2025

SARA YOUNG GRADUATE PORTFOLIO

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About Me

Hi, I’m Sara!

I’m a 23-year-old Product Designer from Meeanjin, Brisbane. I’m in the final semester of my Bachelor of Design majoring in Product Design at the Queensland College of Art and Design.

As an emerging designer, I'm passionate about socially conscious design, with user experience and sustainability at the core of my work. I am particularly interested in working with a hands-on approach throughout the entire design process, from developing physical models to digital CAD models and final production stages, utilising production methods such as CNC machining and injection moulding.

Tidal Wave

What

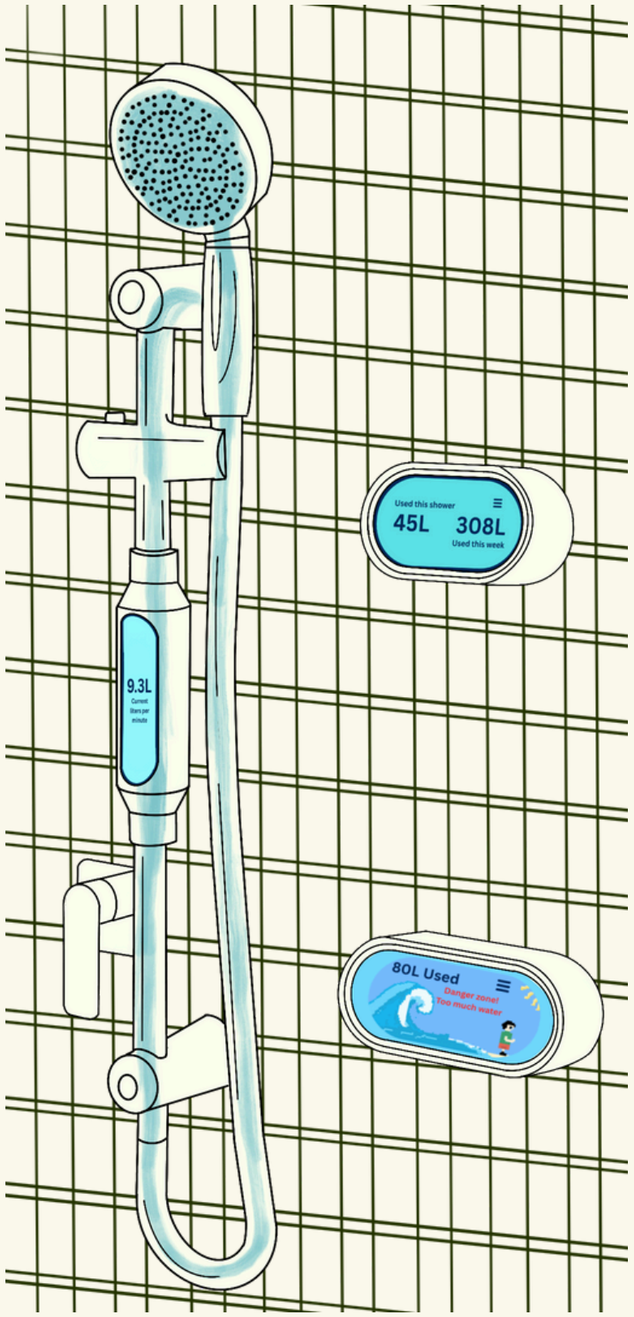
This project had us reimagine what plumbing could look like in 15-20 years. In partnership with Austworld, we were tasked with anticipating the needs of consumers in a speculative future. This project combines education and play to help young children understand water consumption and the importance of mindful water use.

Speculative Future

The speculative future imagined for this product put us in a world of a much harsher climate, with the effects of climate change impacting our everyday lives. With extreme shifts between droughts and floods, water consciousness becomes crucial.

How does it work?

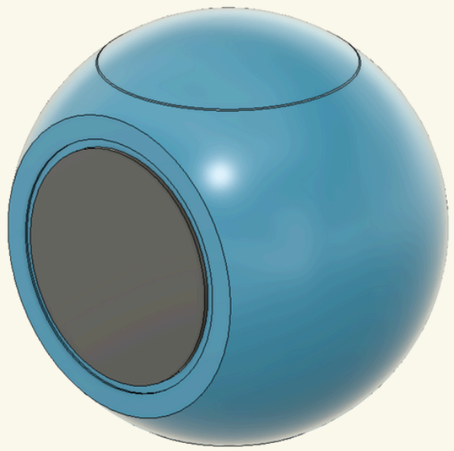
Tidal Wave is a home shower device that monitors water usage and displays data on two separate units: one for adults and one for children. The Adult Unit provides clear feedback on current and weekly water usage. The Child Unit turns water-saving into a game, where a character tries to outrun a tidal wave that grows as more water is used. Parental controls let adults set water limits, and visual cues within the game help children understand and manage their water consumption, making showers more sustainable and engaging for the whole family.

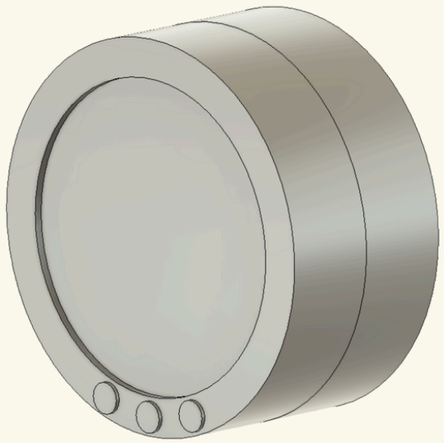


Development

The initial design was much larger and resembled a rain catcher. It used a flow rate monitor built directly into the plumbing during construction. However, this approach felt too limiting, as renters and those living in older homes would likely be unable to use the product. Additionally, the unit occupied too much space and would be extremely expensive to install and maintain.

This led to the exploration of a smaller, single-unit design that could sit in the shower. This version offered greater flexibility, as it could be either built into new homes or added on later, making it accessible to a wider range of users.





3D Printing Test

Initial Test

The initial 3D print revealed several issues with the model. It was oversized and appeared clunky when combined with the shower head. Additionally, the tidal wave unit was not modeled carefully enough for injection molding and required numerous revisions regarding wall thickness, draft angles, cable management, and final assembly.

Final Test

The final version featured updated draft angles and locator pins, sized to industry standards for bracket mounting. Wall thickness was made uniform to ensure even cooling and minimise potential warping during manufacturing. Additionally, space was provided for cable management, allowing consumers the option to hardwire the unit or operate it with batteries, ensuring compatibility for a wide range of users.

Hold Me

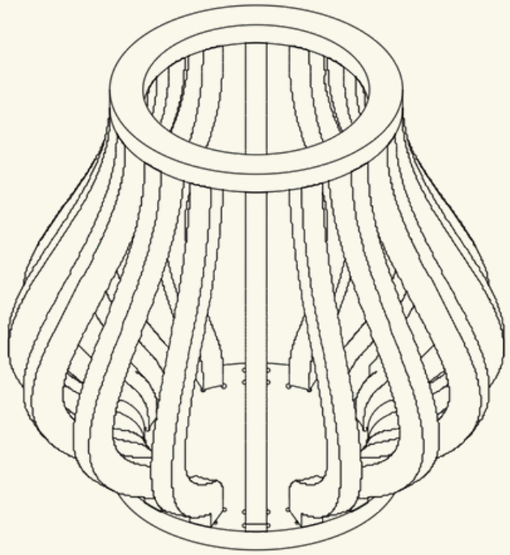
The Brief

Hold Me was created as an initial prototype for small-batch production using CNC machining. The goal of this product was to develop a kitchenware piece that lasts for years to come. Warm and inviting, as the name suggests, it holds utensils neatly and out of the way. While kitchware and timber often raise the question of whether they will actually last, careful material testing and selection ensure that, with proper upkeep and time, this product will last for your children to hold onto as well.

Development

Production constraints

The product was initially conceived as a two-piece set, including a matching spoon rest and utensil holder. However, due to various production constraints, this original design could not be manufactured. The utensil holder in particular underwent several design revisions to suit the capabilities of the CNC machine.



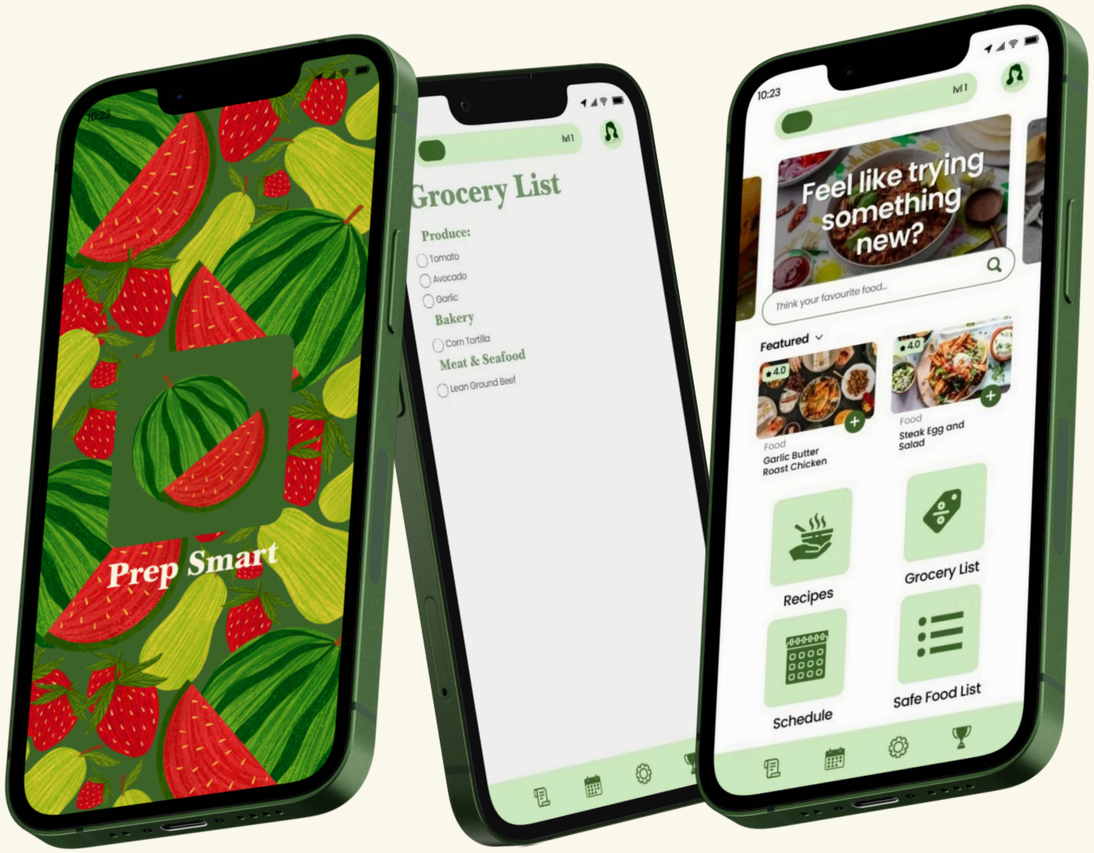
Material research

Choosing the timber for the final product was a key consideration. While hardwoods like Blackbutt and Spotted Gum were first seen as suitable options, their longer growth periods raised concerns about environmental sustainability. This prompted consideration of Accoya timber, which is made from fast-growing softwood and then treated through acetylation. This process enhances its hardness, strength, and resistance to warping and splitting under environmental stress, making Accoya a sustainable and practical alternative.

Prep Smart

What

Prep Smart isn't just a meal prepping app; it specifically caters to young women on the neurodiverse spectrum. An all-in-one approach eliminates the need to organise your life across multiple apps, because let's be honest, you'll likely forget about them. A reward-based system keeps users engaged, encouraging them to return and complete their goals. From meal planning to a daily and weekly organiser, Prep Smart thought of everything for you.



Branding

#fffae3 #d1ebc3 #66b83a #739669 #3e6529

ITC New Baskerville, **Bold**
Feeling hungry?
Not sure what to cook?

Poppins
Feeling like trying something new?

Logo & Illustrations

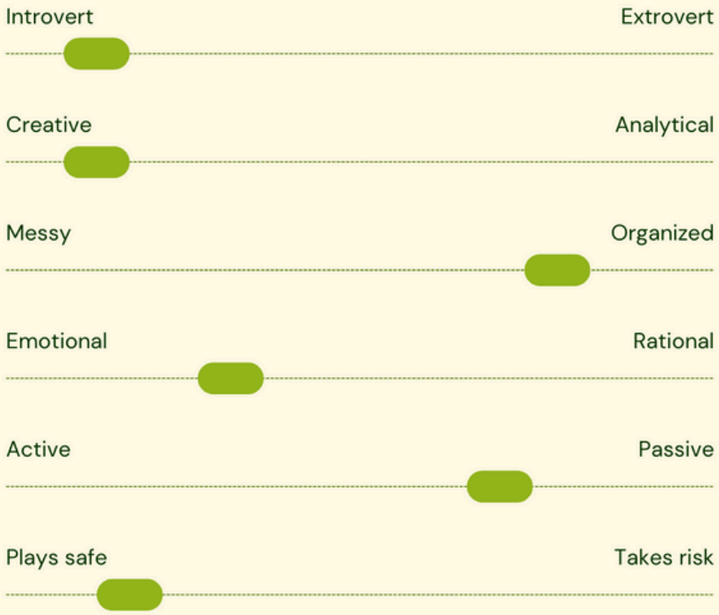
User Personas

Sophie is a 23-year-old woman who recently moved out of home. She **works part time** while **studying.** She needs a way to improve her **eating habits** that is considerate of her lifestyle and living out of home as an **autistic adult**

Sophie, 23

Gender	Female
Income	$40,000
Education	High School, currently an undergraduate
Occupation	Admin worker
Location	Brisbane
Living Situation	Sharehouse

Personality Slider



Who

To develop our target user, Sophie, detailed user personas were created. To better understand potential users and their needs, we used a range of research methods. Using a real-life subject as a primary source of information provided valuable insights that guided the development of the app's features. Additionally, several surveys were conducted with participants from various age groups and backgrounds to gather a broad perspective on what users want in a meal planning app. This was complemented by journey mapping and a series of in-depth user interviews, including sessions with users like 'User X.' Together, these research methods helped further refine and prioritize the core functionality of our app.