, as pets are often great therapy & company....I know they were for my mum when she had dementia & they would bring pets into the nursing home for a visit. Her whole face would light up!

Once successfully implemented there is no doubt that that this concept could be rolled out across other States in time.

Good luck with the completion of your project.

Elizabeth A @ 2025.02.17 5:58 AM

Great idea Toby! There is such a huge need for initiatives like this and your "Village" concept could make such a difference to so many people and their families. Keep up the amazing work.

Toby F @ 2025.02.20 5:32 AM

Thank you

Angus, Estela, Steve, Scott, Nelson, Kylie, Anna, Costa, Alissa, Helena, Belinda and Elizabeth for the comments, your support and help is valuable and helps me a lot! Really appreciate it!

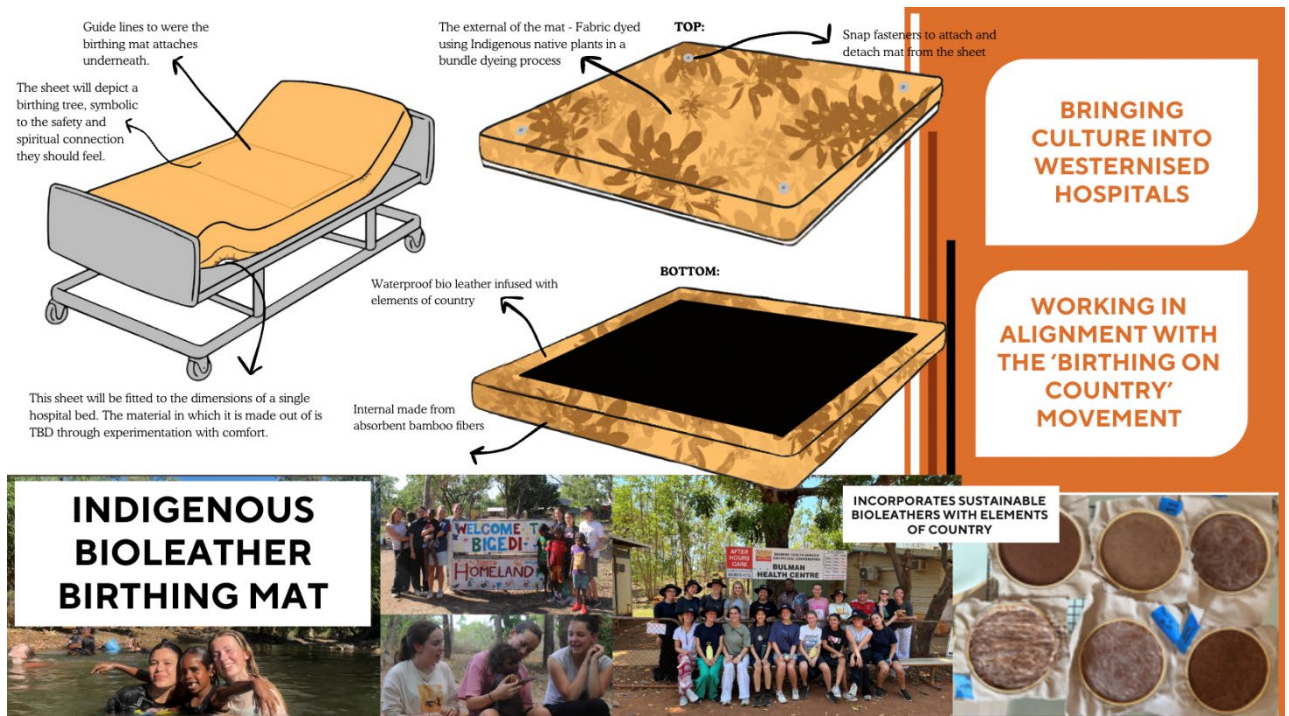
IP Australia @ 2025.04.29 4:50 AM

Hi Toby

I'm impressed with the research you have done, how you have presented your problem and the creative solutions you have proposed. Keep up the great work!

Kali, Project Support Officer, IP Australia

Bringing Country to those who can't birth on Country



2 February 2025 by [Poppy12](#)

56

2025

For 60,000 years, First Nations women have birthed on Country - deeply rooted in cultural and traditional birthing practices. Today, 96% give birth in western hospitals (often far from their land and community), losing that important cultural connection.

SOLUTION: Inspired by my time on Country with Traditional Owners in the Northern Territory, my idea is a sustainable birthing mat made from Biofabrics that incorporates native plant materials (from Country) - to help Indigenous mothers feel more connected to Country and hopefully ease anxieties caused by intergenerational trauma surrounding hospitals, during childbirth.

What do you think?

You must be [logged in](#) to post a comment.
Comments

UpRising @ 2025.02.03 12:27 PM

Wow, a fantastic concept Poppy

So many interesting elements and complexities with this project. Have you got many contacts with First Nations people that can help you with this, either locally or from Countries from the Northern Territory?

What are three things that we can help with?

So looking forward to seeing how your project evolves and connections you make along the way.

UpRising

Michmc @ 2025.02.18 6:56 AM

Fantastic idea Poppy. Can't wait to see what you decide on for the final product.

Zahli Webber @ 2025.02.18 7:29 AM

I love this idea, you are so talented! Can't wait to see you execute this.

Giselle Vasiliou @ 2025.02.18 7:31 AM

This is a magnificent idea. You are so talented. Wow!

Poppy12 @ 2025.02.18 2:55 PM

Hi UpRising, thank you for your reply!

So far I have been in touch with Jajumbora 'Birthing in Our Community Hub', a team of midwives who specialise in pre and postnatal care for First Nations women. They have been very helpful in confirming the need for an innovation of this sort, relaying personal insights into the needs and requests that pregnant First Nations mothers commonly expressed. However, communication with Indigenous mothers (the people who would be receiving this product) is my biggest priority, so any further engagement with First Nation people would be very helpful. In addition to the above, I would love support with potentially developing bio-fabrics to create the mat. This is very important to my project as it will allow for the incorporation of Country, however it is proving to be difficult. Any help with this aspect would be greatly appreciated. As well as that, any contacts with hospitals that have midwifery or birthing facilities would be great in order to inquire about the use of birthing mats.

Thank you again for your support!

UpRising @ 2025.03.18 3:22 PM

Hi there Poppy.

Found this organisation, <https://www.gaimaragal.com.au/home/> might be worth reaching out to them.

Kind regards,

jrus @ 2025.04.01 2:28 AM

What an excellent idea. More needs to be done to support First Nations peoples' connection to country.

MFI @ 2025.04.01 5:28 AM

Fantastic research and a brilliant idea. It is great to see such a focus on Country and Birth! Good luck with this project.

mcocking @ 2025.04.01 5:40 AM

Poppy, this is an incredible concept. Your desire to support First Nations women and families in a time of vulnerability and need is inspiring! Best of luck!

JDil @ 2025.04.08 10:51 AM

Great idea Poppy. It's important to keep our First Nations Mums connection to Country while ensuring the safety of themselves and their babies during the birthing process.

Ebain @ 2025.04.11 7:21 AM

Good morning Poppy, what a fantastic idea!

This product will provide much needed support to First Nation women and families.

As only 5135 Indigenous Australians are employed as nurses and midwives across Australia, do you have a plan to incorporate training programs or other ways to inform medical staff of the importance of your product? Country is so important to these women, it would be detrimental to these communities to not use this product to its full potential.

Regards, Elizabeth

(CQU ENEG12007 Creative Engineering student)

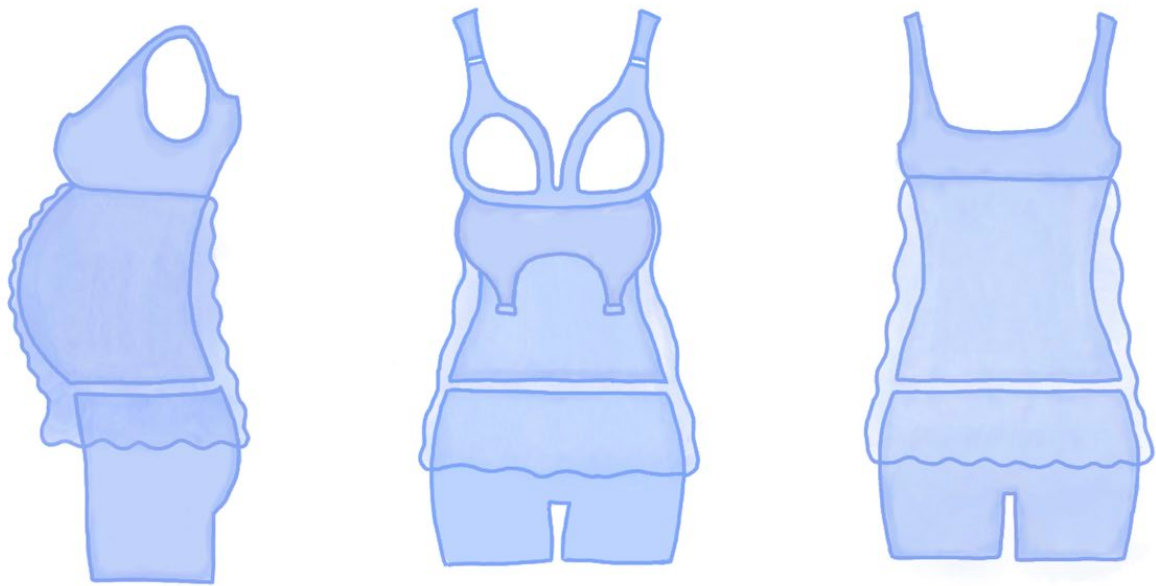
IP Australia @ 2025.04.29 4:48 AM

Hi Poppy

I love how much you have thought about the challenges facing First Nations women and the creative solution you have come up with. Good luck with the project!

Kali, Project Support Officer, IP Australia

Postpartum Pyjamas



2 February 2025 by **Astrid G**

71

2025

Did you know that for the first 4 months after giving birth, on average mothers get 3 and 1/2 hours of sleep each night? Postpartum women experience a range of changes to their body and lives that makes getting a good night of sleep nearly impossible. My goal is to design a set of sustainable pajamas that cater to the needs of postpartum women, ensuring that they can get quality sleep whenever possible. I'm looking for supporters who work in the textiles industry.

What do you think?

UpRising @ 2025.02.03 12:53 PM

A fantastic concept Astrid.

A great combination of social awareness and materials investigation. There are some great materials in the Materials Library in here <https://www.uprisingdesigners.org/shop>, amazing range of circle materials some even regenerative. Contact the Australian Circle Economy Hub <https://portal.acehub.org.au/> and drop their community a message, lot's of great minds doing fantastic things to shift the textiles industry forward as well. The great thing about buying materials from circle supply chains is that you help close the loop. Support them supports you.

Also some great articles in here as well, <https://circulardesignco.com/stories/>

Looking forward to seeing the impact of your project, especially changing perceptions and challenging social conventions.

Michmc @ 2025.02.18 6:57 AM

Fantastic idea Astrid and so needed. I cant wait to see how your designs evolve.

Astrid G @ 2025.02.27 12:05 PM

@UpRising

Thank you so much for your reply! These links have been super helpful in the development of my task.

jrus @ 2025.04.01 2:29 AM

Excellent idea! What a clever way to support mothers.

mcocking @ 2025.04.01 5:41 AM

What an amazing idea that could be of great benefit to many! Best of luck, Astrid!

MFI @ 2025.04.01 5:42 AM

This is an amazing idea which is based on community and need! Textiles and design are truly linked through your project. Well done!

IP Australia @ 2025.04.24 11:14 AM

Hi Astrid,

I love the initiative you are taking and the creative solutions you have considered. Keep it up!

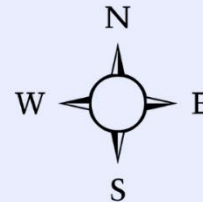
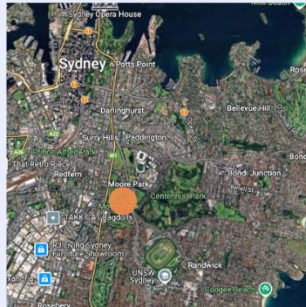
Kali, Project Support Officer, IP Australia

Tiny Home village for Homelessness

TINY HOME VILLAGE FOR HOMELESSNESS

This housing system for homelessness sets out to provide a safe environment to take people out of the harsh conditions and receive the help they may need. Communal areas such as dining, or gardens may encourage a sense of community involvement and provide socialisation and community building instead of isolation which is common with homelessness.

SITE PLAN ANALYSIS



INSPIRATION

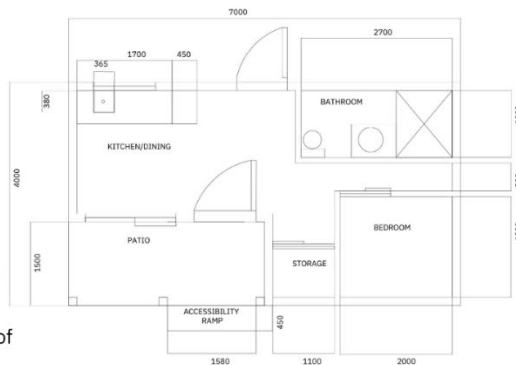
DESIGN PLANS

storage within furniture

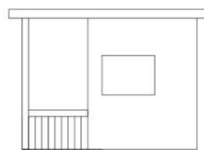
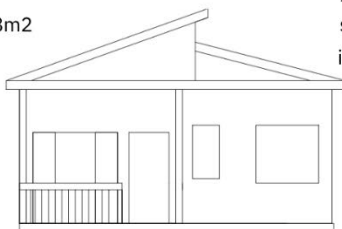
Patio at front of house

Modular design

4x7m - 28m2



raked ceiling for spacious effect
single bedroom
inclusion of all basic amenities



Liverpool city council community garden



Bourke street park community garden



communal dining area in Copenhagen

I have been inspired by a combination of social justice problems, and desire to address societal problems that are raised in places such as SRC meetings, or from the daily news where they discuss problems of the housing crisis, we are currently in. "New home building in the Sydney basin remains exceptionally low, primarily due to exceptionally high land prices and an ongoing excessive impost of housing taxes and infrastructure charges," said HIA senior economist Matt King. This therefore makes me wonder what we could do architecturally to assist in fixing this problem. My other inspirations draw from my love and future desire to become an architect. I want to be able to assist all demographics in living in areas such as Sydney



1 February 2025 by **Ava B**

This sustainable tiny home village is designed to support individuals experiencing homelessness. Featuring modular, eco-friendly homes, the village offers a safe and secure living space where residents can benefit from a wide range of support services, including counsellors and employment training. Communal gardens and shared dining areas foster community

bonding. With a focus on sustainability, the village utilises renewable energy and resource-efficient solutions such as solar panels to reduce environmental impact. This approach to combatting homelessness ensures residents have the stability, skills, and support needed to rebuild their lives and transition into independent living

What do you think?

UpRising @ 2025.02.02 12:36 PM

A fantastic idea Ava.

How can we help? If you could list a few key points that you want advice on or help with resources/ connections, that would be great.

Looking forward to seeing your idea come to life.

UpRising

Ava B @ 2025.02.02 4:30 PM

Thankyou so much!

I would like some feedback and advice on how I should go about creating the initial plans and CAD drawings for the individual tiny homes. Would it be worthwhile making multiple designs and seeing what works best (different layouts, different sizes)? Also, is there any materials that work best or are a better option for creating models.

It would also be great to get some numbers or emails from people in the same field of work, that is building homes for the homeless, or even some connections and resources with people that work with the homeless population (potentially people from the census). Would you recommend talking to these people before I move onto finalising models and CAD drawings, possibly to see what is an important aspect for these homes.

I'm also excited to see the finished design :)

UpRising @ 2025.02.02 4:30 PM

Google Sketch Up would be brilliant for what you are trying to do. It also has 3D Warehouse, which allows you to easily import 3D pieces of furniture. The option to export your architectural homes to google earth locations would allow you to digital place them over at Moore Park. See <https://www.sketchup.com/en/plans-and-pricing/sketchup-free>

Reach out NSW Architects Registration Board <https://www.architects.nsw.gov.au/> as they would be a great place to start to connect with a range of architects.

Talking to different gov agencies that support people who are homeless (I find it best to put 'person' first, 'situation' second), would be a great way to get to know your target market as well. People have lots of different needs and one size won't fit all. Also worth researching on the

previous 'design fails' regarding high density low cost housing, compared to greater distribution of community housing. This could help with your 'Degree of Difference' in your folio.

Looking forward to seeing your next steps.

Ava B @ 2025.02.06 4:30 PM

This is really helpful thankyou!

I have started to experiment with Sketchup some more as I have used it in previous years for assignments etc, and I have begun to create the communal gardens so I can edit and play around with my post and include my ideas on it. Would you recommend I import all the individual garden beds or build them using the tools available? (Just thinking it may be better so I can show my skills in that area)

I have also had a look at the list of architects website you have provided me with, and will be in touch with them.

Thankyou again for your advice it is really helpful :)

SarahHardy @ 2025.04.10 12:38 PM

Hi Ava, I really like your idea for tiny homes to ease the impacts of the housing crisis. The use of renewable energy such as solar panels will help to reduce environmental impact and ongoing costs, and the support services such as counsellors and employment training will greatly help those who are struggling to find jobs. I suggest extra services such as affordable hairdressers/barbers and loaned business clothes to help those in need with interviews. Childcare could also be another service offered as it can be a struggle for those with children to find work. Jobs could also be created within the community such as cleaners, cooks, gardeners and builders which would not only provide an income but also create a sense of community.

Regards,

Sarah H, CQUniversity student

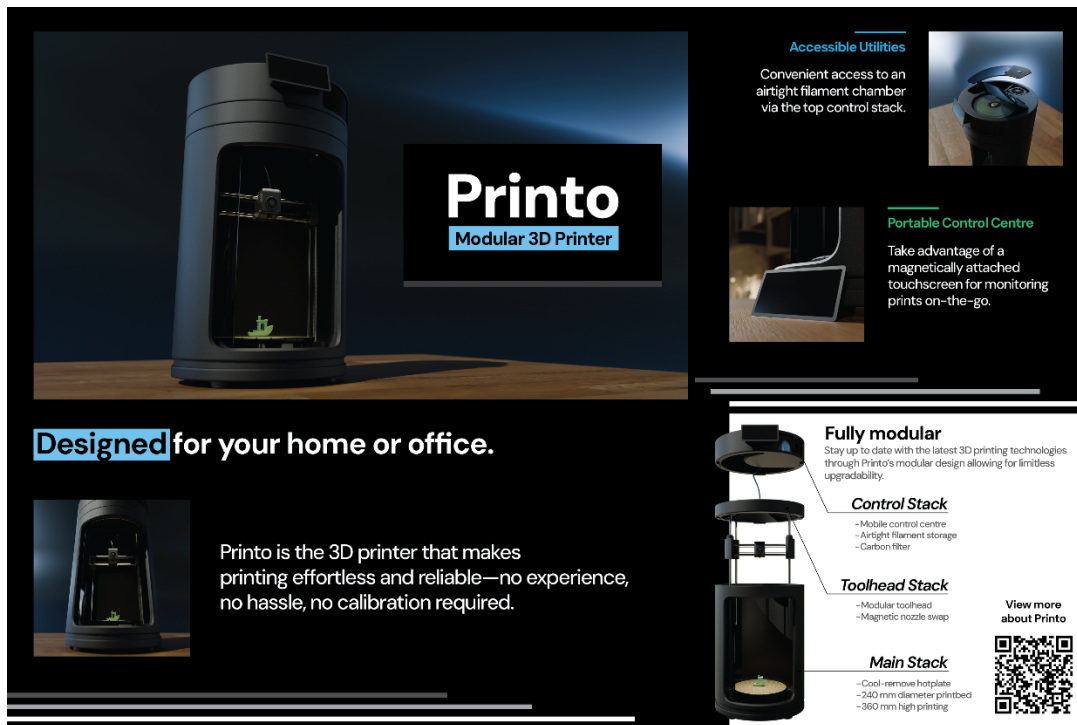
IP Australia @ 2025.04.24 10:59 AM

Hi Ava,

It's great to see students like you considering current real-world problems and focussing on improving the world for everyone. Keep up the great work!

Kali, Project Support Officer, IP Australia

3D printer designed for home users | Printo



10 December 2024 by Peter K

36

2025

Printo is a user friendly, 'home appliance' 3D printer. The printer includes features ensuring a simpler experience for users that want a 3D printer but don't have experience in the field. Opening up 3D printing technology to more users can allow consumers to produce small simple goods at home instead of ordering from overseas factories, reducing their environmental impact.

Learn about Printo's features and see product renders: <https://printo.peterkni.com/>

After refining prototype sketches and incorporating feedback, a final CAD model of the printer was created in Fusion. The next step will be to manufacture a simple physical prototype.

What do you think?

UpRising @ 2024.12.10 4:33 PM

A fantastic project Peter. Amazing CAD work and rendering. How can we help? If you can provide two or three pain points that you need help with, that would be great way to help direct assistance.

Looking forward to seeing your project hit the prototype stages.

Peter K @ 2024.12.13 4:33 PM

Thank you!

My biggest challenge to building a physical working prototype is the electronics aspect of the design. Although I have left some physical space for electronics to be implemented in the CAD model, I'm not sure where I would start with the PCB design and the logistics of power supplies and motors.

Secondly, creating the body of the prototype model would be done via 3D printing but would have to be at a smaller scale due to the large filament cost. This has limitations as a scaled down model won't provide a full idea of the accessibility and user experience compared to printing a full size model. Ideally, breaking the model down into pieces and having access to a large 3D printer with supply of filament would allow for a full size model to be created.

Alex A @ 2025.03.21 6:16 AM

Hey Peter,

Really cool project and I love the aesthetic! Having a bit of 3D printing experience myself a couple of things I'd recommend making it clearer in your presentation if this has the features that are associated with an easy-to-use 3D printer.

What I mean is that something that people who are looking at a 3D printer for the first time won't understand is that the bed being level is essential for good prints - a quick explanation of why your design resolves this would go a long way in making it clear that you have the answer.

The only other note I have is in your exploded view of your extruder and hot end, it appears to me that the boden tube is broken up into 2 smaller pieces and 1 longer piece that goes out to the filament chamber. From a technical view, you're now hoping the filament doesn't jam on an extra 2 components that are prone to deformation with their proximity to the hot end.

I really look forward to seeing where you take this! Good work.

Peter K @ 2025.03.22 10:24 AM

Hello Alex,

Thank you for your feedback!

I agree that explicitly mentioning auto bed leveling as a feature is a good idea - especially since a level bed is such an important aspect of first-layer adhesion (and therefore a successful print). Someone new to 3D printing will not want to experience a failed print and then have to manually re-level their bed.

Regarding the extruder and Bowden tube - I see what you mean. Ideally the PTFE Bowden tube should end at the top like it currently does but instead enter a single metal tube with no seams or locations it could get caught. Eventually funnelling into the hot end.

Thanks again! I appreciate your feedback and interest in my project.

IP Australia @ 2025.04.24 10:24 AM

Hi Peter

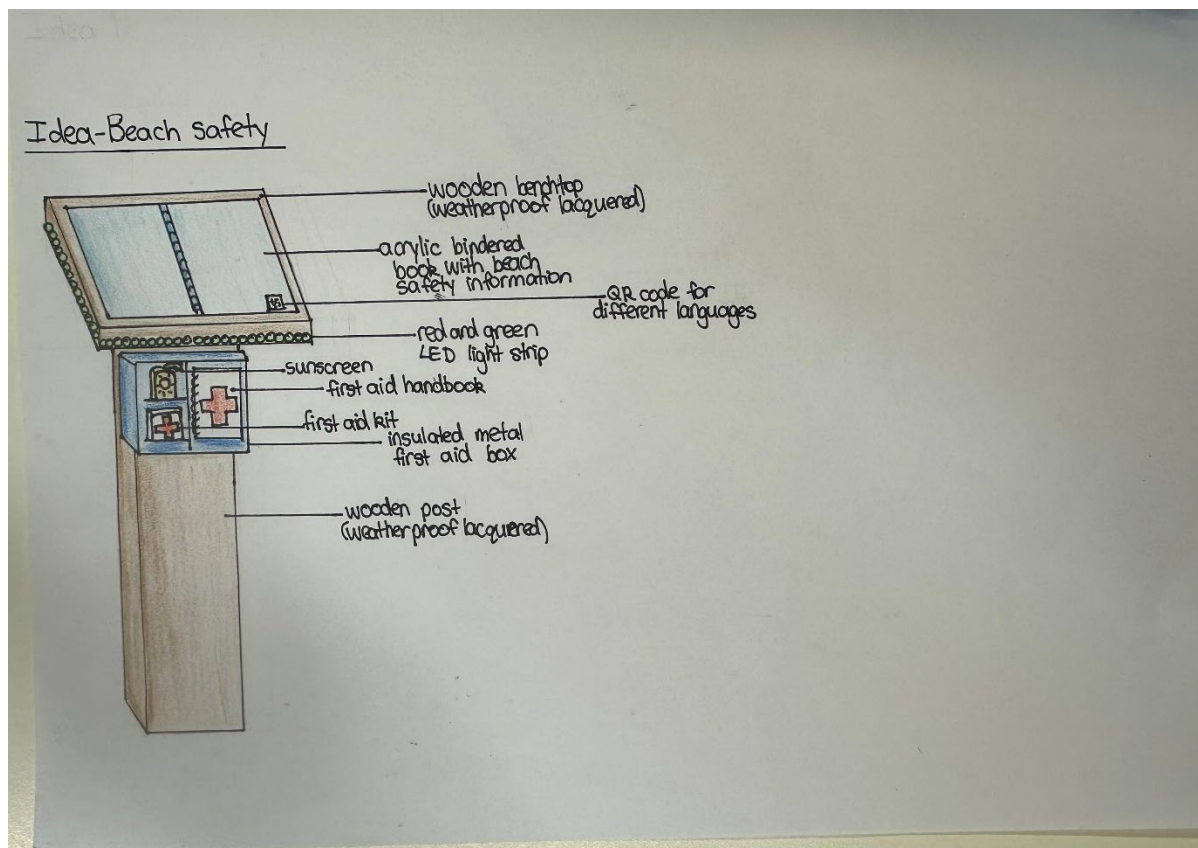
I'm really impressed with how professionally you have presented your idea and I can tell you have worked hard on this project. Keep up the great work!

Kali, Project Support Officer, IP Australia

Peter K @ 2025.04.26 10:27 AM

Thank you Kali.

Water safety and first aid on Australian beaches



11 February 2025 by **Mili C**

366

2025

This beach safety station helps tourists understand basic water safety and first-aid on Australian beaches. The water safety component includes pictures and information on ocean conditions and a QR code to access this information in different languages. The first-aid component includes an insulated box with first-aid equipment and instructions to assist basic stings and injuries, taking

pressure off lifeguards on busy beaches, and helping people on unpatrolled beaches. I would appreciate advice on future developments of the concept and construction. I would also appreciate supporting opinions on the benefit of the design and for the product evaluation in the folio.

What do you think?

UpRising @ 2025.02.22 9:13 AM

So many good ideas in here, especially the idea of taking pressure of the life guards and the QR to access different languages. Might be worth setting about a simple prototype at a local beach.

Looking forward to seeing your project develop.

Mili C @ 2025.02.24 9:13 AM

Thank you so much for the comment and for the idea of the prototype @UpRising! I appreciate the support!

Gregory Madas Levestam @ 2025.03.12 10:26 AM

Awesome initiative congratulations , hopefully will get to see your project displayed at every hotel in Fiji Islands. This definitely could save lives.

Matt Hanlon @ 2025.03.12 10:26 AM

Hi Mili, Your beach safety station is a fantastic idea that addresses two critical aspects of beachgoer safety—ocean awareness and first-aid. The inclusion of visual guides and a QR code for multilingual access ensures that tourists, regardless of language barriers, can understand important water safety information. The insulated first-aid box is also a great addition, as it provides immediate assistance for minor injuries and stings, reducing the strain on lifeguards and offering support on unpatrolled beaches.

charl.peenze @ 2025.03.18 6:42 AM

Great idea needed on every beach. Multi language first aid is a very important consideration. Good luck.

Chris Pallas @ 2025.04.04 6:42 AM

I wholeheartedly agree with your proposal. The concept of the beach safety lectern represents an invaluable initiative, particularly for international visitors and non-English speakers. It is imperative to ensure that all individuals, irrespective of their linguistic background, have access to vital safety information, thereby mitigating the risks of water-related accidents. The integration of QR codes into this safety framework is particularly innovative; they offer a seamless, contemporary means to disseminate important information in multiple languages, ensuring greater accessibility. By making such safety resources readily available, we can safeguard both tourists and locals, enabling everyone to enjoy our pristine beaches without unnecessary peril.

Furthermore, the incorporation of safety benches equipped with basic first aid supplies, alongside LED lighting, not only serves as a practical measure but also as a symbol of an evolving safety culture. These additions will undoubtedly become synonymous with enhanced public safety awareness, fostering an environment where both visitors and residents feel secure. I am fully supportive of the implementation of such measures across all our beaches, as they represent a significant step toward a safer and more inclusive coastal experience for all.

william perfrement @ 2025.04.09 6:42 AM

With Australia being such a multicultural and diverse country, the idea of implementing a QR code for different languages is a fantastic idea. Your idea will help greatly for water safety on beaches without lifeguard supervision and without access to assistance when injuries occur. Your idea is well thought out as well as innovative and creative, and I would like to share my concerns/ideas for future designs.

I believe for a future design it would be very beneficial to implement signage above the information desk to draw attention. Signs such as the universal symbol for first aid, and water safety symbols. This would help draw the attention of visitors regardless of language. My other concern is the upkeep of the first aid equipment, there will have to be a type of plan formed for checking the condition, as well as keeping stock for when the first aid kit is used. If its not regularly upkept it could be dangerous for people in need during emergency situations.

Overall, I believe this is a great idea that should be implemented onto all beaches. Your sketch shows a great depiction of your ideas, and i believe that continuing to improve upon your design and furthering the creative project will produce a innovative and impactful solution to beach safety in Australia.

CNS ENEG12007 @ 2025.04.09 6:42 AM

This is an awesome idea that would be so beneficial to all Australian beaches. Every design aspect you have incorporated is so useful, the QR code is such a good feature for tourists, and the first aid box would relieve so much pressure from lifeguards. Throughout Australia, I have only ever seen posts with vinegar for small jellyfish stings, leaving all other enquiries and small medical issues to lifeguards, I could imagine this idea would have such a positive impact to so many people. A few questions, could the LED strip light be solar powered? Also I could imagine the contents of the first aid box constantly getting taken by people who are not in serious need, would there be some sort of monitoring system or signage in place for this?

curtis.farrell @ 2025.04.09 6:42 AM

Hi Mili C,

I believe this is an excellent idea that would be greatly appreciated by many. The dangers of the beach are not as obvious as they seem, and this concept is a great way to attract people and express these dangers. When something does happen to go wrong, this concept provides a convenient and accessible source of first aid. This is great, as most people would not typically be prepared for an incident to happen. Free to use sunscreen is also a great way to promote sun safety and help increase the experience of regulars and visitors of the beach.

The first point I would like to raise is vandalism. Unfortunately, vandalism is becoming increasingly common amongst all cities and I would expect something like this would be an easy target. Perhaps a monitoring system or camera may be able to be used in order to identify any users and potential vandalisers. In addition to this, rather than vandalising, people may take advantage of this idea and help themselves to medical supplies etc. I was wondering whether you had considered this and what your potential ideas were?

Originally, I thought this idea would be a portable station set up daily by lifesavers. I understand that a permanent solution is accessible for anyone at any time, however the large majority of people who go to the beach would go throughout the day. If this concept was able to be made into a portable station, it may be an idea to reduce possible vandalism. It is also an opportunity to ensure that supply levels of the station are sufficient.

Overall, I strongly support this idea, and I would love to hear how the concept has progressed.

Kind Regards,

Curtis Farrell (CQU Engineering Student - ENEG12007 Creative Engineering)

Mili C @ 2025.04.17 10:04 AM

@Gregory Madas Levestam, @Matt Hanlon, @charl.peenze, @Chris Pallas, thank you so much to everyone who has taken the time to consider my design! I really appreciate all the ideas, advice and support on my project!

@william perfrement, thank you very much for the idea of the signage! I will work to implement this into my design. Thank you also for highlighting the concern of first aid equipment upkeep- the idea is that this design will be located in the surf life saving club on the beaches. This way, the equipment can be accessed by all, as well as restocked by the council.

@CNS ENEG12007, thank you so much for your comment! Yes, I have been looking at ensuring that the LED strips are solar powered. Thank you for highlighting the concern of needing the design monitored, I have proposed that this beach safety system be located in the surf life saving club, allowing for surveillance of the product so that people are only taking what is required and not stealing anything if the equipment is not actually needed.

@curtis.farrell, thank you so much for your comment and for highlighting potential concerns. In regards to the vandalism, I am planning on the beach safety system to be monitored by life guards (and potentially any cameras located here) in the surf life saving club. This ensures that the equipment is only being used by those who actually need it, and prevents any misuse or damage to the design. Thank you very much also for highlighting the idea of a portable design, this is something I had not thought of, and I will definitely consider this for my project.

Thank you again to everyone who took the time to write to me about my MDP. I really appreciate it!

Mili

IP Australia @ 2025.04.29 10:04 AM

Hi Mili,

You have clearly put a lot of effort into designing your solution to a real-life problem and it's great to see you considering suggestions made by others. Good luck with the project!

Kali, Project Support Officer, IP Australia

Mili C @ 2025.05.02 7:54 AM

Thank you so much Kali for your comment and your support!

'Protection Meets Style'



14 February 2025 by **Michelle M**

1127

2025

Four days, five unrelated Sydney stabbing attacks. Seven people dead. Five of the seven dead, Women.

Australia is experiencing a surge in domestic violence, with knives and weapons increasingly used against women, including the recent Bondi stabbing. This concerning trend highlights the urgent need for effective personal-safety solutions, both in public and at home. April 2024, the Prime Minister declared a 'national-crisis' of violence against women, with ONE woman killed every FOUR days to domestic violence. My MDP aims to develop a range of stab-resistant protective clothing to combat this issue, combining discretion, comfort and style, potentially offering life-saving protection.

What do you think?

Ramy @ 2025.02.15 2:56 PM

What a brilliant and timely idea, especially in today's crazy world! I'm truly impressed by your innovative thinking—offering protection without compromising on style. Absolutely love it!

John Cane @ 2025.02.15 2:56 PM

Brilliant..

Julia Davis @ 2025.02.15 2:56 PM

You addressed the problem, you raised awareness and you came up with a wonderful solution..

Samantha @ 2025.02.20 2:56 PM

I love this. Excellent initiative Michelle.

Francesca Robert @ 2025.02.20 2:56 PM

Looking forward to see the final product. I'll be the first to buy. Great work Michelle.

UpRising @ 2025.02.21 2:56 PM

A seriously important project idea Michelle. So many issues you are highlighting here. What are your next steps and how can we help with achieving them?

Looking forward to seeing this project evolve.

Michelle M @ 2025.02.21 2:56 PM

@Ramy thank you so much!!

Michelle M @ 2025.02.21 2:56 PM

@John Cane thank you so much!!

Michelle M @ 2025.02.21 2:56 PM

@Julia Davis thank you so much!!

Michelle M @ 2025.02.21 2:56 PM

@Samantha thank you so much!!

Michelle M @ 2025.02.21 2:56 PM

@Francesca Robert thank you so much!!

Michelle M @ 2025.02.21 2:56 PM

@UpRising Thank you so much for your support! I truly appreciate your recognition of the importance of this project. My next steps involve finalising the design and materials for the protective clothing, as well as conducting further research into the most effective ways to integrate comfort, safety and style. Any suggestions as to the materials or methods to achieve this would be incredibly valuable. Your support means a lot!

Marise Andrews @ 2025.02.23 4:43 AM

Brilliant idea and necessary in today's world. Thank you Michelle.

Michelle M @ 2025.02.23 11:50 AM

@Marise Andrews thank you so much!!

Niamh O @ 2025.02.24 4:33 AM

This is sosmart I love this idea

Michelle M @ 2025.02.24 4:33 AM

@Niamh O thank you so much for your support!

siennaisrael @ 2025.02.25 3:46 AM

your amazing!!!!

Michelle M @ 2025.02.25 3:46 AM

@siennaisrael you're the sweetest!!

Lola @ 2025.03.05 1:50 PM

Love how you're creating a solution to real problem thats not talked about enough. Can't wait to see the final product!

Michelle M @ 2025.03.07 1:50 PM

@Lola thank you so much!!!

Meibh connon @ 2025.04.02 1:50 PM

This seems like such a wonderful idea to help bring comfort to everyone during this crazy time!! Can't wait to see the end product (:

scarlethelene @ 2025.04.02 1:50 PM

love!!!!

Michelle M @ 2025.04.02 1:50 PM

@Meibh connon thank you soo much :)

Michelle M @ 2025.04.02 1:50 PM

@scarlethelene thank you sooo much :)

Chris Van Mello @ 2025.04.11 1:50 PM

Hi, Michelle M,

Thank you for raising awareness regarding the growing issue of domestic violence, particularly against women, emphasised by the recent Bondi stabbing. Your suggestion of a comfortable and ergonomic range of stab-resistant clothing is an extremely ingenious and resourceful solution to this issue, providing protection, discretion and peace of mind for assault victims, without compromising on comfort or style.

My main concerns with your suggestion are that the clothing may be expensive to manufacture, and therefore expensive for prospective customers, since the clothing must be equipped with a tough, durable and weather resistant layer for protection, such as high-quality leather or stainless steel; furthermore, it may be cumbersome to design the clothing around the stab-resistant layer to maximise its effectiveness, whilst maintaining an ergonomic, comfortable and lightweight design.

Here are some design factors that you may want to consider:

1. Ensure that the stab-resistant layer covers the entire piece of clothing, and is manufactured from strong, durable and weather resistant materials, and the clothing itself is ergonomic and weather resistant, and is manufactured from lightweight and comfortable materials.
2. Ensure that the design materials are cheap, easily accessible, sustainable and recyclable, permitting the clothing brand to sustainably continue for many years.

3. Ensure compliance with the relevant standards in your country/region, confirming that the stab-resistant layer can reliably withstand stabbings and other assaults.
Overall, I believe that your suggestion is incredibly inspired and imperative, and with a few small improvements and extensions, should be implemented worldwide. Keep up the great work!
Kind regards,

Chris Van Mello, ENEG12007 student at CQUniversity, North Rockhampton

Michelle M @ 2025.04.11 1:55 PM

@Chris Van Mello thank you so much for taking the time to review my project. i will definitely take your feedback onboard and incorporate it into my portfolio. thanks again!!

IP Australia @ 2025.04.29 8:11 AM

Hi Michelle,

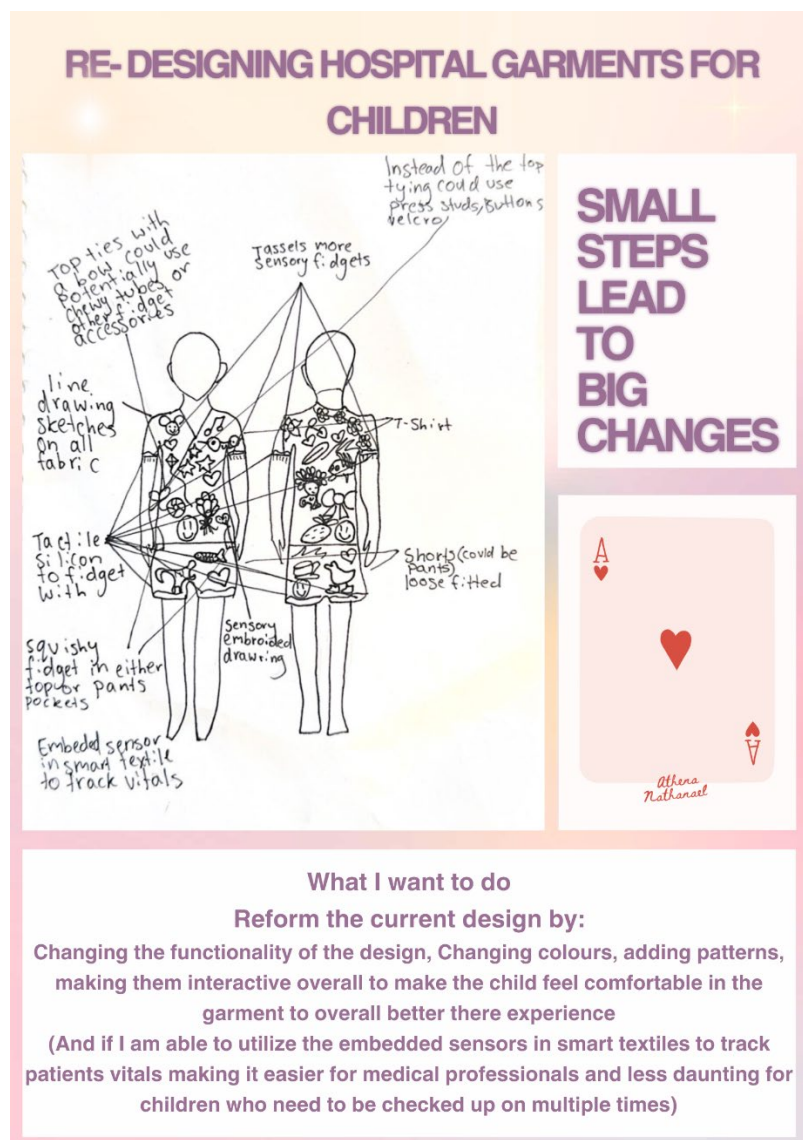
Great to see such creative thinking in response to a real-life problem. Wishing you success with your project.

Kali, Project Support Officer, IP Australia

Michelle M @ 2025.05.01 8:12 AM

@IP Australia Kali thank you so much :)

Re-designing hospital gowns for children



25 February 2025 by **Athena Nathanael**

283

2025

According to current ABS 1 in 10 Australian children suffer from a mental health disorder, the most common of these being anxiety and ADHD. After looking closely at this issue and the amount of time these children have to spend in hospitals it has become evident that they require a gown that is both physically engaging and aesthetically pleasing for the wearer. Therefore I plan to design an interactive gown that will make kids feel comfortable, safe, and help reduce anxieties whilst undertaking medical treatments and alleviates additional issues for medical professionals.

What do you think?

UpRising @ 2025.03.01 5:51 AM

Love this idea Athena. So many clever elements to it. Recommend you check out haptic design. It is all about connecting with the human sensors. Could the material in the garments have areas that are haptic that create a positive sense of calm when touched? Lots of great research out

there that does not need a lot of technical / digital work, <https://pmc.ncbi.nlm.nih.gov/articles/PMC8281818/>

Looking forward to seeing your idea develop.

Athena Nathanael @ 2025.03.03 3:41 AM

@Uprising Thank you so much I will definitely look into this, seems very interesting!

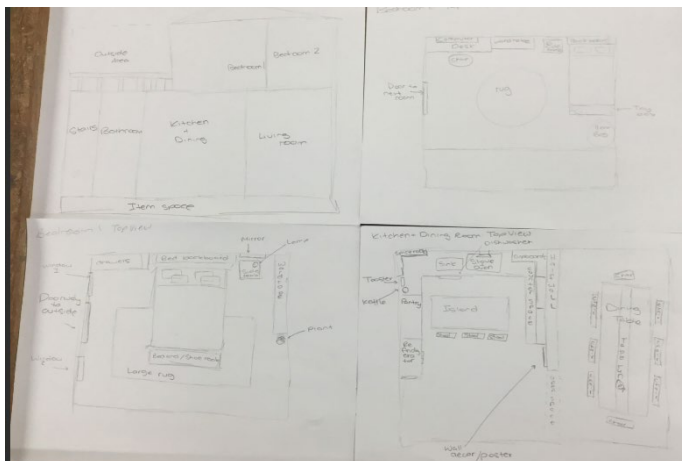
IP Australia @ 2025.04.30 5:31 AM

Hi Athena,

Your attention to detail is really great to see and you have clearly thought about the needs of children in medical care, keep up the great work!

Kali, Project Support Officer, IP Australia

Dollhouse to Support Young Autistic Children



13 March 2025 by kayla

46

2025

The purpose of my dollhouse design is to help meet the needs of children with ASD, and incorporate that into one space that encourages mental and tactile stimulation and growth. The goal is to make this a product that helps a child learn, grow, and emotionally regulate. I plan to meet these needs by building a dollhouse that encourages an ergonomic relationship. My product consists of various rooms filled with items that the children can engage with. Underneath, there will be a considerable amount of space for the storage of all smaller items, this makes transportation and tidiness much easier.

What do you think?

UpRising @ 2025.03.18 4:09 AM

A great idea Kayla. Fascinated by the idea of different rooms. Wondering if the different rooms would have different ergonomics and haptic design features. Capturing data on which rooms are more used by children with ASD would be an interesting study.

How can we help with your project? If you could provide a few next steps that we can help with that would give us a good insight in how we can assist.

Michael D @ 2025.04.11 4:59 AM

Hi Kayla,

The dollhouse you purpose sounds interesting. Giving children, especially children with ASD a way to safely interact and gain an understanding of common household rooms and objects, will really help their future development.

I have a few thoughts/questions that will hopefully get you thinking about the future of your idea.

You state that the dollhouse will be filled with items, I'm assuming these are household items for the dollhouse? Will they lean towards sensory toys/gadgets or will they be common household colours and textures to help gain familiarity? Or a mixer of both?

Your floorplan of each room is very informative and detailed, the dollhouse layout purposed is a little confusing. Is it 2 story, since the item storage is stated to be on the bottom? If so, the stairs seem to be in an odd spot leading from the bathroom to the upstairs balcony or are the external stairs? Have you thought about making the dollhouse modular? I believe a child able to re-create their own house would be a great way a child to be more comfortable in their own home.

As a father of two young children, having storage in toy is a great idea. This helps structure the pack-up of the toy.

Lastly, what size is the dollhouse? have you considered the age bracket that you are aiming this dollhouse towards? The younger the preferred age for the dollhouse is the bigger you'll have to make it to avoid choking hazards.

I hope I have given you something to think about. I look forward to seeing the progress of your idea.

Kind Regards,

Michael D

Civil Engineering Student, CQUniversity – ENEG12007: Creative Engineering

Aiden Farrington @ 2025.04.11 10:10 AM

Hi Kayla,

The proposed concept that you have come up with holds great potential. Especially when it comes to helping children with ASD have fun and enjoy a potential Christmas/birthday gift.

I have a few thoughts or interests that could hopefully help you with the progression of your unique idea.

First, the idea of having an in-build storage room inside the doll house would make it easy to store and clean up making it a great idea that you have come up with. Furthermore, would it work better if u decorate the floor and make a stone retaining wall, or hedge wall/garden and steps up to the front with the purpose of storing all the extra small parts under the house while also giving it a decorative appearance.

Considering those small parts, I have concern that they may be easy to swallow or digest parts that for younger children may pose as an issue for their safety.

Also, if the purpose of this dollhouse is to adhere to children with ASD, are there any actual differences to a normal doll house, what aspects personally adhere to ASD children.

I hope to have helped you in your interesting product.

Kind regards,

Aiden F

Mechanical Engineering Student, CQUniversity – ENEG12007: Creative Engineering

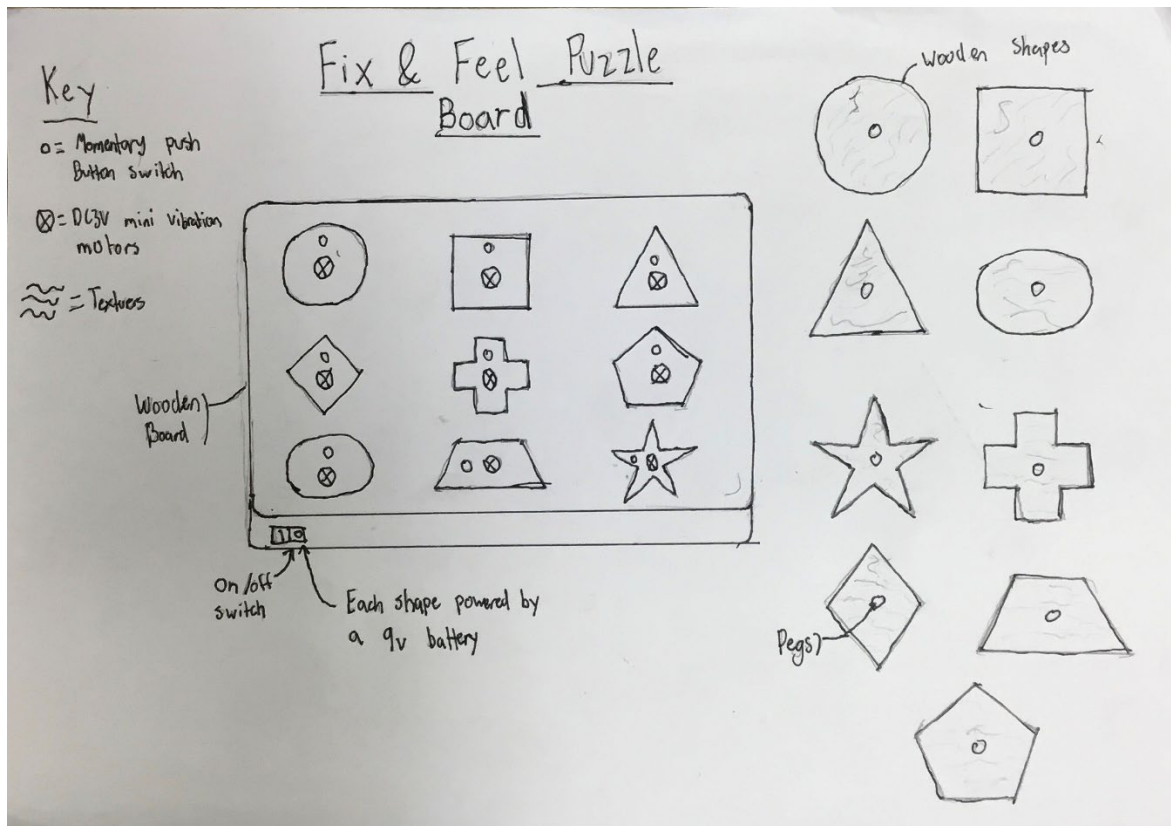
IP Australia @ 2025.04.30 10:45 AM

Hi Kayla

I can see you worked really hard on those detailed drawings and have incorporated a number of creative ideas! Keep up the great work.

Kali, Project Support Officer, IP Australia

Fix & Feel Puzzle Board – Engaging Young Minds Through Play



13 March 2025 by **AAlexx**

40

2025

Young children nowadays are slowly losing their fine motor skills and sensory awareness due to technology, but the Fix & Feel Puzzle board is here to fix that. The Fix & Feel Puzzle Board is an interactive and educational toy designed for children aged 2-6 to develop fine motor skills, sensory awareness, and problem-solving abilities. It features textured puzzle pieces, magnetic connections for a satisfying snap, and vibration feedback when pieces are correctly placed. The board is the perfect tool for parents seeking an educational yet entertaining toy for their kids.:

What do you think?

UpRising @ 2025.03.18 8:21 AM

A great idea Alex. Fine motor skills are so important for so many subjects and tasks for school and life, from hand writing, drawing, modelling etc.

Are you thinking of 3D printing or something more traditional like clay / ceramic pieces?

Let us know what we can do to assist.

Kind regards,

Willem @ 2025.04.08 12:04 PM

This is a great idea.

vibration is not necessarily the right path for positive reinforcement as it could be surprising or alarming to small children. It might be a better idea to consider either an auditory or visual response or a combination of both.

Additionally, physical resistance would be highly beneficial. Perhaps a large button to push that is connected to a mechanical linkage that produces some resultant movement. This will help improve both the cognitive and the motor development. Making the mechanism visible will make the action more engaging and, as the child grows older, teaches the relationship between cause and effect. Mechanisms should however be shielded by a transparent cover to prevent injury.

Sliders are another great way to help develop fine motor skills, especially if the part to grasp is slightly smaller so that some focus is required to grab it.

Another consideration with toys like this is pieces getting lost. It would be great if the pieces could be somehow tethered to the main toy body. This does unfortunately lead to the problem of tangling. Perhaps some thought could be invested to find a suitable solution.

There are a significant number of products that cater to this issue. Research will have to be done to ensure your idea doesn't violate any existing patents.

Hope that helps

Willem (CQ Uni engineering student Bundaberg)

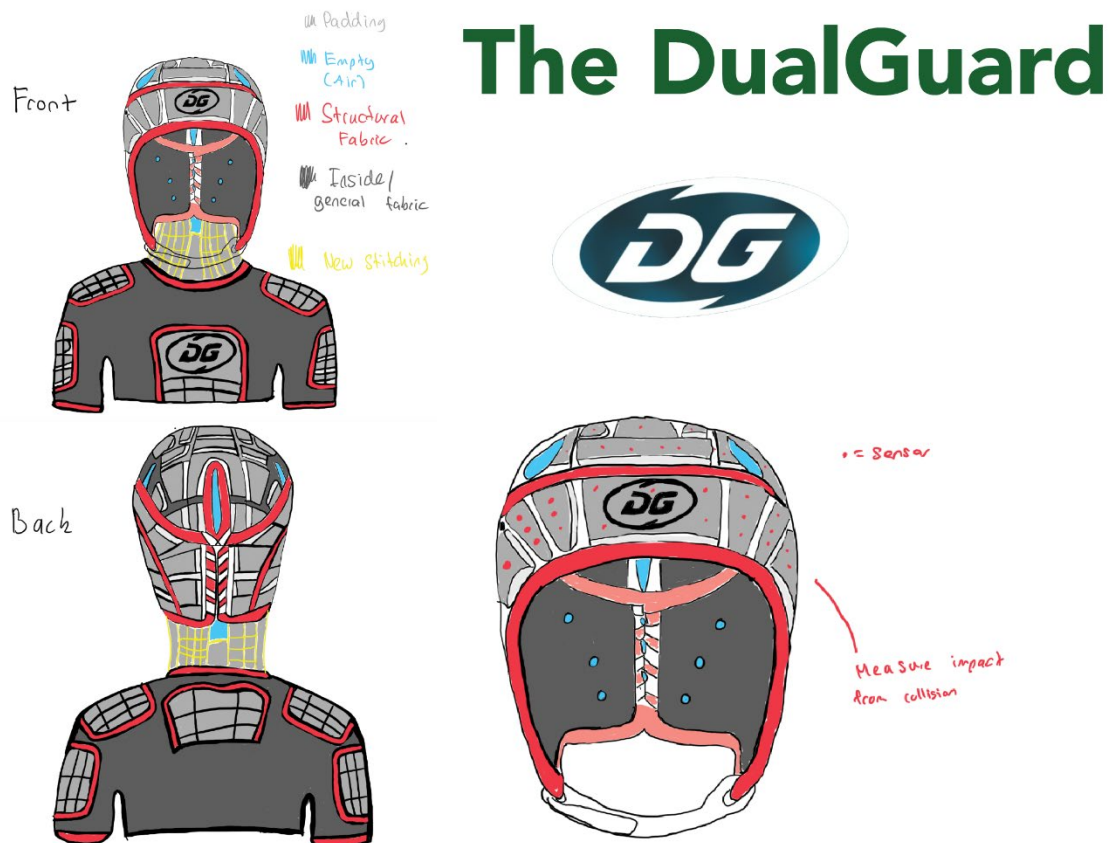
IP Australia @ 2025.04.30 10:32 AM

Hi Alex,

Great to see such creative thinking. You have clearly worked hard on your proposal and it's great to see how much effort you have put in!

Kali, Project Support Officer, IP Australia

DualGuard Sensor Protection



13 March 2025 by **ZachL**

58

2025

In rugby, injuries are common and have the potential to impact all parts of a player's body. Protection is not holistic to the body, and its support ends on the field. To combat this, I am aiming to protect additional areas such as the neck and Chest with enhanced comfort and protection, whilst also minimising impact to the player's ability to play. However, I aim to enhance protection and understanding off the field, too. By adding sensors to my design, players can understand the parts of their body that are taking excessive impact before they get injured or worse.

What do you think?

UpRising @ 2025.03.18 12:23 PM

Fascinating project idea Zach. Can you provide a little more clarity by what you mean by "off field"?

Love the idea of how your garments could be used for players who have had a head injury and have to follow concussion protocols. Is there a way to capture data to help with recording recovery processes. Great for Rugby and AFL coaches.

Let us know a few things on how we can help.

DA real1 @ 2025.03.25 7:12 AM

WOW, what an amazing idea, this is my favourite one for sure. We NEED enhanced protection for heavy contact sports... the damages these players sustain are so overlooked. my cousin has a lifelong brain injury from playing rugby :(. Keep up the amazing work ZachL!

Chloe.Howden @ 2025.04.10 4:19 PM

Hi Zach,

I have some personal experience with many family members playing contact sports like NRL and AFL and think this idea is very useful in preventing injury. However when playing sports players can become sweaty and overheat quickly, due to its increased coverage have you thought about a specific material or design to increase player comfort like any kind of sweat-wicking or more porous options that still provide decent padding? Otherwise this seems like a great way to improve player safety.

Regards,

Chloe Undergraduate Engineering Student CQU

Harrysteele @ 2025.04.17 8:01 AM

Hi Zach,

This concept is strong in both on-field protection and off-field injury prevention, offering a holistic approach to player safety. However, potential challenges include maintaining player mobility, ensuring durability under repeated stress, and making the sensor data accurate and user-friendly. Improvements could include wireless data syncing, lightweight flexible sensors, and modular padding designs that adapt to player position and play style. Overall, it's a forward-thinking innovation that could be a great idea in the current concussion crisis in contact sports.

Cheers,

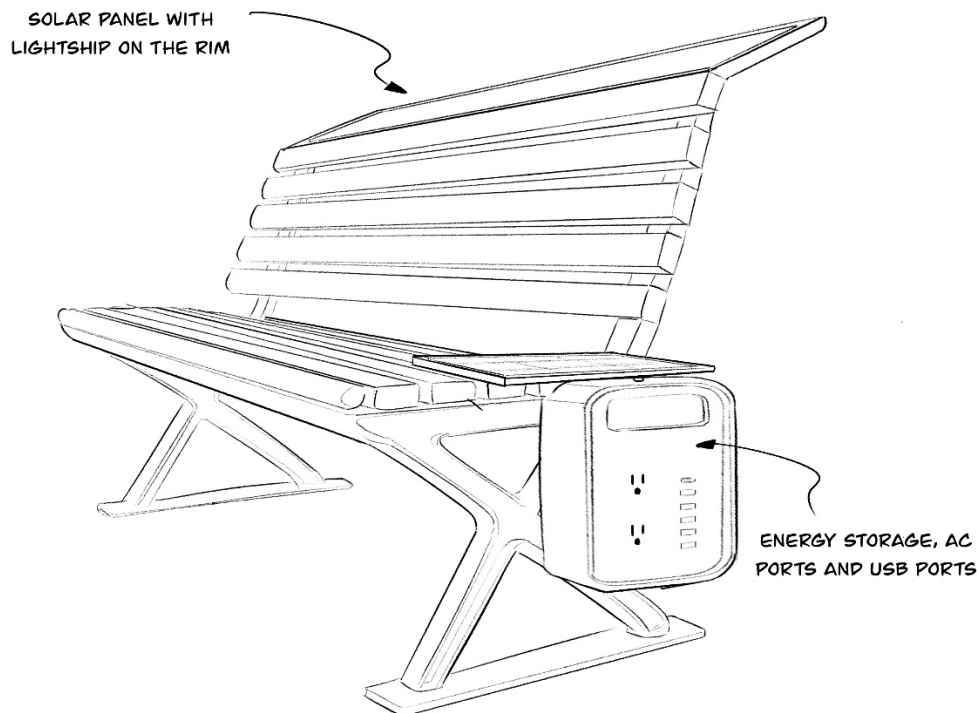
IP Australia @ 2025.04.30 10:25 AM

Hi Zach,

You are really thinking outside of the box here. I love the use of colour in your drawings to clearly demonstrate your ideas. Best of luck with the project!

Kali, Project Support Officer, IP Australia

Accessible and Sustainable Charging Solutions in Parks



13 March 2025 by [arijittt](#)

38

2025

I am working on a innovative solution to a daily struggle—finding a place to charge devices while enjoying outdoor spaces. As a student, I often want to study in parks/outdoors, but the lack of charging options keeps me stuck indoors. My idea is a cost-effective, solar-powered bench attachment that brings sustainable charging to public seating. However, I need help figuring out how to efficiently connect solar panels to a battery and then to charging outputs. How can I ensure optimal energy storage and seamless power delivery? Any insights on wiring, energy conversion, or component selection would be greatly appreciated!

What do you think?

[AAlexx @ 2025.03.13 6:59 AM](#)

Great Job, what an innovative way to charge outdoors

[UpRising @ 2025.03.18 12:27 PM](#)

I love it when a project sneaks up on you and you realise, gosh, why has someone not done of this already. Such a great idea and so helpful to so many situations.

Great 'post', clear call with what you need assistance with. We are on it.

arijittt @ 2025.03.24 3:34 AM

Thanks uprising! cant wait for the help

Aidan.L.Q @ 2025.04.07 12:09 PM

Hi Arijit,

I don't currently have any technical knowledge assistance for you on this occasion although, I'm able to provide thoughts on the overall concept.

Personally, I believe the idea is convenient and timely, especially with the growing demand of environmentally friendly design solutions. If applied to public spaces such as university campuses, parks and shopping centers, it could prove as a convenient way to charge electronic devices while promoting sustainability.

The major challenges I foresee relate to energy efficiency and real-world application. Given that the proposed solar panels are so small, efficient energy collection would be difficult, more so on cloudy days and in shaded areas. In addition, vandalism and theft of components in public areas could increase maintenance costs and attract a bad look.

If the design was more practical by including features such as a universal bench attachment or a LED charging indicator, I believe it would attract further interest. In addition, weather-resistant materials and battery replacement options could improve the life-expectancy of the item making it more appealing to consumers.

In conclusion, I think the charging solution has great potential, although additional design considerations should be incorporated that can improve sustainability.

Best Regards,
Aidan Q (CQU Engineering Student - Bundaberg)

Dylan @ 2025.04.09 2:27 PM

I think this is a really cool idea and one that could make studying or working outdoors more convenient. Having a solar-powered bench with built-in charging ports is a great solution for students and remote workers who enjoy being outside.

That said, where I live, I could definitely see this kind of device being at risk of either getting stolen or damaged by delinquents. Unfortunately, public infrastructure with visible tech components often attracts the wrong kind of attention, either from people wanting to take it for parts or just vandalize it out of boredom. On top of that, I imagine the weather could be a real issue too. Electronics like USB ports and energy storage units can be sensitive to extreme heat, cold and/or rain, so outdoor exposure might lead to faster wear and tear unless properly weatherproofed and maintained. I would be curious to see how you would approach these challenges.

Some suggestions I have to potentially improve the design would be:

1. Use materials and casing that are lockable and resistant to prying or unscrewing, making it substantially harder to tamper with. You could make it that you need to get permission from the local council/owners of the box to gain access to a pin, key card or something along those lines.

2. Maybe even put the charging unit inside the bench rather than having it hang off the side. You would also need extra protection for the solar panel. Something like glass or a flexible panel design to allow more efficient energy capture and better durability.
3. You would need to ensure all electronics are enclosed in a weather-sealed, IP-rated housing. Also, use coated or rustproof materials for the frame and wiring to handle rain and humidity, while also being physically damage resistant but not electrically conductive.
4. Incorporate an automatic shutoff system during heavy rain or unsafe conditions. Another option is to install them in those undercover benches with the table, as this would also suit laptops users better and keep everything out of the elements.

Overall, it's a great concept that just needs a bit of practical reinforcement to survive the realities of public and outdoor use.

All the best,
Dylan S, student at CQU, ENEG12007

Nicholas Larsen @ 2025.04.09 9:14 AM

Hi arijittt,

Currently, I don't have much to contribute in terms of recommendations for optimal energy storage and seamless power delivery but I can provide my thoughts on your idea. Your idea for public seating incorporating a power bench is extremely innovative and clever and I think that this is a brilliant way to promote outdoor study, as you mentioned, as well as providing an option for those in public who may be in need of an outlet. Furthermore, your idea also promotes great sustainability by utilising solar power. Of course, power availability may be limited if it's not particularly sunny outside for prolonged periods but there's not much that can be done to prevent that. Since the system can be easily attachable to existing benches, this also could open the possibility for implementation in other public areas such as tables.

Just a few factors to consider:

- Make sure that the attachment is made from a material that can withstand harsh weather conditions, particularly high and low temperatures, and rain; ensure that the electronics are properly sealed inside too.
- Ideally the material should also be sourced sustainably; particularly consider recyclable materials.
- Ensure the attachment is built and properly installed in a way that it can't be broken into or pried open easily, but can still be accessed for maintenance. Perhaps, it could be detachable in a way that the bench doesn't have to be unavailable to use during maintenance
- Make sure to follow the relevant standards of your country/region, particularly those relating to electrical installations and solar panels.

Overall, your idea is fantastic and I can see this being considered for implementation across the world. Keep up the great work!

Kind regards,

Nicholas L, ENEG12007 student at CQU

Chikumbi Mwenda @ 2025.04.10 6:07 PM

Hi Arijitt

Congratulations for coming up with such a brilliant idea. I can relate with the idea as there are times am unable to study from the park due to unavailability of electronic devices charging facilities.

I am sorry am unable to assist you with how to connect the solar panel to battery or the charging port as it is out of my area of specialty. However, I will suggest a few things that you can consider and possibly incorporate in your design

I suggest repositioning the solar panels that they can serve a dual function: providing a shade to bench occupants as well as supply voltage for charging the battery. You would likely agree with me that the benches become quite uncomfortable to seat on in summer when the heat is intense and sunlight reflecting off the papers makes studying difficult. A shade would make benches more comfortable.

Consider getting rid of the central charging unit as it susceptible to theft and vandalism. My recommendation is that you design a lockable storage for the battery and reposition the charging outputs to maybe 3 points that each occupant can plug in the phone or laptop and use it at the same time without moving to one side of the bench.

Congratulation once more for the brilliant idea.

Chikumbi Mwenda

CQU undergraduate Engineering student (ENEG12007)

Macey @ 2025.04.11 6:32 AM

Hi Arijittt,

What a great idea! I think this would encourage students to study outside and consequently improve their mental health, being in nature while maintaining a great sense of productivity. Have you considered creating a table with two of these benches on either side, acting as an outdoor productivity hub? You could also add shade coverage to not only protect people from the sun but also reduce the wear and tear of the charging system itself. If shade were to be implemented, solar power could potentially be installed on top of it. Although this may increase the pricing of the project.

- Macey (CQU, ENEG12007: Creative Engineering class)

Henry B @ 2025.04.11 1:23 PM

Hi arijittt,

This is a good idea! I always preferred studying outdoors when possible and losing charge is irksome - the computer always runs out when you're really on a roll.

I think there's a few points to consider:

- as others have said, I think it would be better operationally if this were more of a picnic-table-with-roof design. This would allow more solar panels to be installed to capture as much solar energy as possible to charge the battery. This feeds into:

- it might not be feasible to have general purpose AC power outlets in the units. There is nothing preventing someone from plugging a hairdryer or heater into them and immediately overloading the inverter or draining the battery. So maybe:

- only provide USB outlets. This could be a pain, although many laptops charge through USB-C these days, so could still be feasible for laptop charging. Additionally:

- if only USB outlets are provided, there is no 240V source in the units, which is definitely preferable from a safety perspective - particularly in a public place potentially at risk of vandalism

For more inspiration I might suggest looking at those modern bus stops with solar panels on the roof to power LED lighting, they will contain the solutions to many of your questions I think.

Anyway best of luck!

Henry B (CQU Student ENEG12007)

Cody Hamilton @ 2025.04.13 1:32 PM

Hello,

This is a highly relevant and socially impactful project that responds directly to the growing demand for sustainability in public infrastructure. Your idea for the solar-powered charging bench is not only creative but very scalable, particularly in University campuses and transport hubs.

A couple of things to provide feedback on:

- How do you plan to keep the charging station attachment protected from the weather and/or external factors such as crime (someone stealing the charging station). If a charging station suddenly stops working, how would the relevant parties be notified to solve the issue and get it running as quickly as possible.

- How would this system integrate into existing infrastructure without needing major structural changes. Maybe consider a modular clamp-on or slip-fit design to make your unit compatible with different bench styles.

- How could this be marketed to local councils. If this is not providing any direct benefit to local councils other than user happiness, how is this product expected to be marketed. Would it cost money to charge your devices at the station? If not, how would this product be financially feasible.

Overall it is a very creative product with huge upside potential, and I am excited to hopefully see something similar to this in the future.

- Cody Hamilton from ENEG12007 Creative Engineering CQU University.

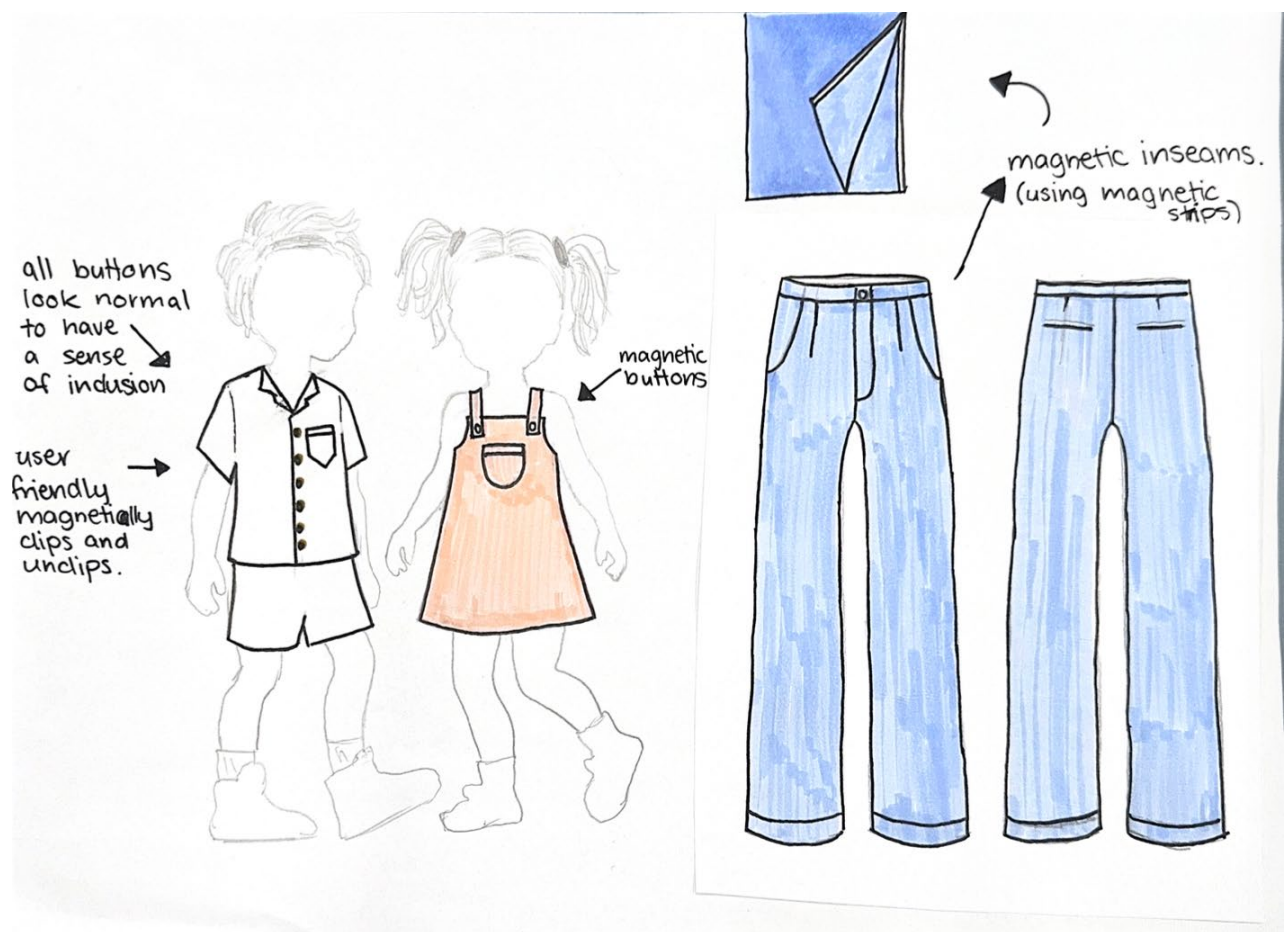
IP Australia @ 2025.04.30 10:17 AM

Hi arijittt,

It's really impressive to see such critical and thoughtful thinking, keep up the great work!

Kali, Project Support Officer, IP Australia

Adaptive Clothing for Children with Disabilities or Temporary Impairments



11 March 2025 by **phoebe g**

855

2025

A collection of adaptive clothing for children with disabilities or temporary impairments, designed to foster independence. Inspired by my struggle getting dressed when I injured my ACL. This struggle meant a lot of independence was stripped away, independence is essential for children to develop and mature. Using magnets, children are empowered to become self-

sufficient when changing, boosting confidence and fostering a sense of inclusion. It supports their development by combining functionality with innovation to enhance their quality of life. The purpose is to create a practical and empowering solution that strengthens independence and emotional growth for children facing physical challenges.

What do you think?

UpRising @ 2025.03.18 12:33 PM

Brilliant idea Phoebe. So many great wins here. Flexible and adaptive recovery wear also helps in reducing further injury.

Eyes looking around to all the different applications of your idea!

How can we help bring this to market already!

phoebe grace @ 2025.03.24 9:17 AM

@UpRising, Thank you so much. I am very excited about this project. I've been trying to make this project as inclusive as possible, as I know that everyone's situation is different. Because of this, I am also going to make a DIY adaptive clothing kit so that school uniforms or other clothes have the ability to suit everybody. I would love to hear any insights and ideas you have surrounding my project and I am so grateful for your support.

SarahHardy @ 2025.04.10 11:50 AM

Hi Phoebe, I think this is a great idea which could help many children with disabilities to gain independence. Have you considered using Velcro instead of magnets for the clothing? This may be a more lightweight solution and would be more comfortable for a child with disabilities. Another way to expand on this idea would be to include different designs for different seasons and occasions. For example, light and breathable fabrics for summer months and warm jackets for winter time. There could also be designs for formal clothing such as dresses and buttoned shirts. This would foster inclusivity and allow for disabled children to have their own fashion sense, which can be an important element in self-confidence, especially for young people.

Kind regards,

Sarah H, CQUniversity student

emilyswanton @ 2025.04.11 7:40 AM

Hi Phoebe, I also think this is a great idea to help children with disabilities. I do believe some areas need to be looked into further as some things have not been considered completely. Regarding the temporary impairments, I assumed this would include broken bones, etc. If this is the case, the clothing items can be used, but it would only be for some time. Although they can wear this beyond that period, they will grow out of the clothing item before they have another chance to wear it.

The other aspect that I believe needs to be included is what disability the child might have. This needs to be further looked into as children with Down syndrome will benefit from this drastically as they can develop independence - so great job there. but regarding children with autism and other similar disabilities, this might affect them more negatively. This is because they can become oversimulated easily and might find this as less beneficial.

Regarding these points, I believe the idea is great, but the target customers may need to be adjusted as it is quite a large group and may not be beneficial for some.

Emily Swanton from CQU ENEG12007 Creative Engineering class.

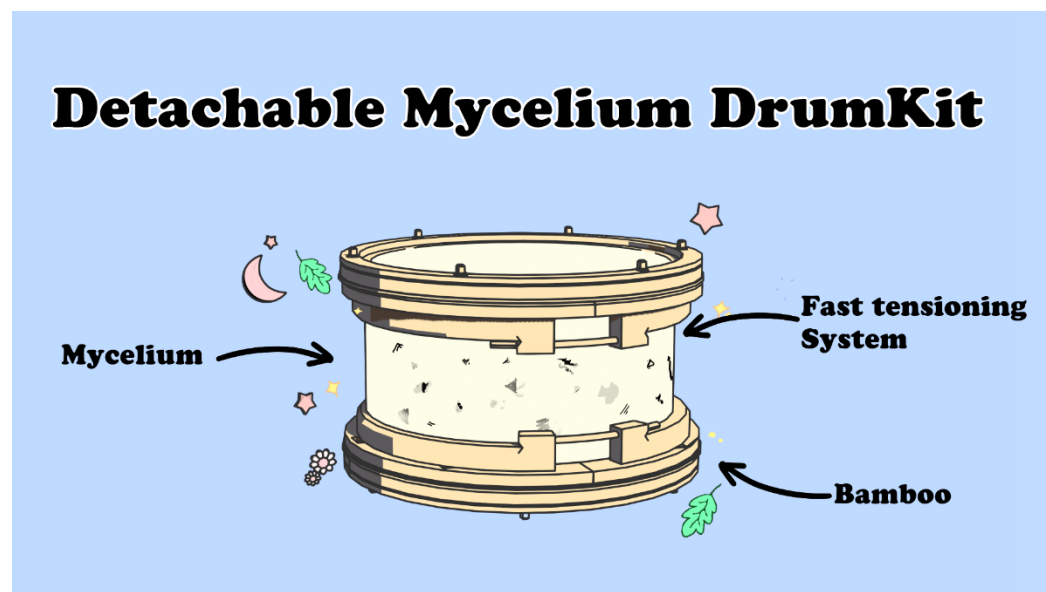
IP Australia @ 2025.04.30 10:11 AM

Hi Phoebe,

Feeling included is so important – great to see you thinking about accessibility and inclusion! Good luck with the project.

Kali, Project Support Officer, IP Australia

Detachable Mycelium Drumkit



4 March 2025 by **Benr**

64

2025

Millions of drum kits produced yearly end up in landfills, unrecyclable and non-biodegradable. As the materials are difficult to separate the whole kit ends up in landfill causing environmental destruction. This unsustainable cycle needs to change.

I have designed a mycelium and bamboo drum kit, as a sustainable solution. Designed for disassembly, each component can be individually recycled, ensuring a cradle-to-cradle solution. These eco-friendly materials also reduce costs and benefit the environment, both during manufacturing and at the end of the products life.

Exploded view (model)

<https://drive.google.com/file/d/1Ja9DqRmvqtHzf8NLE-wDn1kTohVXFFr1/view?usp=sharing>

What do you think?

UpRising @ 2025.03.09 5:56 AM

A fantastic concept Ben. I had never really considered the scale of the waste created by discarded short term musical interests. So great that you are creating awareness about this.

What are two or three things that you need assistance with?

Also check out the Shop tab in UpRising site for possible places to purchase Mycelium.

Great work

George Alexandratos @ 2025.03.10 4:20 AM

Hey Ben, i'm making the mycelium single use lids, have you started growing anything with mycelium yet, if so hows yours going. Thanks George

UpRising @ 2025.03.10 4:20 AM

These two might be worth reaching out to...

available in Europe through [Grown.bio](#) and in the US via [Ecovatedesign](#).

Great to see you connecting and helping out with another UpRising student project.

Legend!

Benr @ 2025.03.10 1:27 PM

Hey Alex,

I saw that, it looks sick!

i'm mainly just finalising the design now (I had to redo it like 3 weeks ago so i'm a bit behind).

I was wondering if you wanted to chat about our projects? do you have discord?

My name on discord is: treetrunks_

If not I can just send my whatsapp..... hello?

DA real1 @ 2025.03.25 10:28 AM

Ben Ben Ben... you have really outdone yourself with this one, beautiful! Once everything is done, hit me up. My fellow friend and music artist 'Summrs' will happily buy hundreds of these + he will overpay, he is very big on sustainability and the environment.

RobertENEG12007 @ 2025.04.11 12:34 PM

The focus on sustainability is a good strength here, and using mycelium is an interesting idea. However, the acoustic properties of mycelium aren't mentioned, which are an important property that would be affected by the change in material. Drum sound is obviously an important factor in drums, and it's not clear how this material compares to standard drums in terms of how it would affect the sound.

Mycelium may not perform well in humid or wet conditions, which could limit where and how this drum kit could be used. This should be addressed if the design is intended to be a long-term solution, and be usable in various environments.

Overall, it's a good idea, but more information around performance and environmental conditions would help improve it.

Robert, MKY4, from CQU ENEG12007 Creative Engineering class

Benr @ 2025.04.11 12:34 PM

@RobertENEG12007

I'm doing a prototype now on seeing if the mycelium will work with a normal snare drum, If it doesn't i'm going to do a inner bamboo ring so the acoustic is still there.

If it still doesn't work, i'm going to try other creative sustainable materials.

I'm also down to 2 sustainable glosses which should help protect it a little bit

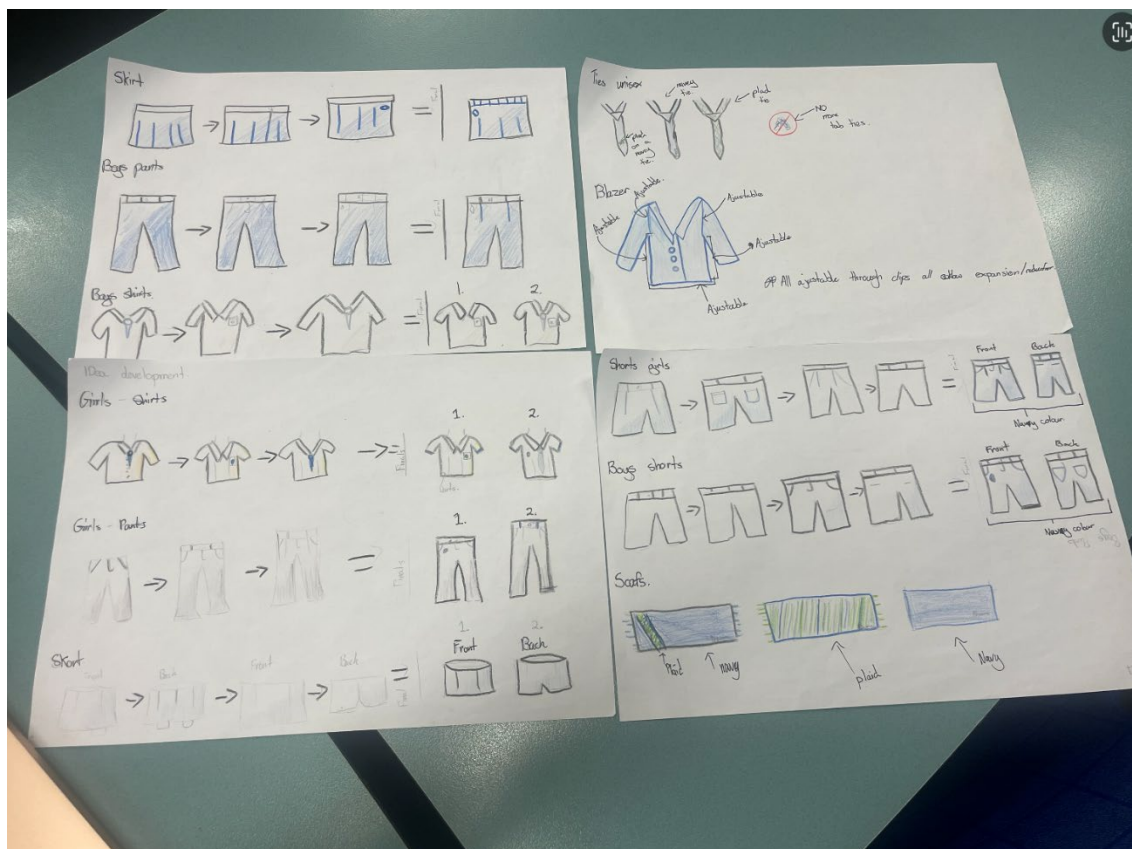
IP Australia @ 2025.04.30 4:58 AM

Hi Ben,

Your vision for creating a more sustainable world is truly inspiring. Keep up the good work!

Kali, Project Support Officer, IP Australia

Uniform that is customizable.



4 March 2025 by sarah florence

64

2025

The purpose is to create a uniform that you can customized to suit the students style as this is benefits students as expression of individuality. Another element that I am including is having different elements of the school uniform adjustable e.g. blazers. This has purpose as blazer for HVGS retails for \$200 this is not affordable for some and by making it adjustable students can wear the same blazer through 7-12. this also create less waste which means that it will be more ecofriendly.

What do you think?

UpRising @ 2025.03.09 1:54 AM

A fantastic idea Sarah.

As a young person grows from between the ages of 12 to 18, a family often has to purchase three or four complete uniforms, for some schools, thats shorts shirts, socks, blazers, which can be very expensive. Even purchasing second hand can be expensive along with the stigma.

The idea of be8ng able to constantly adjust garments, especially a blazer is a great idea.

What are two things that we can assist you with?

Looking forward to seeing this project develop.

alnahh @ 2025.04.08 12:02 PM

This is really great Sarah! I like the way you think.

I am a 2nd year student, Alanah in ENEG12007-Creative Engineering and found your idea so intuitive; with the rise of fast-fashion and big corporations that pump out more waste than we need, it makes me happy to see a design that tackles an area of fashion that could eventually be expanded into other clothing. I did have some question on how you would integrate the customizing aspect of your designs. For example, for the blazer to be customizable, it would need to be bigger to cater to growing bodies of school-aged children. How would you address the bulkiness of that extra fabric? School children are active and having that extra fabric on them wouldn't be ideal especially during summer. If they were detachable, the quality of the clothing that has gone through multiple cycles through the wash would differ from the attachment that does not get used as much. How can we make sure the detachable parts stay somewhat the same in terms of its quality?

Additionally, from your sketches it wasn't very clear how the customizations on the uniforms would be attached. Are they also through clips, zippers, Velcro or maybe even with detachable iron-on patches?

This is a really solid idea, and I can see it changing the game for sustainability in clothing. Did you know a garbage truck's worth of clothing end up in landfills every second? Your idea can lessen this, and I am excited to see what you come up with!

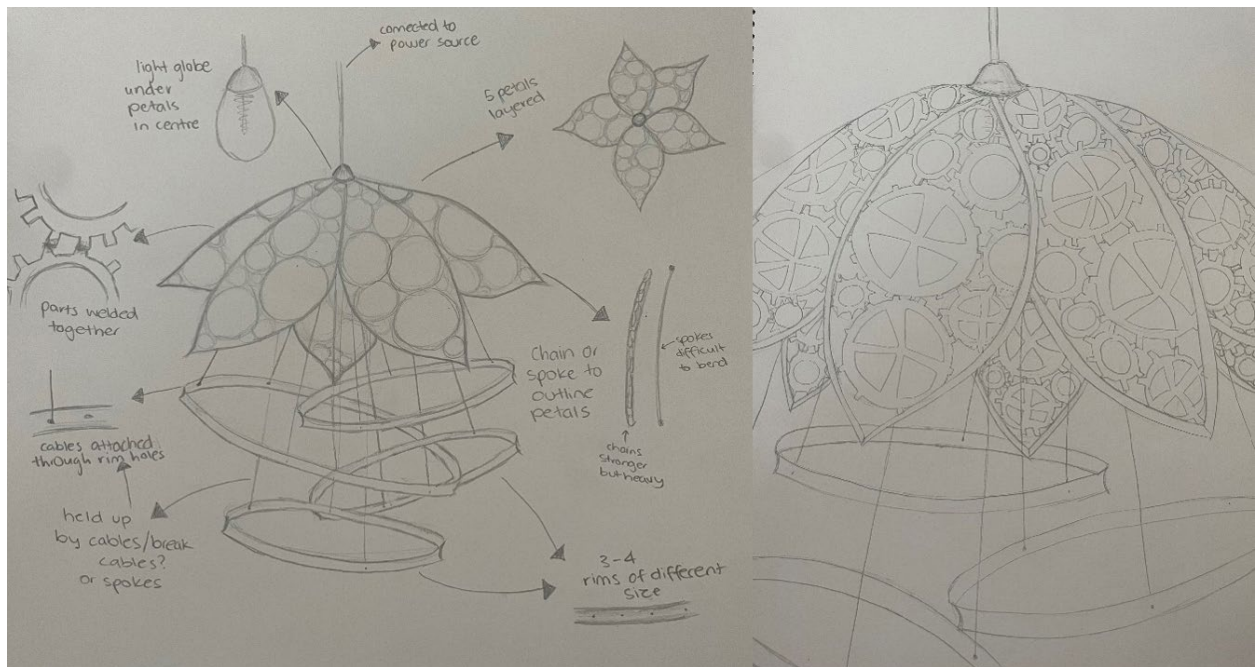
IP Australia @ 2025.04.30 10:08 AM

Hi Sarah,

I love how much you've thought about the challenges facing students, and how solutions-focussed you are. Best of luck with your project!

Kali, Project Support Officer, IP Australia

Turning old bikes into light



27 February 2025 by **Elleni T**

117

2025

I am designing a light installation made from purely unusable and upcycled bike parts, to advertise a specific organisation who take in and donate old bikes to people in need. This will capture the attention of members of the public through bright lights and shadows, advising them of what they can do with their old bikes, as well as how they can help individuals in poorer communities. This aims to reduce the environmental impact of unusable bike parts and old bikes in landfill.

I am seeking guidance into advertising a specific organisation through an art installation rather than using words.

What do you think?

PJM @ 2025.02.27 5:17 AM

A great use for old bike parts Elleni! What type of organisation are you looking to promote with this installation?

UpRising @ 2025.03.01 5:17 AM

Such a clever idea Ellen. I love the play on words here, 'shining a light on this issue'. There are so many great organisations doing important work to link non used bikes to communities who need them. Quick search found 4 or 5 great examples. <https://asf.org.au/projects/revolve-recycling-foundation/500-bikes-for-kids> Keen to see which one you go with.

Looking forward to seeing your concept evolve.

PS Not sure if you have tried using 'Notes' in an iPhone to take scans of drawings. The images come up really sharp and clear. Its a little known tool that most iPhones have but not many know about.

Elleni T @ 2025.03.08 5:19 AM

@PJM, I am hoping to promote a national organisation called 'Bikes4Life,' who receive donations of old bikes and send them to people in need throughout the world, such as communities in Uganda and Cambodia!

Catherine MacNamara @ 2025.03.28 9:21 AM

Amazing idea!

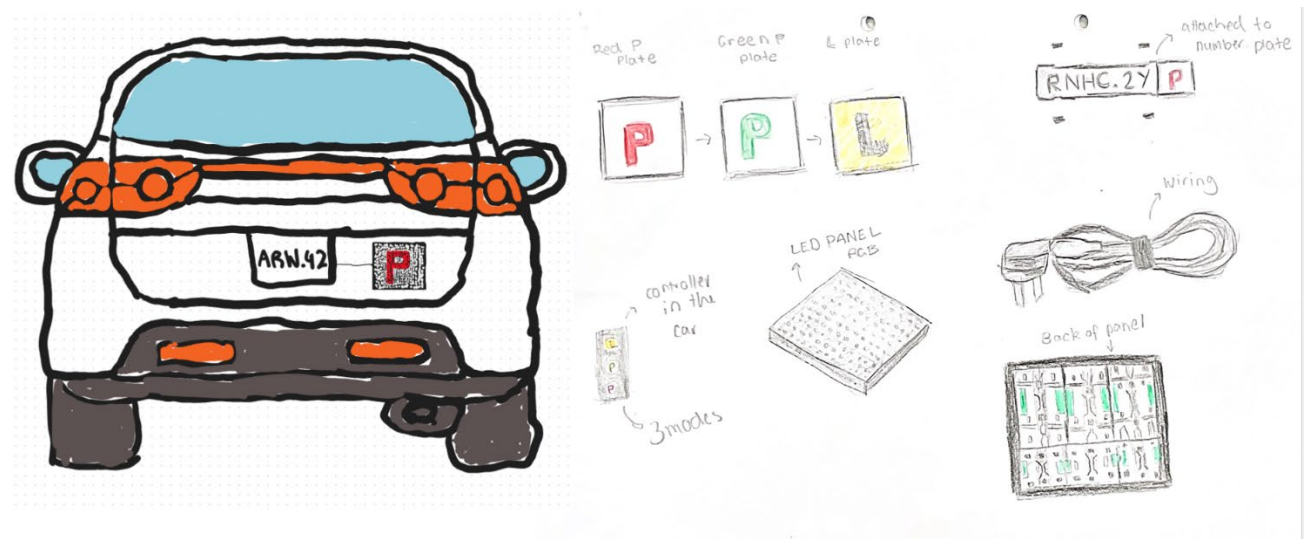
IP Australia @ 2025.04.30 5:36 AM

Hi Elleni,

You are thinking so creatively and have such beautiful drawings. Good luck with your project!

Kali, Project Support Officer, IP Australia

Modifying the driving system



27 February 2025 by **Charlotte F**

I am developing an electronic learner and provisional driving plate system that integrates a lighting solution into a car's existing electrics. This system allows drivers to control the plates from inside the vehicle, eliminating the need for manual removal. When not in use, the screens turn black, reducing reliance on plastic or magnetic plates. This innovation simplifies daily driving while promoting sustainability by reducing plastic waste and pollution caused by lost or damaged driving plates. I am seeking guidance on coding the lighting system, recommended software for development, and best practices for integrating the system into a vehicle's electrical setup.

What do you think?

You must be [logged in](#) to post a comment.

Comments

PJM @ 2025.02.27 8:17 AM

What a great idea Charlotte - a sustainable solution for drivers and their parents!

Is it possible to have a light on the drivers dash to show if the plates are activated?

Leone Smyth @ 2025.02.28 12:41 PM

Such a fabulous, practical idea!

UpRising @ 2025.03.01 5:37 AM

A great concept Charlotte.

Also a great way to reduce the plates being left on accidentally and causing confusion with other motorists and traffic authorities. Some great technical complexities in here and a lot of good crossovers in terms of social and environmental needs.

Not sure how much experience you have had with micro bits or playground express, but they are a great way to start to build your first prototype. The team from LittleBirdy are a great place to start. https://littlebirdelectronics.com.au/products/circuit-playground-express-developer-edition?_pos=1&_sid=ef92ae8b7&_ss=r

astronat @ 2025.03.15 2:45 PM

I love this idea! I definitely find myself worrying when I'm driving that I've lost one of my plates, but this would definitely eliminate that issue. I'd recommend looking into Arduino for the electronics, as it's relatively straightforward to get the hang of but also very powerful. Lots of tutorials online for how to code it too. Have a Google for 'Arduino LED Matrix' - this could be what you're after for the actual plate display. Would be great for prototyping too as it is pretty compact and can carry its own power supply if you don't feel like rewiring your entire car just yet haha. Excellent idea :)

cooper F @ 2025.04.07 12:44 PM

This is a great idea Charlotte.

As a provisional driver myself, I do find it annoying moving the set of plates I have from car to car, and sometimes find myself forgetting them and having to turn back or stop and buy new ones, which are overpriced and will eventually end up in the bin, contributing to landfill.

As for how to power them, small lights generally have quite a low power draw, and you could look at integrating a solar-powered system into the panel, or a more reliable source of power would be the 7-pin trailer plug that the majority of cars have below their rear bumper.

Overall, you're onto a good idea and are on the right track.

Regards, Cooper Fairfull

CQU Bundaberg. Undergraduate Engineer

Engineering Bro @ 2025.04.08 4:09 PM

That's such a great idea, Charlotte. My name is Ethan and I am a 2nd year engineering student in ENEG12007-Creative Engineering and I think creating a digital display provisional driver plate that can display all the provisional plate IDs would be super useful and promote sustainable solutions. I certainly know how frustrating those plates can be from getting lost or breaking due to sun damage or forgetting to take them out of the car before your parents drive off to work, so I think you are on to something here.

I did have some consideration about your project. Firstly, how easy will it be to transfer the digital plates to another? Some users may need to switch vehicles, and depending on how the system integrates with the car could impact its ability to be easily transferred. Depending on what type of power system you are using can also impact the versatility you have when transferring it between vehicles. A solution for this would be implementing a rechargeable battery system that could be put into the car's charging ports.

Secondly, I think you can utilize the idea for other conditions or people. People with disabilities often also have some sort of stickers or identification system to allow them to access specialist parking, which could also be implemented with the digital plate. In addition to this, the plate could also be used as a form of driving ID to quickly determine the current person. The workforce could utilize this for special parking, vehicle identification or company business logos. I think this is a way that you can make it more versatile to make the product more viable but still be able to complete your desired function.

Best of luck, Charlotte, I cannot wait to see those digital plates next time on the road.

Matt Wood @ 2025.04.09 6:00 PM

This is an innovative idea Charlotte,

As a provisional driver myself, I am familiar with the constant issue of having to change plates between cars or dealing with the cheap plastics going brittle and breaking or suction cups falling off, or external magnetic plates being stolen. The plates are a constant hassle to stay on top of; after all if the plates are not displayed it is a \$258 fine and 2 demerit points in Queensland.

As mentioned, an issue of running these plates would be charging the battery to display the screen. A recommendation I have would be a solar panel fitted to the top of the screen. This concept is currently used in tire pressure monitors. The tire monitor is placed on the dash of the vehicle and on the back of the display is a solar panel that fuels the system. I believe this would

be the most suitable option as it would result in a clean seamless install, mitigating the need of hiding cables.

Another recommendation I have is to be able to have the display controlled from inside the vehicle. Most vehicles these days head units allow for mobile phone connectivity such as apple car play. If you were able to develop a connective app the driver will be able to see what the display is showing and whether or not the product is on or not.

All of the best.

Kind regards,
Matthew Wood

CQU Bundaberg. Undergraduate Engineer (ENEG12007)

Bradley Jessop @ 2025.04.11 10:30 AM

Hi Charlotte,

This is a great idea. However, just hooking electronics up to the existing cars systems may be a big issue. Car manufacturing companies might void any or all of your warranty with this particular modification. It would also mean the regulations surrounding this modification would need to be approved by the primary regulatory body for vehicles, in Australia it is the Department of Infrastructure, Transport, Regional Development, and Communications (DITRDC). From here the installation would need to be completed by a service professional, i.e an Auto-Electrician and possibly be mod plated. Still runs the risk of voiding warranty if manufactures don't approve of electronic modifications.

Possible problems:

- The device is not installed correctly by the technician
- Device is incompatible with the system and trips fuses
- Drains battery
- loose wires causing earthing issues
- Damage to the front and rear of car, breaking the device, possible fire hazard.
- Installation costs and approvals by Federal and State regulatory bodies

Possible solutions:

- A device that is battery rechargeable. Not connected to the cars electrical system
- Able to be attached and or re-attached. Could mean designing a number plate cover that has a metal backing and is sturdy enough to hold the device and display the number plates in accordance to road regulations
- Option A - Device could have a switch built on one side that you flick on/off and flick between L's, P1, and P2 plates.

- Option B - Devices' are Bluetooth compatible to your phone via an app. The devices stay in sleep mode until your phone connects to the car and only then will the plates light up. The app should have an option for notifying you on the battery life and how many hours of driving are available before needing to be recharged.

Other thoughts:

- How the battery and or overall device can function in hot or cold climates.

- Battery life longevity. Maximum usable hours before needing recharge. Look into Li-SOCl₂ or LiMnO₂. These batteries are used in electronic water meters and have high energy density's and long lifespans.

- Chosen LED's to be energy efficient

- Chosen material needs to be able to withstand the constant change in UV, temperature and weather conditions.

kind regards,

Bradley Jessop
CQU ENEG12007 Creative Engineering

tonisha @ 2025.04.15 9:13 AM

This is a smart and practical idea that makes it easier for drivers to switch between L and P plates without having to get out of the car. It's great that it also helps reduce plastic waste and lost plates. To help improve this project, I suggest using something like Arduino or Raspberry Pi to control the lights. You can connect it to the car's battery using a 12V to 5V converter and maybe use a waterproof LED panel so it works in all weather. It might also help to use a small switch or phone app for changing the modes (L, Red P, Green P) easily from inside the car. Overall, this is a really good idea that could make driving easier and safer for learners and provisional drivers.

Kind regards,

Ronisha Magar

CQU ENEG12007 Creative Engineering

Harrysteele @ 2025.04.17 7:53 AM

Hi Charlotte,

The concept improves convenience, reduces plastic waste, and enhances safety by eliminating the risk of forgotten or lost plates. However, it may face challenges with legal compliance, visibility in bright sunlight, weatherproofing, and reliable electrical integration. To improve the system, you could explore adding automatic brightness adjustment, fail-safe modes, and modular plug-and-play wiring. Prototyping with Arduino or Raspberry Pi using addressable LEDs and consulting transport authorities early for compliance approval would help progress this promising idea into a functional and road-legal solution.

IP Australia @ 2025.04.30 5:34 AM

Hi Charlotte,

I can tell how hard you've worked on your proposal and how you have used your personal experience to shape your ideas, it's great to see all the effort you've put into it!

Kali, Project Support Officer, IP Australia

Safer Helmet Storage for RFS Firetrucks

HELMET SECURING DEVICE

Design Brief

I propose to design and manufacture a cost efficient and safe adjustable helmet holder that will make fire trucks across NSW safer by securing structural firefighting helmets. I will make this a cheaper and safer method for volunteer firefighters in category one appliances to respond to structural firefighting operations.

There Is Nowhere to currently store the Helmet Safely

Helmet Being stored on the middle seat.

Prototype 1

Prototype 1

Prototype 1 Trial Clip attachment

What is the Problem?

- Gallet F1 XF helmets are essential for internal firefighting operations.
- Fires can compromise structural integrity, increasing the risk of head injuries for firefighters.
- The Gallet F1 XF offers enhanced protection around the ears and sides of the head.
- These helmets feature built-in speakers and a microphone for radio communication convenience.
- There are storage issues in fire trucks for the helmets, affecting distribution to volunteers.
- Firefighters may purchase a \$300 hook for helmet storage with no mounting options available in the truck.
- Lack of proper storage can lead to damage to the helmets, fire trucks, and even pose safety risks to firefighters.

26 February 2025 by Ellison

210

2025

For my MDP, I have decided to explore the challenge of storing new structural helmets (Gallet F1 FX) on the RFS fire truck. At present, there is no secure storage option for the helmets, and their current location poses a safety risk to both the crew and the vehicle. I aim to develop a viable storage solution that ensures the helmets are safely accommodated within the fire truck.

What do you think?

You must be [logged in](#) to post a comment.
Comments

UpRising @ 2025.02.26 1:19 PM

Fantastic idea Ellison

What are two or three things we can assist you with?

Ellison @ 2025.02.28 9:30 AM

@UpRising At this stage, I have particular areas that I need help with:

1. Suggestions for materials I could experiment with
2. Finding sustainable materials that are recyclable, such as plastics that can be remelted and turned into 3D printing filliments or used for moulding.
3. Possibly access to plastic moulding equipment or similar.

Riley @ 2025.04.10 7:39 AM

Hey Ellison, this is an interesting proposal. Have you thought about specific storage outside of the cab of the fire truck? maybe storage that has some type of security system ensuring the person requiring the helmets are the fire personal and not just available to the public to grab, this is based off of most of the componentry needed by firies is often located around the outside of the truck. The implementation of smart devices could also be implemented into the dash of the fire truck to ensure all gear has been returned to the truck before leaving the site.

Regards, Riley Harney

CQUniversity

Undergraduate Mechanical Engineer

pragya @ 2025.04.15 9:28 AM

Hello Ellison,

This is an interesting concept! I really appreciate how you're prioritizing the safety and security of helmet storage for firefighters. The idea of a clip attachment seems very functional. It might also be beneficial to explore materials that can withstand heat or harsh conditions since fire trucks typically operate in demanding environments. Additionally, it could be valuable to assess the clip's strength when the truck experiences movement or vibrations.

Best regards,

Pragya Yadav

CQUniversity

Undergraduate Civil Engineering Student

IP Australia @ 2025.04.30 5:32 AM

Hi Ellison,

I really appreciated how you structured your project proposal, it was very clear, concise and detailed. Best of luck with the project!

Kali, Project Support Officer, IP Australia

Clothing for the vision impaired

The infographic is titled "TACTUS CLOTHING FOR THE VISION IMPAIRED". It features two red t-shirts with various tactile features labeled: "stylish back neck design", "magnetic closure", "bright red fabric", "3D tactile Braille pearls used for Braille spelling 'TACTUS'", "invisible magnets", "Braille label", and "red t-shirt XS". Below the shirts is the "INITIAL DESIGN" section. To the left, it shows an "ACCESSIBLE WEBSITE/ TACTILE CATALOGUE" with a laptop icon and a "MONTHLY CATALOGUE" with a book icon. To the right, there are three text boxes: "Clothing brands focus on visual appeal, overlooking the needs of vision-impaired individuals", "The TACTUS brand: Magnetic Closures - Easy snap-on magnets replace buttons for hassle-free dressing. 3D Tactile Braille Labels - Raised Braille provides size, colour, and care instructions. Textured Patterns & Fabrics - Different textures help distinguish clothing items. Soft, Wrinkle-Free Fabric - Versatile colours which simplify outfit coordination.", and "Blind and vision impaired individuals face unique needs when selecting, wearing and organising clothing as they rely heavily on tactile, auditory and other sensory features."

TACTUS

CLOTHING FOR THE VISION IMPAIRED

stylish back neck design
magnetic closure
bright red fabric
3D tactile Braille pearls used for Braille spelling "TACTUS"
invisible magnets
Braille label
red t-shirt XS

INITIAL DESIGN

ACCESSIBLE WEBSITE/ TACTILE CATALOGUE

MONTHLY CATALOGUE

User-Friendly Website

- High contrast for easy visibility.
- Text-to-speech feature for accessibility.

Tactile Monthly Catalog

- Subscription includes Braille & fabric samples.
- Allows users to feel and understand clothing before buying.
- Fabric samples made from scrap material to minimise waste.

Clothing brands focus on visual appeal, overlooking the needs of vision-impaired individuals

The TACTUS brand:

Magnetic Closures – Easy snap-on magnets replace buttons for hassle-free dressing.

3D Tactile Braille Labels – Raised Braille provides size, colour, and care instructions.

Textured Patterns & Fabrics – Different textures help distinguish clothing items.

Soft, Wrinkle-Free Fabric – Versatile colours which simplify outfit coordination.

Blind and vision impaired individuals face unique needs when selecting, wearing and organising clothing as they rely heavily on tactile, auditory and other sensory features.

24 February 2025 by Cindy.B

782

2025

Tactus—Latin for "touch"—is a clothing line designed to **empower vision-impaired individuals** through **touch, texture, and intuitive design**.

Choosing an outfit is simple when you can see, but for **285 million vision-impaired people worldwide**, it's a challenge tied to independence.

Fashion brands often **prioritise visual appeal**, overlooking the needs of Vision-impaired individuals. Some brands include **Braille**, but that's not enough—identifying **armholes, buttons, or the front of a shirt remains difficult**. Tactus makes dressing **effortless and stylish**, proving fashion can be both **accessible and empowering**.

What do you think of my project? Are there any features or improvements you'd suggest?

What do you think?

You must be [logged in](#) to post a comment.
Comments

Tavo @ 2025.02.24 5:04 AM

This is a unique, creative and wonderful project, congratulations on your initiative!

DavidT @ 2025.02.24 2:59 PM

Amazing idea! Excited to find out how it progresses!

BeatrizL @ 2025.02.25 2:18 PM

What a creative innovation in fashion!! A very inspiring project.

Chloe.Howden @ 2025.04.10 3:44 PM

Hi Cindy,

This idea seems great, very useful and a good way to make fashion more accessible! You mentioned the use of decorative pearls to create a tactile braille description on the items, and while that is an effective design for most women I would be curious to know what other aesthetic elements you could swap those for to become more appealing to men? I was also curious about the security of using magnets as replacements for buttons as it may get caught and pull apart easier if using a more lightweight magnet, however this design is very well thought out and I'm very interested in seeing how it progresses.

Regards,

Chloe Undergraduate Engineering Student CQU

emilyswanton @ 2025.04.11 12:54 PM

I think Cindy has a great idea when targeting a specific and small audience to appeal to as it correctly outlines the needs directly. I do also believe that some improvements could be made.

From my understanding, the use of pearls is to appeal to blind/ vision impaired women. I do think that this is a great idea but the process of washing these clothes might become a bit difficult. This could be when beads fall off or begin to pull from the fabric, the brail might not be in place properly. As for the website and design I do think that this is a good idea if they are visually impaired as the high automatic brightness will be easier to read.

As for the blind, I believe that if they are to receive a piece of clothing, there should be steps included within the package providing a way to receive a catalog and how to have someone else help them with it. Regarding the pearl design, if this is to appeal to women, it is a fantastic idea although another way to build up fabric should be included for men. This is just to ensure there is less feminine features on the clothing item if that is something they would not be interested in.

Overall, it is a great idea regarding the initial concept directed at women. But maybe consider looking further into how to build up thread or fabric to create brail on clothes that won't pull or lay flat again after washing.

Emily ENEG12007 - CQUniversity

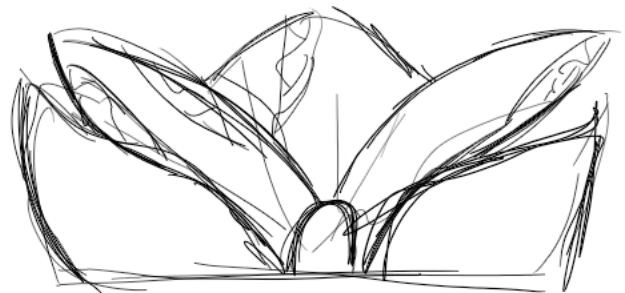
IP Australia @ 2025.04.30 5:27 AM

Hi Cindy,

It is wonderful to see your creative thinking and innovative solutions for increasing accessibility!

Kali, Project Support Officer, IP Australia

Theatre as a Solution For Wellbeing in Rural Australia



24 February 2025 by Jocelyn

198

2025

I am to create a portable, biophilic, modular performance space designed to unfold like a blooming flower that focuses on renewal and sustainability, aiming to revitalise and foster connection, engagement, and entertainment in rural Australian communities. In light of the challenges these regions have faced, particularly due to the COVID-19 pandemic and the widening digital divide caused by rapid technological advancements, the theatre serves as a beacon of cultural and social revitalisation. I am seeking guidance on modular construction strategies, sustainable and durable materials for large-scale productions, and recommendations for modelling programs to bring this vision to life

What do you think?

PJM @ 2025.02.27 5:36 AM

What an amazing idea Jocelyn.

Do you have any particular regional communities in mind yet?

Would it be school based or community based?

Jocelyn @ 2025.02.27 5:34 AM

Thank you so much for your comment PJM, I am currently looking at regional communities in general across Australia while drawing on my knowledge of places I have visited in person such as Coonabarabran, Broken Hill and Lightning Ridge. My MDP will be more focused towards communities in general rather than schools. If there are any insights you could provide that would be amazing.

VickiH @ 2025.03.06 5:34 AM

Excellent idea. Community engagement on a realistic level. Very impressive.

David K @ 2025.04.10 5:34 AM

Hi Jocelyn,

I think your idea is both an excellent and creative way to link nature's form to a functional space. Sustainability and therein connection to our local environment is a key criteria in our ever improving design standards which focus on the complete lifecycle of a product.

This idea in its current conceptual stage is exciting because there are many creative avenues to explore and further develop the project.

- Do you want this flower to be large enough for people to go inside or will it be the backdrop to a theater stage?

- Modularity /portability will be impacted by the design's size, materials and transport solutions that you have available.

- Is this design intended to be used for night shows and therefore require a lighting solution?

- Do you intend for the design to continually move or remain in a selected static state?

You should continue to sketch and draft different design layouts thinking about scale and perspective (FRONT, TOP, SIDE). Some software that may help you develop your ideas further include Revit, Sketchup or AutoCAD.

I think this is a great concept that could take many different forms depending on which direction you wish to take.

All the best,

David K

(CQU ENEG12007 - Creative Engineering)

Jocelyn @ 2025.04.23 5:34 AM

Thank you so much for your comment @David K,

My current design is of the theatre within the flower where people can enter so therefore will need to be large enough.

I hope for the theatre to be used as a regular city theatre which includes night shows so lighting will be considered.

I intend for the design to be portable to different rural areas across Australia however will remain static for long periods before moving on.

Thank you so much for your suggestions, I have experimented with Revit and Sketchup so far as well as Blender for 3D modelling, and am currently working on how the different petals which will be the modules can connect to each other for assembly. Any suggestions would be greatly appreciated. Thank you again.

Jocelyn

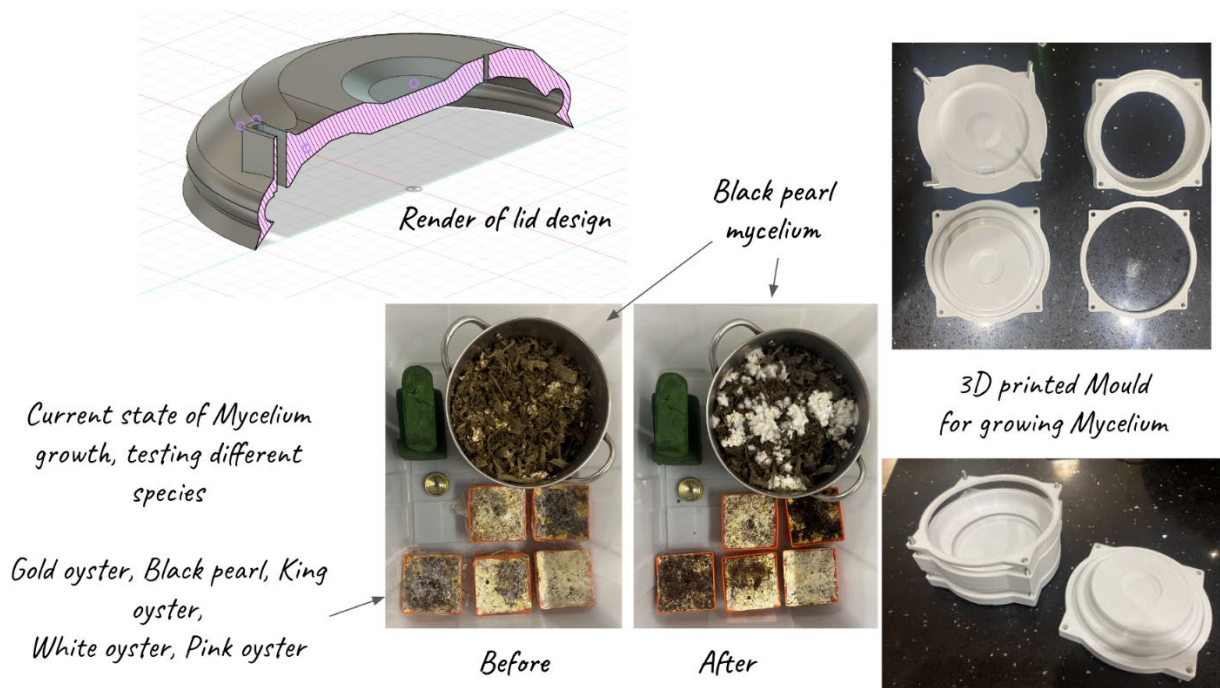
IP Australia @ 2025.04.30 5:29 AM

Hi Jocelyn,

What a beautiful concept drawing, you are thinking really creatively! Keep up the great work.

Kali, Project Support Officer, IP Australia

Mycelium single use lid



20 February 2025 by **George Alexandratos**

37

2025

My project is for a biodegradable single use lid made from mycelium. Current single use lids, even paper lids contain plastic that is harmful to the environment since it will never break down. Additionally most plastic lids are never recycled since they are so small and often contain food contaminants. I am using sawdust to grow the mycelium on then I will be putting that into moulds where it will take the final shape of the lid.

What do you think?

You must be [logged in](#) to post a comment.
Comments

UpRising @ 2025.02.21 3:22 AM

Brilliant idea George

What do you need help with. If you can provide a few tricky things you are trying to over come we can target our resources to addressing them. So many applications for this exciting material. Might be worth having a chat to these guys, <https://www.fungisolutions.com.au/>

Looking forward to seeing your project evolve.

George Alexandratos @ 2025.02.21 3:22 AM

Hello, I am currently growing a variety of mushroom species to test for the best properties for my design. I am having problems with the time it takes for the mycelium to fully colonise the moulds, if anyone can help with that I would really appreciate the help. I am also designing and printing moulds to grow the mycelium in on Fusion 360, I don't require any assistance with that however any recommendations would be greatly appreciated. thanks for viewing my project.

Benr @ 2025.03.18 4:00 AM

Did you still want to talk about our projects?

Luke Stark @ 2025.04.11 9:31 AM

Hi, I am currently an Engineering student studying Creative Engineering (ENEG12007) at CQU. I really like this idea and think it's an interesting sustainable alternative to plastics. I have a few potential considerations that may arise:

- How long will it take for the mycelium to grow to fit the mould? For instance a quick google tells me that while it varies for species, some of the slower species can take a few months.
- How expensive would it be to maintain an environment to support mycelium growth in terms of energy, water and cost?
- Are there any safety risks to consider such as prolonged contact with food or for people with mycelium allergies?

Interested to see this succeed.

Sylvian MC @ 2025.04.11 11:34 AM

Hi George,

This is a terrific idea. Single-use lids are a common pollutant I see far too often among litter. It's especially an issue with festivals, which often leave large amounts of single-use products in or nearby natural areas. Mycelium would be a great sustainable alternative to address this.

In addition to the feedback from other comments, one query I have is how effectively the mycelium lid would seal the cup. The product would need to fit the rim and be structurally sound enough to prevent any spills and subsequent burns to the consumer.

Another aspect that could be considered is the storage and lifespan of the product; Is there any limit on how long the mycelium lids can be stored for and still be fit for use?

I really like this idea, and hope it succeeds!

Cheers,

Sylvian MC, (ENEG12007) Creative Engineering student at CQU

IP Australia @ 2025.04.29 9:09 AM

Hi George,

I can tell how much thought you have put into your project and it's great to see the steps you are taking to present sustainable solutions to solve a real-world problem.

Kali, Project Support Officer, IP Australia

Cultural transmission and red envelope revitalisation



18 February 2025 by **JoshM**

86

2025

As a Chinese-Australian second-generation immigrant I have often faced difficulties connecting and familiarising myself with my heritage and family.

My project aims to solve this through a functional redesign of the red envelope - an Asian cultural staple - combatting its associated disposability to encourage cultural transmission across generations.

This will be accomplished through striking contemporary design (visual and functional) that can appeal to both traditional and modern, young audiences.

I'm seeking the help of graphics and communications design professionals and physical packaging designers for my project.

What do you think?

UpRising @ 2025.02.21 9:50 AM

Such a fascinating concept Josh. Was just reading up a little more on the back ground, <https://theconversation.com/what-is-the-story-of-hongbao-the-red-envelopes-given-out-at-celebrations-like-lunar-new-year-247687> . So many interesting overlaps with culture, technology and sustainably.

It might be worth reaching out to the great group of supporters on the ACE HUB, <https://acehub.org.au/network/portal> regarding sustainability of paper and even the ink. They would love to see this idea.

Looking forward to seeing your design come to life.

Michelle2025 @ 2025.04.02 2:14 PM
Brilliant idea!

IP Australia @ 2025.04.29 9:07 AM

Hi Josh,

Your dedication to finding creative solutions while considering cultural issues is admirable. It's clear that you are passionate about making a difference!

Kali, Project Support Officer, IP Australia

Solve listening fatigue for musicians/artists with a mobile app



App for musicians/artists to solve listening fatigue

- The app will address the issue of **auditory satiation** (colloquially referred to as "listening fatigue" in the music community.)
- Detects and provides warnings of **sound repetition** in real-time.
- Uses **scientifically-proven** therapy methods to reset the affected parts of the brain.

I need:

1. Musicians, artists, producers to **fill out my survey** on Google Forms.
2. Access to **professionals of psychology** and **songwriters** for further research of auditory satiation.

18 February 2025 by James B

As a songwriter, I experience how repeated exposure to musical phrases causes the brain to filter out sound, reducing engagement and emotional impact—hindering productivity. My project is an app that addresses onset and recovery, helping music creators stay engaged and produce better music with fewer interruptions.

The app combats auditory satiation by:

1. Early Detection: An algorithm detects repetition patterns and provides real-time warnings.
2. Accelerated Recovery: Using EMDR therapy, the app resets cognitive processing, restoring engagement without long breaks, improving workflow efficiency. I'm seeking to connect with supporters working in or studying psychology, and musicians for my survey: <https://forms.gle/jEuwiabUSgJskbVS7>

• **Share:**

What do you think?

You must be [logged in](#) to post a comment.
Comments

UpRising @ 2025.02.21 5:18 AM

Amazing James. Such an original idea. Have never thought of this or seen anything like it. Wondering if this could also be used to help teach students how to play and write music.

Will share the survey with those I know in the music world.

IP Australia @ 2025.04.29 9:05 AM

Hi James,

You're really thinking outside of the box here - great to see such creative ideas! Best of luck with the project.

Kali, Project Support Officer, IP Australia

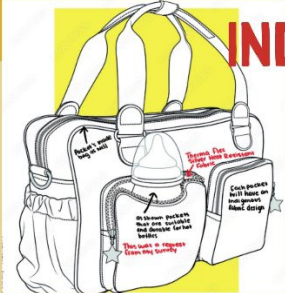
Indigenous Baby Bundle

"MANY INDIGENOUS WOMEN LIVE IN REMOTE AREAS, MEANING THEY HAVE TO TRAVEL FAR FROM THEIR HOMES TO THE NEAREST CITY HOSPITALS TO GIVE BIRTH, WHICH CAN NOT ONLY BE EXPENSIVE BUT ALSO LEAVE THEM FEELING ISOLATED AND DISTRESSED, ACCORDING TO RESEARCH FROM THE UNIVERSITY OF MELBOURNE"

I recognise an opportunity to make this experience more culturally supportive for remote mothers who travel to the city to deliver their babies. My concept is to develop an Aboriginal Baby Bundle, inspired by the NSW Health Basic Baby Bundle. It will consider the experience of Aboriginal women from remote areas feeling isolated and distressed when away from community.



Personal design



INDIGENOUS BABY BUNDLE

Every baby born in NSW has received a Baby Bundle bag, full of useful products to help women and their babies get off to a good start when they return home

- Each pocket will have an Indigenous fabric design
- Pockets will be inside the bag as well
- As shown the pockets need to be durable and suitable for hot bottles
- --> Requested in my survey
- Therma Flwx Silver Heat Resistant Fabric



I intend to gain an understanding of the NSW Baby Bundle, and customize it for remote Aboriginal Mothers to bring a cultural connection to their birthing experience.

17 February 2025 by NayliseT

22

2025

My MDP idea is to customize the NSW Baby Bundle, a bag with a collection of items and information designed to support new mothers and their newborns. This is distributed to all mothers that give birth in NSW hospitals. I intend to create a version that will be designed for remote Indigenous mothers, with a goal to bring a cultural connection to their birthing experience.

I would appreciate any specific advice from the healthcare system, on how to integrate my project and any guidelines that I should be aware of. Any general advice would also be appreciated!

• **Share:**

What do you think?

You must be [logged in](#) to post a comment.

Comments

UpRising @ 2025.02.21 3:24 PM

Brilliant concept Naliyse. Such a clever idea and so important. I wonder if there is a way for users to be able to customize their bags. Wondering if part of the bag could have an option to apply

a particular pattern from Country that a mother could attach when travelling, could be a way to help bring Country with them when they travel?

Looking forward to seeing your great project develop and where it takes you.

UpRising @ 2025.03.13 3:24 PM

Good morning Naylise

Was thinking a simple App that could help expecting mothers / families with their preparation. Not sure if you have used Glide before but it could really work with your project.

<https://www.glideapps.com/>

Regards,

UpRising @ 2025.03.18 3:24 PM

Hi there Naliyse.

Found this organisation, <https://www.gaimaragal.com.au/home/> might be worth reaching out to them aswell.

Kind regards,

NayliseT @ 2025.03.20 3:24 PM

Thank you @uprising for your suggestions!

IP Australia @ 2025.04.29 3:24 PM

Hi Naylise,

I can tell how hard you've worked on your proposal and your consideration of the unique experiences of indigenous mothers, it's great to see all the effort you've put into it!

Kali, Project Support Officer, IP Australia

WTC JEWELLERY

I MADE THE CHANGE

Taking/ growing sustainable materials

- Kombucha scoby
- Orange peel
- Seaweed
- Milk kefir

To make a change in the damage being created through the jewellery making process.

WTC JEWELLERY

Jewellery types

- Bracelets
- Rings
- Earrings

something fitting for everyone

YOUR HELP

I know WTC Jewellery has great value and can accomplish the goal of creating jewellery without the cost of destroying our enviroment with your help. I could use your help by expanding my business through designs, ideas, materials and knowledge.

SO YOU CAN WEAR THE CHANGE

12 February 2025 by **AbbeyG**

35

2025

The jewellery that you wear in your day to day life requires mining to retrieve the metals needed to produce your rings ,earrings and bracelets. The damage jewellery making creates is more than contamination; it goes on further leading to deforestation, water pollution, and loss of biodiversity, not to mention the significant carbon footprint from energy-intensive processes. My goal with WTC JEWELLERY is to show you how I create jewellery that's better for the environment and prove why it's better for the environment through Kombucha scoby, Orange peel, Seaweed and Milk Kefir. This change is the start for bigger changes.

What do you think?

UpRising @ 2025.02.21 9:55 AM

A fantastic idea Abbey. I had never really thought of the damage done during the manufacturing process, only really just focused on the extraction of precious materials and disposal. So you have already shifted my thinking. See the SHOP page <https://www.uprisingdesigners.org/shop> in the main UpRising page. Some great materials in there.

Looking forward to seeing where you go with this important project.

IP Australia @ 2025.04.29 8:43 AM

Hi Abbey,

I can tell how dedicated you are to this cause and how much effort you've put into your project, it's so great to see. Best of luck for the rest of your project!

Kali, Project Support Officer, IP Australia