

DECO3200: Interactive Product Design

# PORTFOLIO

AUGUMENTING URBAN EXPERIENCES

EHUA3419  
EDMOND HUA

# The Design Brief

## Strand A: Augmenting Urban Experiences

The Design Brief - Augmenting Urban Experiences This design project is future thinking as it is focused towards designing new interactions or applications to engage citizens on issues that are relevant to them within an urban environment. You are required to conceptualise, design and prototype a digital technology or application that provides citizens or communities relevant information about the location in which they are situated.



# Problem

Environmental impact is a broadly used and expansive term that covers a range of areas. Understanding and visualising one's own impact on the environment, especially within a specified locality, is a challenging issue that is rarely addressed. While there is extensive socially commentary about environmental impact and concern, people often find it difficult to gauge the reality of this impact due to a lack of accurate data visualisation.

Under the branch of environmental impact we have chosen the prevalent issue of Air pollution. Today in our society with rapid industrialisation and natural disasters there has been an increasing amount of incidents of air pollution being emitted into our atmosphere. From our research we have discovered that although individuals know about the issue around the world in different countries, they were unaware about its ever growing impact in their own community.

# Vision

*"We seek to visualise air pollution data through daily interaction in order to raise public awareness about air quality in local areas and the greater environment."*

# Solution

The Breathing Tree is an adaptable display system, designed for urban green spaces or suitable public areas, intended to convey information about air quality within its locality. The Breathing Tree's main purpose is to raise public awareness about air quality.



# Meet the team

Project Passion Fruit: In regards to workload and role allocation each member was given a specific task in relation to their strengths in which they had to follow through and complete.

## Ian - Lead Product Designer

Ian was our Lead Product Designer his main role was to bring the concept into reality through physical practices. Playing to his strengths in engineering Ian made the physical prototype through soldering and linking the device to a centralised arduino board.

## Maya - Video Lead

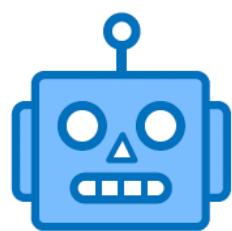
Maya's role was working in conjunction with Hamish in coming up with the visual designs and mockups of the project. Aligning her abilities with animation and video making her main task was in the creation of our product video.

## Hamish - Documentation / Brand Assets

Hamish role in our team was in designing the visual branding and strategy of how we approached the project. His strengths was posed in his scholarly ability, so he was tasked in creating the end documentation of our report as well as assisting in Maya in the video.

## Edmond - Lead Interaction Designer

My role in the project mainly revolved around strategy of the actual product and the creation of the extended user experience. My role was mainly chosen due to my personal strengths in visual interface design and my considerations of interactions of our prototype.



**IAN**

Lead Product Designer



**HAMISH**

Documentation,  
Brand Assets



**EDMOND**

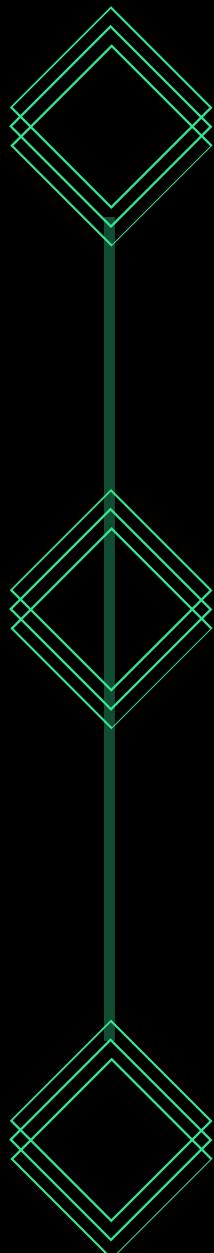
Lead Interaction  
designer



**MAYA**

Video Lead

# Design Process



## Research

To start off we first deconstructed the problem brief of Augmenting Urban Environment, brainstorming potential areas in which everyone in our team was comfortable in pursuing. Where we then reached the problem area of Environmental Impact, from there we conducted background research on the area. Reading through scholarly articles and readings about present day environmental impacts.

## Ideation

Contrasting based on the research we would conduct user research in the form of an online questionnaire. The questionnaire would pose questions in regards to environmental impact awareness and about interacting with urban interactive installation. Based off our feedback it really helped shape and inform our future ideation of our initial concepts. Next three members would then focus on one different problem branch under environmental impact, to conceptualise an idea on. The three concepts we came up with were: Digital, Breathing Tree and the Issue Wall.

## Low Fi Prototyping / Evaluation

Furthermore, the next step was bringing the concepts to life through low fi prototyping. Each member would prototype their concept at a base level, using paper as a tool to create it. From there we would then evaluate our concept for further insights and general improvements, asking individuals to walk through the prototype. Users were asked to Think Aloud through the process as well as asked questions and then made to do a questionnaire.

# My contributions

In relation to my key responsibilities throughout the whole project, I believe I contributed systematically to all aspects of it. As it was an overall group effort I believe everyone contributed their own equal works in the specific areas they were tasked on focusing on. As we as a group placed a high importance in the delegation of content and the works.

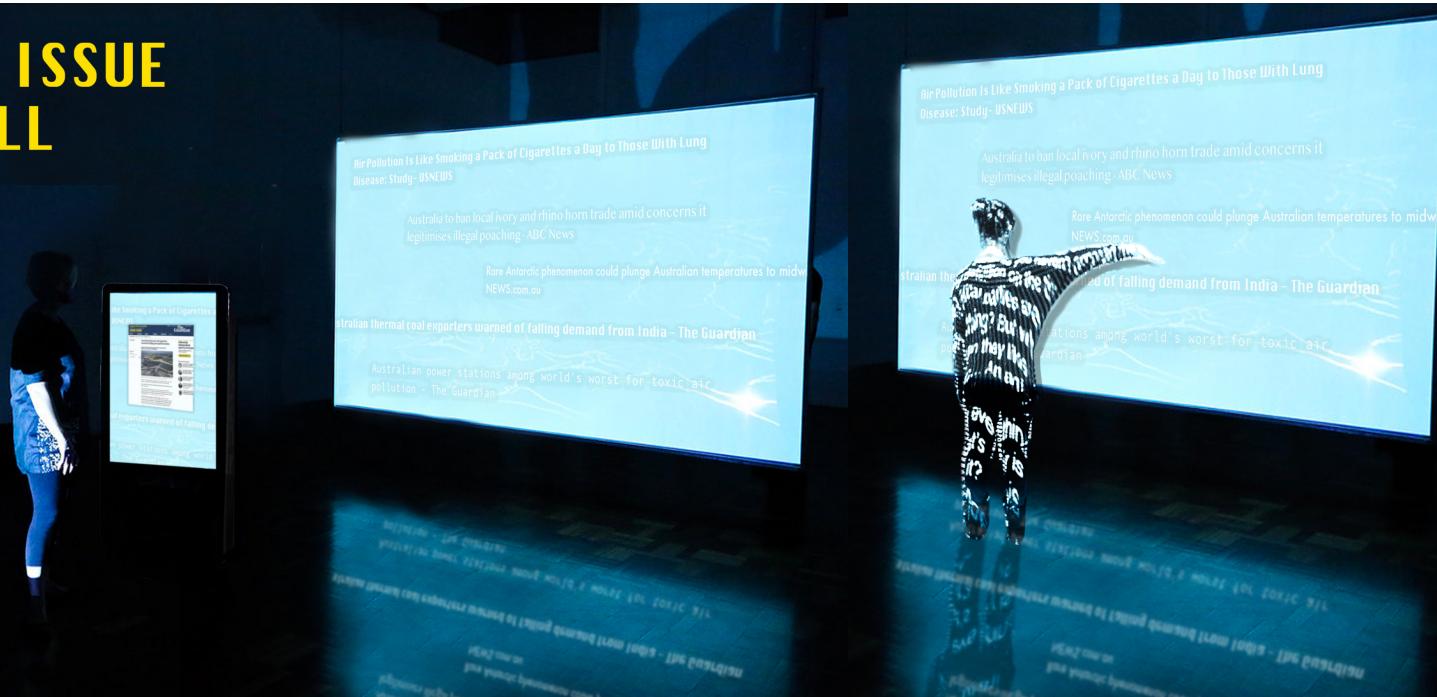
In terms of my contribution to the specifics, for the first part of the project I was tasked with concept creation of one of the initial ideas. Where I placed emphasis on the creation of 'The Issue Wall'.

The Issue Wall is an interactive projection based artwork. With the digitalisation of the majority of today's knowledge, the wall aims to be a modern take on a centralised network of information. Utilising the medium of web articles to encapsulate pressing environmental issues.

For this concept I went through the holistic approach from research to low fidelity prototyping where I then evaluated the concept with Think Alouds, Questionnaires and Interviews. For the Questionnaires I helped create them for the other two concepts to keep it consistent.

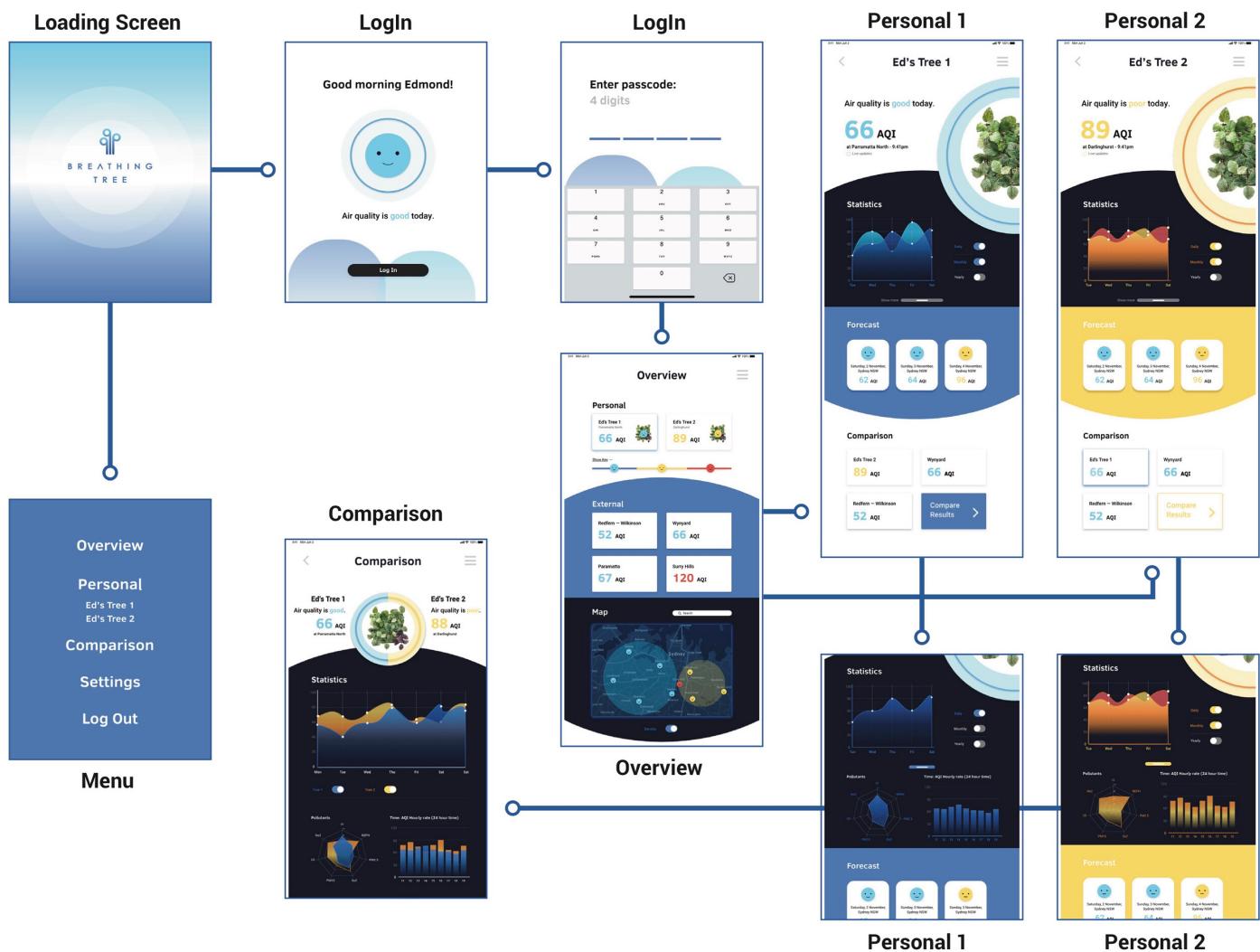
Moving on to the next phase of Mid Fidelity prototyping, I created a tablet UI on Adobe XD and a flowing background video for the Issue Wall. From there I undertook another round of user evaluations, and then finally deciding on the final concept based on a decision matrix I created.

## THE ISSUE WALL



# My contributions

Furthermore in the High Fidelity stage of the prototype my role mainly revolved around the creation of the final interface. I also strongly contributed to the overall strategy and coming up with the end design and visual conceptualisation of the final prototype layout. For the interface I mainly used Adobe XD and created a click through prototype in which individuals could use. The interface was created to be an extended experience for the user, so they actually understand what the lighting on the breathing tree meant and the actual data involved of AQI. (Air Quality Index)



# Online Project

We make engaging content that all online guests appreciate and look forward to.

Whether you choose to have a monthly or quarterly report, there are some tips you can learn to help your report shine. First is to make the report relevant to your audience. Selecting the right information from a glut of data makes a difference in supporting the goals of your team and organization. Second, keep in mind that social media statistics don't operate in a vacuum. That's why you need to relate current data to previous data. Lastly, aside from keeping it simple, your report should always answer "so what?"

A big project involves overseeing a lot of moving parts, oftentimes from different people. To have a successful rollout, project managers rely on a well-crafted project plan to ensure objectives are met on time and on budget. A project plan is a formal approved document which is used to define project goals, outline the project scope, monitor deliverables, and mitigate risks. It must answer basic questions like what is the purpose of the project, what activities are involved, who will be responsible for what, and when is it expected to be completed? It is not to be confused with the Gantt chart, which shows project deliverables against the timeline. The said chart is only one part of the project plan.

