

PROJECT REPORT

ANTARCTIC CENTRE

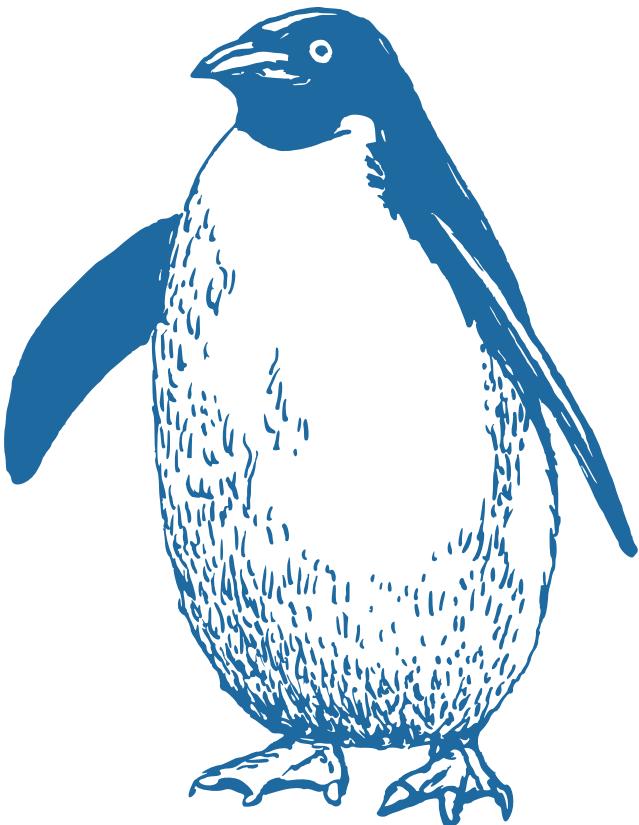
PROJECT



PROJECT SPONSORED BY
THE INTERNATIONAL
ANTARCTIC CENTRE

TEAM

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OVERVIEW

This project is being done for our industry partner the International Antarctic Centre (IAC) in Christchurch. The IAC is an interactive exhibition space with the aim to educate people about Antarctica. Its exhibitions include sensory interactions (animals, Hagglund rides, 4D cinema, storm dome), many text-based exhibitions pieces and atmospheric video footage. It aims to distinguish itself from a museum by displaying the science in relation to the continent, and how the continent is affected by Climate Change.

OPPORTUNITY

The IAC has exhibitions which highlight how Antarctica is being affected by Climate Change and why it's important to take action. One of the best examples is the video Generation Antarctica, which was done in collaboration with scientists and highlights how climate change affects Antarctica. However, there is no further information on how to take action after you leave the International Antarctic Centre.



As users, we would like to have more information on how we can take action after leaving the Antarctic Centre.

This led us to focus on how individuals have an impact on climate change, and how we can make them aware of how different options have different impact on climate change.

This project aligns with our stakeholder goals and values as we are focusing on individuals, climate change, a take home product, and adding educational value.

THE PROJECT

This project will focus on making people aware of how their every day decisions can have an impact in the world, empowering them to make more mindful choices. This will be done by playing a game which shows how impactful your decisions are to the environment.

To show the impact we are aiming to show the CO₂ emissions of everyday choices people make. You will be given a monthly budget which you can spend on food, rent, petrol, plants, accessories, new things or save it for later. You will be encouraged to make environmentally friendly choices by rewarding you at the end of the month for low emissions which will help you to unlock new things to buy. You can also get extra rewards by completing daily tasks.

PROBLEM STATEMENT

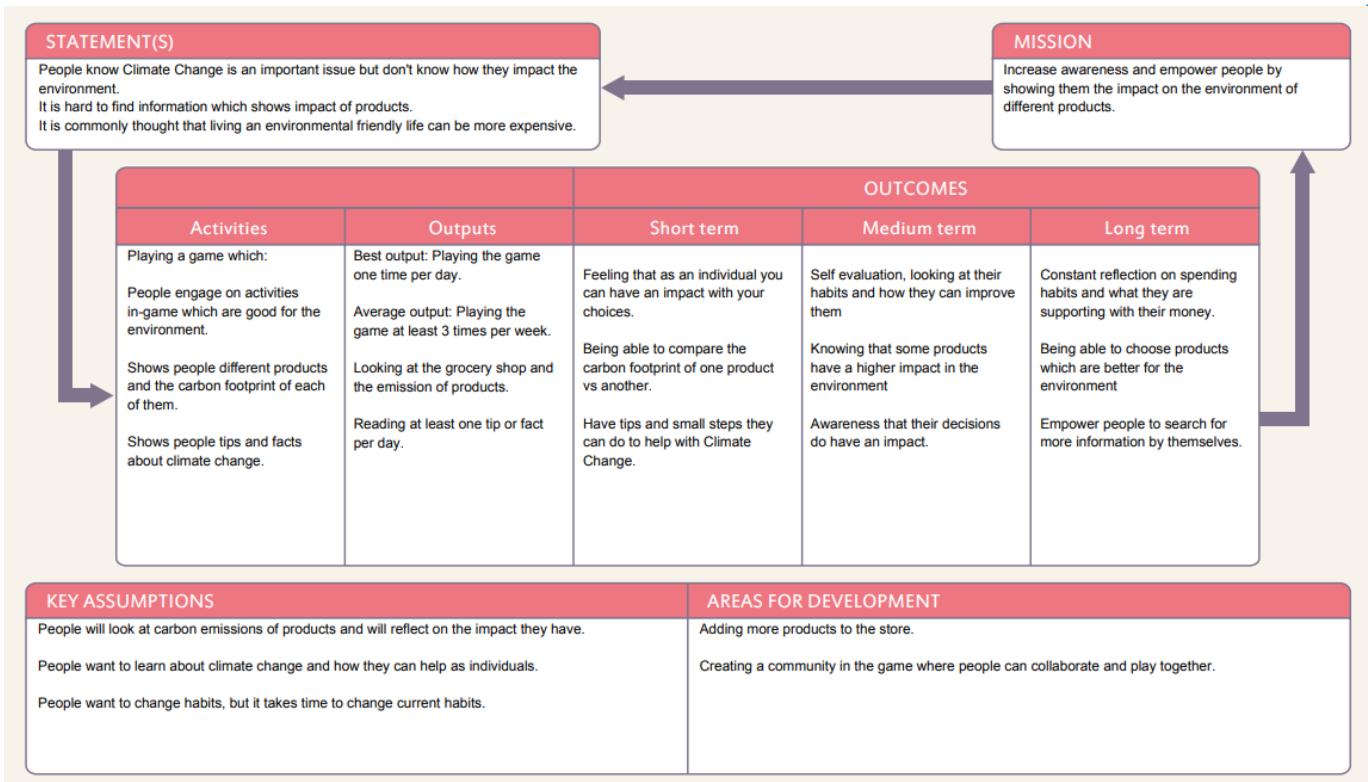
While the IAC has exhibitions which highlight how Antarctica is being affected by Climate Change and why it's important to take action, there is no further information on how to take action after you leave the IAC.

This project purpose is to focus on making people aware of how their every day decisions can have an impact in the environment, empowering them to make more eco-friendly decisions by showing them alternative options.

The project goal is to have a prototype at the end which tests the horizontal slice of the core components of the game.

The theory of the change for the game has as goal to create empowerment that will lead people in the long term to make more eco-friendly choices. The intermediate outcomes are to make people aware that their decisions do have an impact and to show them different options, which will lead to empowerment as they realize there are other options to choose from and ways they can help which they might have not known about before. In short term effects we want to give people a boost and give them a new perspective where they can be in control of what they choose and where the environmental impact of things is clear, because of this we are using numbers that are clear for people and not ratings (eg, 1/5 environmental friendly).

To accomplish the goal and our outcomes, we are going to design a game which helps to make people aware how their decisions make an impact and we will give them tips of things they can do to help and facts about climate change.



This is the theory of change for our project, we will attach a better version which is readable on the Appendix.

AUDIENCE ASSESSMENT

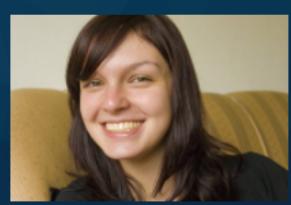
Due to university regulations of testing with minors, we decided to focus on audience of people who were 18 years old and older.

When we went to the IAC, we saw mainly 2 groups of people: Adults (parents and grandparents) taking children to the IAC; and, young adults, mostly couples. We decided to focus on the young adults. This was due to 2 reasons: They are usually the most concerned about the environment and how it will affect their future, and they are more familiar with technology so the acceptance level of a take-home product would be greater for this audience.

Since the current demographic we can focus on are locals, our primary audience are New Zealand residents.

This means our target audience are young adults, people from 18 - 30 years old, who reside in New Zealand and are concerned about the environment but find it difficult to find information on how they impact the environment.

Stella Smith



"I want Earth to be a healthy again and I want to play my part"

Age: 22

Work: Uni Student, studying psychology

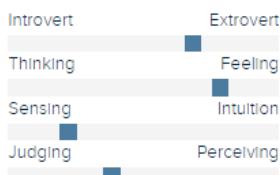
Family: Parents, 1 Sibling, Grandparents

Location: Belfast, Christchurch

Character: Consul

Likes: Reading and visiting the botanic gardens

Personality



Spontaneous Adventurous Caring

Goals

- To live a more environmentally friendly life
- To live on a healthy Earth in the future
- Have an orchard when she buys a property

Frustrations

- She hears about Climate Change all the time but doesn't really know what her impact is.
- She feels overwhelmed about the Climate Change topic.
- She doesn't know how to help reduce her emissions in her everyday life.
- She fears that if people don't act to protect the environment, there won't be a real change.

Bio

Stella loves nature and is really happy to live in New Zealand which takes the environment issues more seriously than other countries. However, she has always wondered how she can make an impact on the environment as an individual. Although she volunteers to pick up rubbish at parks and the beach, she feels she could be doing more in her everyday life, but it's hard for her to find information that can help her. After visiting the International Antarctic Centre and watching the last video of the tour, she felt she had no time left to act and she needed to change her life, along with her close ones, or the world would be in a point of no return.

Motivation

Incentive

Fear

Growth

Power

Social

Brands & Influencers



Preferred Channels

Traditional Ads

Online & Social Media

Referral

Stella is our persona for this project and for whom we are designing the game based on our research. We will attach a more readable version on the appendix.

CONSTRAINTS

There was a list of constraints after the first meetings with our project sponsor, and we knew that we could not fit all of them as hard as we tried. We were told that we could make any project we wanted to, so long as it fits these constraints:

VR is too expensive; educational above entertaining; includes themes of climate change and Antarctica; it needs to bring customers back; is a product customers can take home; concentrates on young people, if possible, as they are just learning; focuses on locals, then think about internationals; they want to be a center of scientific knowledge about Antarctica and be first in the world on the topic.

The budget is tight, but funding can be found to build the project to completion if necessary.

CHOOSING OUR CONSTRAINTS

After meeting with our industry partner and visiting the International Antarctic Centre as users, we decided to focus on:

Climate Change

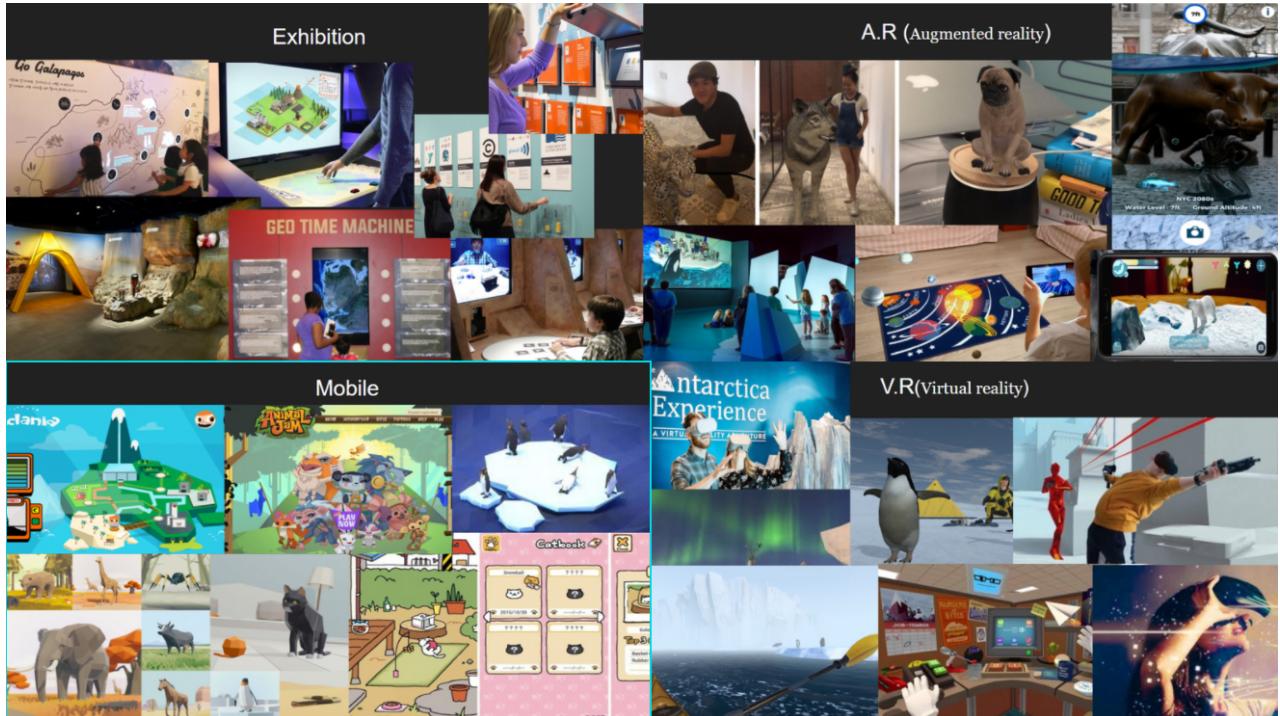
Focus on locals

Make it educational above entertaining

Make a take home product

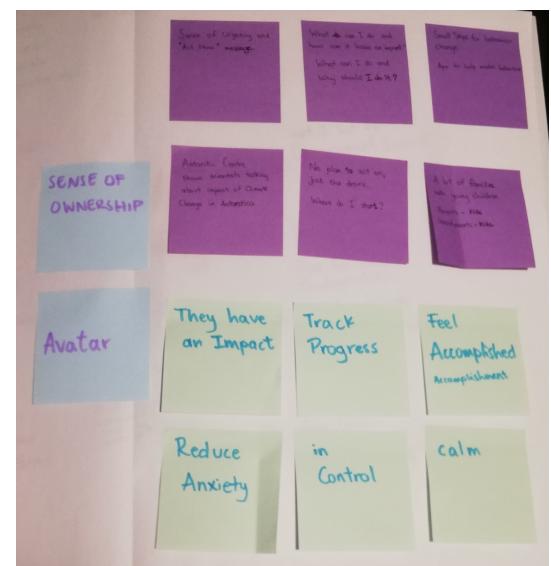
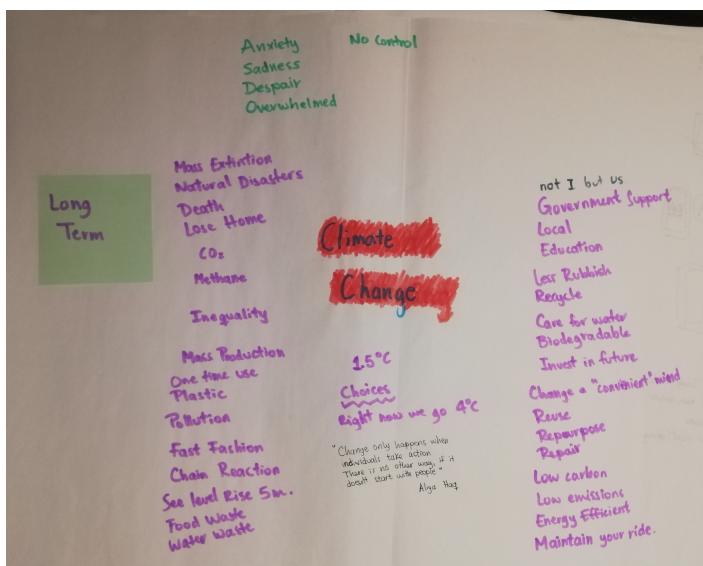
CONCEPT DESIGN

When displaying ideas to the client we need a clear way to get information across so 4 mood boards were created. One for V.R, A.R, Exhibition, and mobile development. The core idea behind V.R was an underwater experience going throughout Antarctica. For A.R we thought an A.R scavenger hunt going through the building would be a good idea with questions for the guests to answer. For the Exhibition, we thought of a simple game where you build a 6 sided cube to scan from your mobile and then have questions to answer.

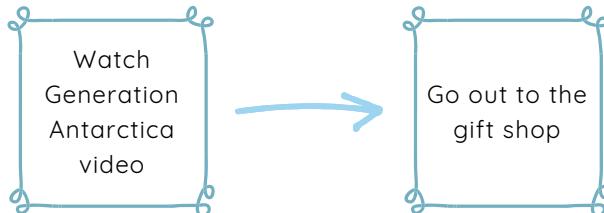


BRAINSTORMING

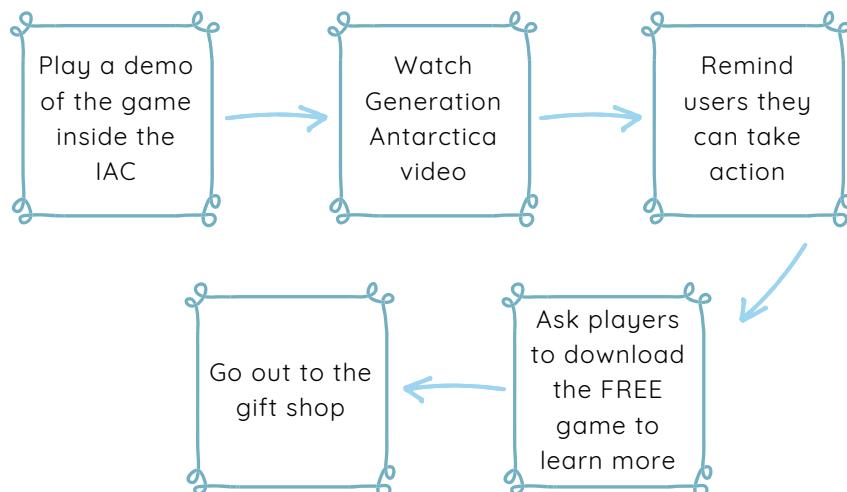
After we talked with our industry partner and visited the Antarctic Centre, we started brainstorming on Climate Change. After that we started focusing on different ideas we could do for the topic using our constraints.



Since the video Generation Antarctica was a very strong message we wanted to support, we analysed the user journey. The user pain in this case is the very emotional and impactful video which asks viewers to take action, but after that there is no clear path to follow. We can support users and give them a direction to follow and some help so they can start. This will also support the mission of the IAC of educating people about Climate Change and supporting people to take action.

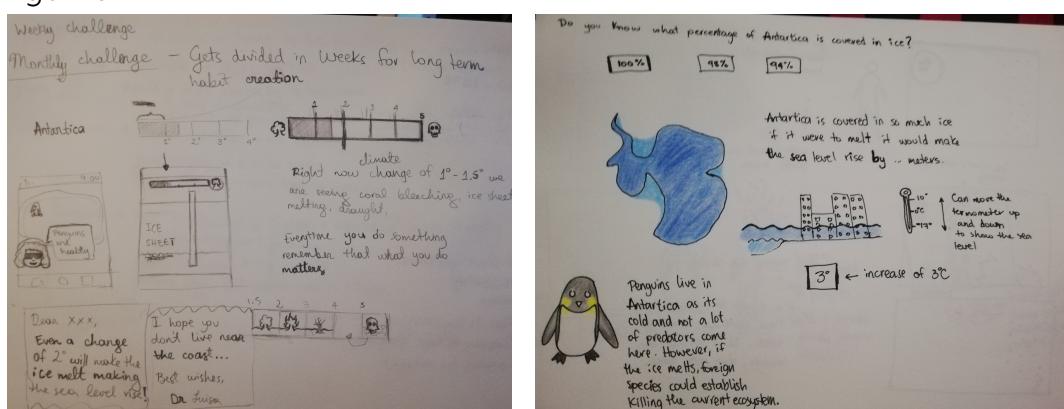


The new journey shows users the demo before the video to help them become familiar with the application. After the video has been shown they are reminded that they have to take action and they CAN take action. After leaving the room users can see the game, and if they are interested on taking action they can download it and learn more about emissions.



SKETCHING

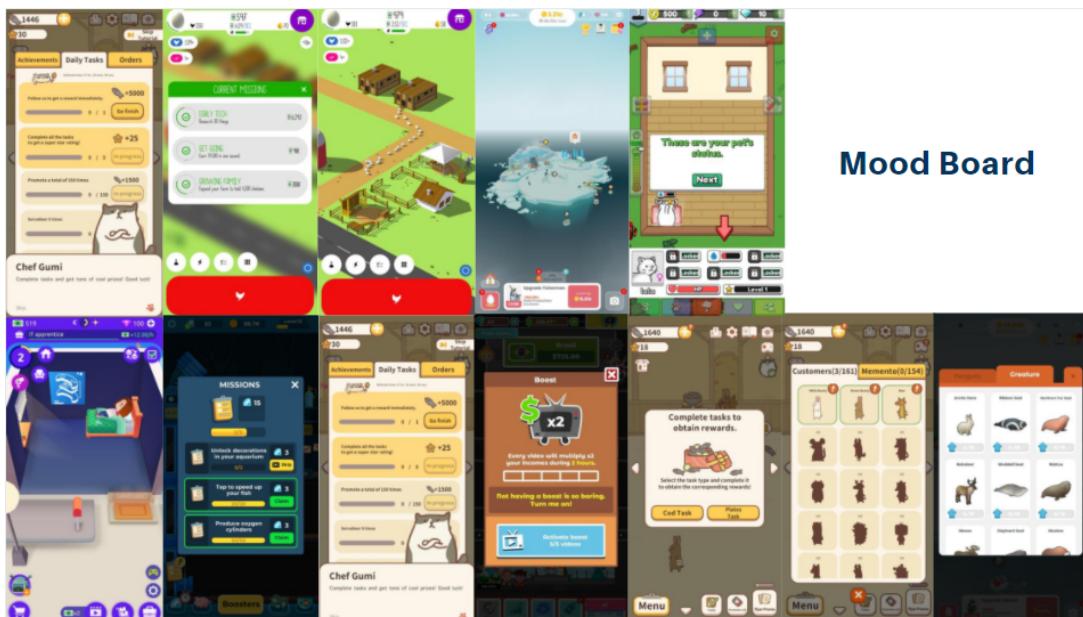
We sketched different ideas and decided that a game would be the best way to go. We started brainstorming different game mechanics we could have in the game and then we started to prune the ideas that didn't seem to support well the core concept of showing players how their actions affect the environment. We finished with a core simulation game.



MOBILE UI RESEARCH

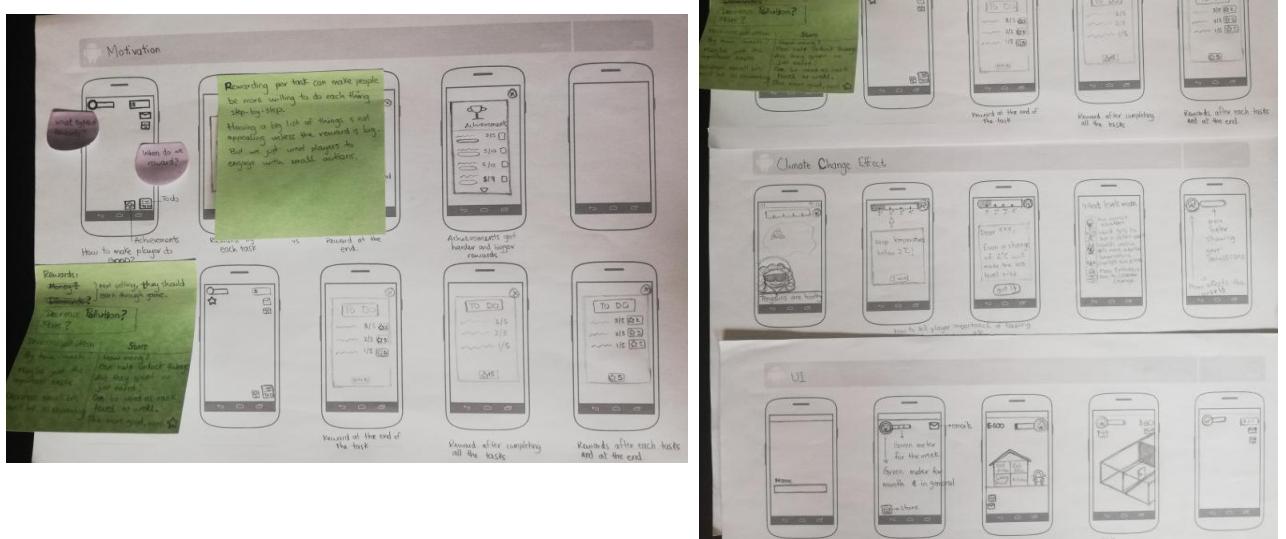
After the sketching phase we had a talk with Heide, our project mentor, and she suggested that we looked into motivation in mobile games and how we motivate people to do good. After this, we researched different mobile simulation games that were similar to the idea we had and learned about achievements, tasks, missions and the way UI is presented to users.

The mood board below was created to define mobile phone influences with UI and art styles. Each game is a simulation game where you own a cafe, farm, or house that requires a job to sustain. There are meters/bars for each requirement or a currency to display. The core of each game shows the development of a facility and management of a currency.



Mood Board

After researching different mobile games of similar genres to the simulation game we wanted to make, we started sketching and analysing each of the components we wanted to have in the core game loop as well as creating wireframes for the interactions.



SOLUTION DEFINITION

The focus of the project is to make people aware of how their every day decisions can have an impact in the environment, empowering them to make more eco-friendly decisions by showing them alternative options.

Our solution is to make a mobile game which shows the CO2 emissions of everyday choices people make. The player will be given a monthly budget which they can spend on food, rent, transport, plants or accessories. They will be encouraged to make environmentally friendly choices by rewarding them for low emissions, which will help them to unlock new things to buy. They can also get extra rewards by completing daily tasks, achievements and reading tips.

This solution addresses the problem as we show people different options and the impact they have on the environment. We also give them tips which are simple and achievable so they can take action.

To validate our solution we will test and ask willingly users to answer a questionnaire with questions related to awareness and empowerment before and after playing the game. The questions asked in both questionnaires will be the same as we want to compare them and see if the game has had any impact on their answers or not. There will be a short time between playing the game and answering the second questionnaire. This will let the participants take their mind off the game before answering the last questionnaire.

We meet our project sponsor's constraints:

- Climate Change: Make people aware of how their choices impact the environment.
- Focus on locals: We are using New Zealand as the place the avatar lives.
- Make it educational above entertaining: We aim to educate people in the matter rather than make a game for entertainment.
- Make a take home product: People who come to the IAC can play the game and choose to download it to learn more and play at home.

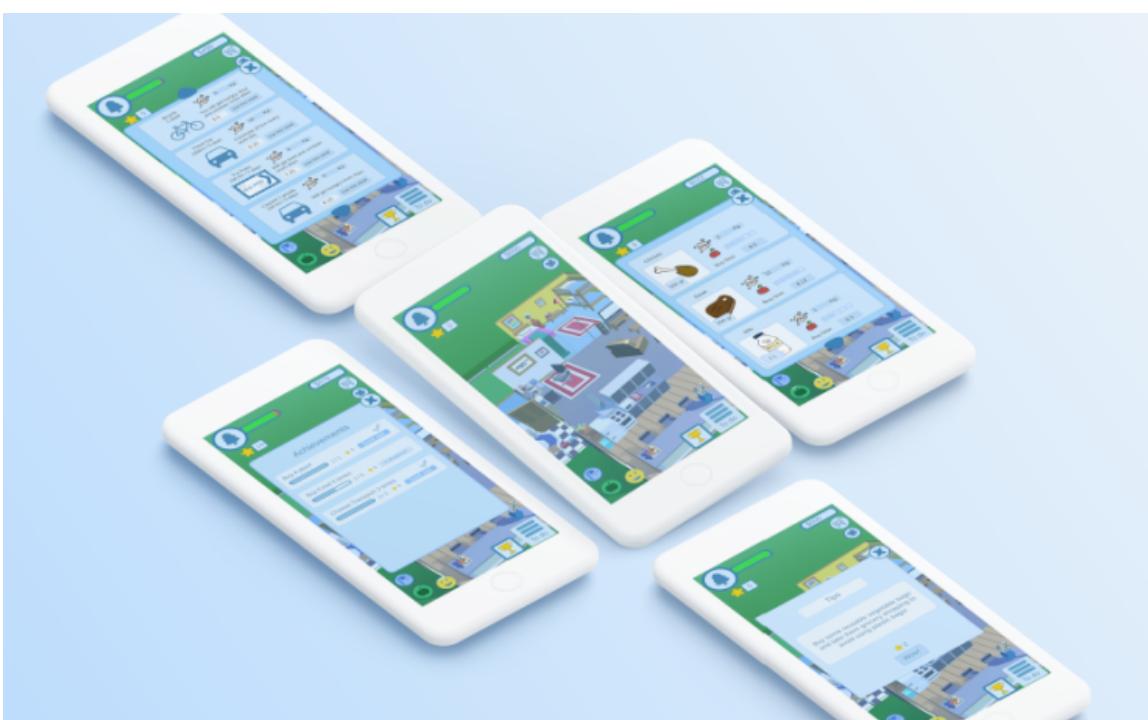
GAME MECHANICS

The core game user interface display was created on Adobe XD. This is the Finial UI design created by Luisa. This clearly displayed each button and bar which had a clear function in the game. This is what the core gameplay elements are built off. Later we used these mockups to create the UI for the game.

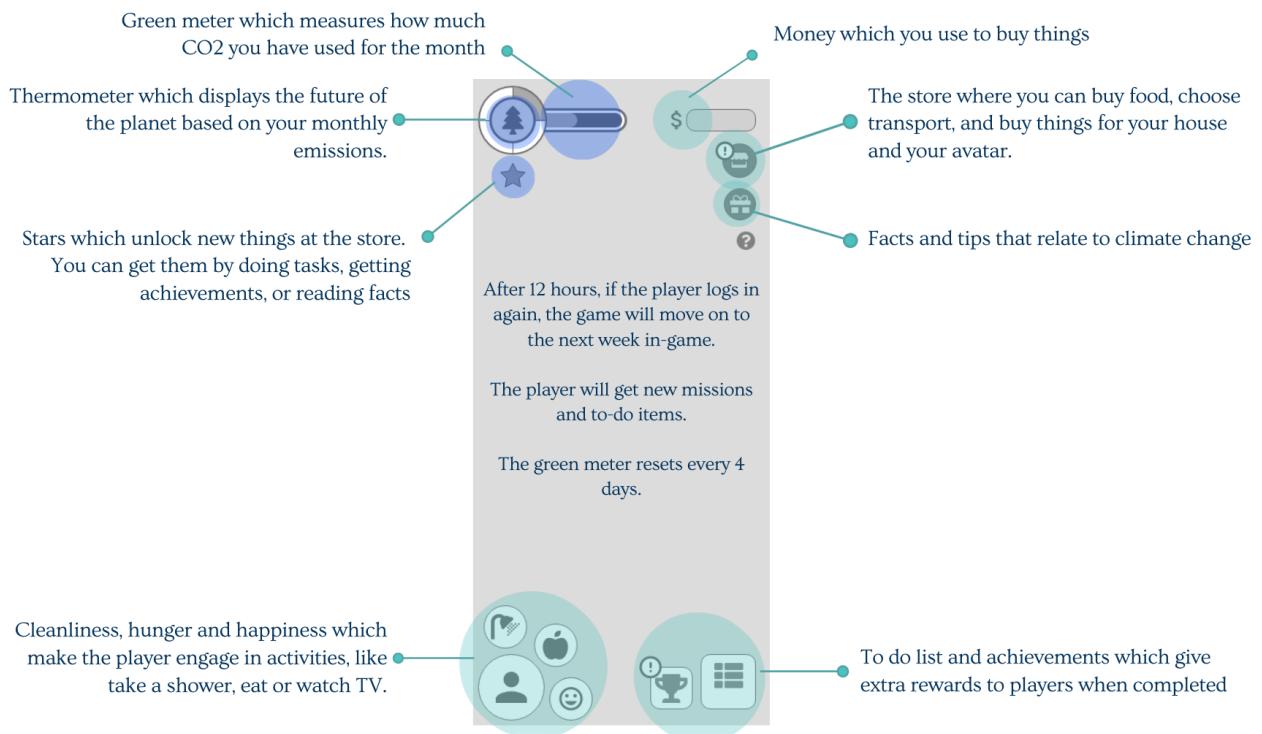


CORE

The core game is to maintain a healthy and happy lifestyle while also staying green. Your green level shows the impact on the planet and will decrease when you buy foods or use one vehicle over another. You need to find ways as a new Zealander/Kiwi with a average budget to stay green and continue to live a great life. Each small decision the player makes will allow them to learn how to be a greener kiwi and also show the small impacts on the earth from Antarctica to the plastic Ocean and back to dry land to show the impact they can see and feel.



The image below shows what each icon on the middle screen is intended to do. Following this image, we will describe each game mechanic of the game.



COMMUNICATING IMPACT

When we first developed the prototype, we made the green meter to fill up, however this didn't communicate well to the players their impact, as it made it seem there was a maximum they were trying to achieve when in reality they were trying to not fill the bar. We changed the bar to drain, and we added 3 bars representing how good the choices of the players have been.

To make the bar we used the average emission a New Zealander makes in a year (data taken from: data.worldbank.org/indicator/EN.ATM.CO2E.PC?locations=NZ) and we divided it by 12 months, since the bar represents the monthly budget for emissions.

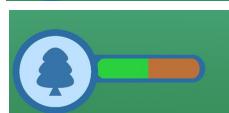
Average Kiwi emissions: 7326 Kg/year

Montly emissions: 610.5kg/ month

Montlhy emissions cut down by 40%: 366.3kg/ month



The green bar represents emissions cut by 40%. So the green meter represents 366.3 kg in total.



The orange meter represents the 40% remaining of average emissions to complete the average monthly emissions: 244.2 kg.



When users use 366.3Kg the green meter will run out and the orange meter will be activated with an extra 244.2 Kg to use. After the orange meter goes down, players would be using the red meter impacting negatively the environment as they are not cutting down emissions. This will negatively impact the game driving prices up as well as making it harder to receive rewards until the player makes more environmental friendly choices.

STARS

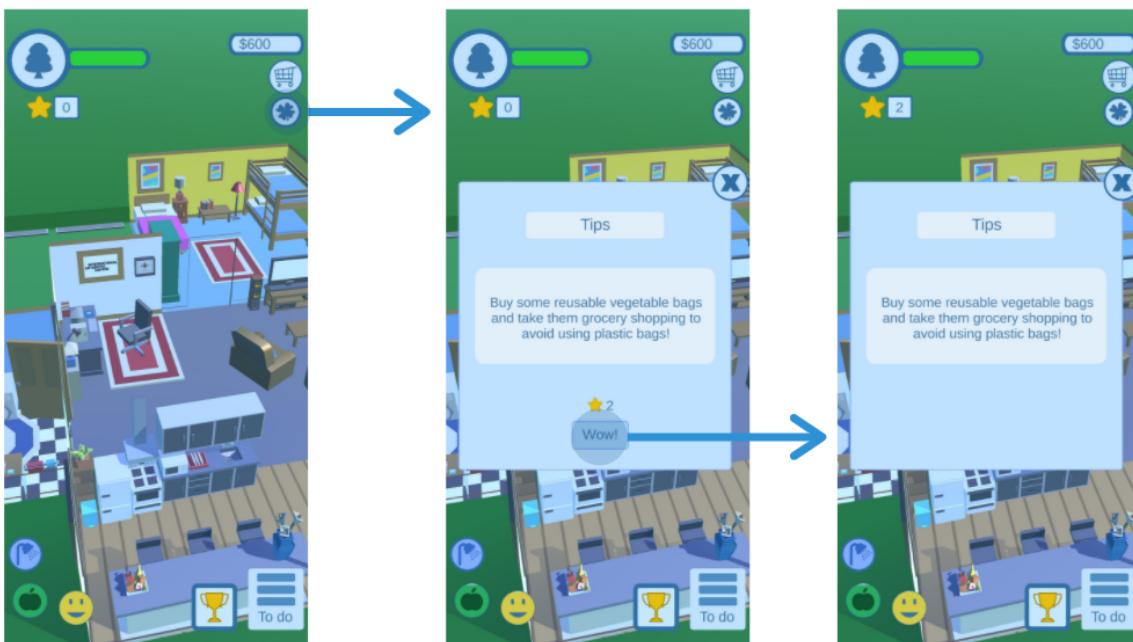
Stars are a secondary currency in the game needed to unlock new products or upgrade current owned ones. Stars are part of a reward system which seeks to encourage users to engage with the game and in environmental friendly activities.

The player starts with zero stars in the game and can earn them through 3 different activities: doing To-do tasks, unlocking achievements, and reading tips and facts

TIPS AND FACTS

The tips and facts section contains tips that are actionable for users and contains facts about climate change and emissions. After the tips section is open, if the tip is new, the player will be rewarded 2 stars. If the tip has previously been read, the player can obtain nothing, random object or stars. This is to encourage users to come back to read tips.

To avoid people from clicking on the tip button until they get a reward, the next step is to implement a countdown that will only allow people to get a tip after a certain amount of time, or only x tips per day; and will require them to wait 10 seconds before they can obtain the reward to encourage them to read the tips.

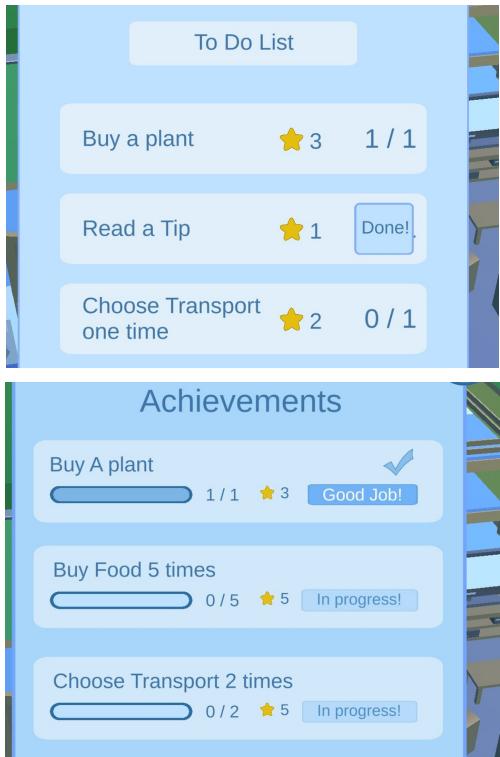


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ACHIEVEMENTS AND TO DO LIST



To Do List creates new tasks to do every 12 hours, so once all have been achieved there are no more to do. To do tasks will always reward with stars.

The achievements are already predetermined. Once achieved, they are replaced by harder achievements each time so players have always something to work towards to. Eg: After completing "Buy a plant", the next reward will be given when the player buys 5 plants. The rewards for achievements will be stars and in rare cases decrease of CO2 levels.

The rewards for the to do lists and achievements will increase depending how hard the activity is to achieve. The rewards from the to do lists will be always smaller than the achievements.

PLAYER BUBBLES



The three player bubbles were introduced to make people engage with the 3D world that is seen on the image to the left. These bubbles drain over time so you will have to engage with the world to bring them up again. There are certain things you choose, like transport, that will affect the rate at which the bubbles drain. For instance, the bike will make all the bubble drain 30% faster. In the prototype we built we didn't include world interactions, as we were focusing on the UI and how to represent different options and emissions to players.

The 3 bubbles are:

Tiredness: This measures how tired is your avatar. To gain energy you can go to sleep or engage on leisure activities like read, gardening, or watching tv.

Hunger: This measures how hungry your avatar is. You will have to buy food to make your avatar less hungry.

Cleanliness: This measures how clean your avatar is, if its unclean, you will have to take a shower, and you will need cleaning products as well.

STORE



The store is one of the core mechanics we wanted to have in the game. Here is where we show each player the impact of their shopping.

To the left you can see a gif of the grocery store. When the player buys something, it will decrease the money, decrease the green meter according to the CO₂ emissions the products make and increase the food bar.

Although we currently have only 3 food you can buy, the idea is to add more and show the impact of different types of food to people.



The store also includes a transport section where players can choose one transport per week.

As we want to create a game that encourages behaviour that is good for the environment there are certain transports that will be free or generate less CO₂. To balance that the players always choose this type of transport, or that it feels like "cheating", some transports with alter the rate at which the cleanliness, hunger and tiredness bubbles drain. This will mean that the player will have to buy more food for the avatar or engage in more activities to increase the bubbles to a healthy level.



The last section of the store is where you can buy "premium" objects like decoration items and plants. These need stars to be unlocked.

Plants are important in the game as they will allow players to offset their carbon footprint. Although the number of the carbon the plant offset in the game is not realistic, we are including it to create conscience that plants are very important. Moreover, we want to give the sentiment that the more plants you have in your home, the more carbon dioxide that is being cleaned.

DEVELOPMENT PROCESS



Sprint 1 Pre-production

Research and finalize the design and validate it using simple prototyping.



Luisa and Ben will present their current idea for feedback to the project mentor and visit the IAC to understand the layout and exhibits for long-term research.



Luisa and Ben will be researching AR technology and possible platforms that can be used.



Luisa and Ben will produce an MVP to test the functionality before long term commitment.



Sprint 2 Prototyping

Done when we have tested and built simple prototypes of our design.



Luisa will create a paper prototype to test within prod322 the core gameplay elements and flow of the app.

Ben will create two simple visual prototypes to test which one users like more and which one feels more natural.

Luisa and Ben will have a meeting with the project sponsor.

Luisa will design tests for the prototypes at the end of the sprint.



Ben will create two prototypes to test the UI elements of the application.

Luisa will create a paper prototype to test the positive/negative display of the impact of the choices in the world.

Luisa will continue to work on the ethics application with the goal of submitting it by the end of the week.



We will test the prototypes created for visuals, positive/negative impact, and UI. At the end of the week Ben will analyse the results.



Sprint 3 Prototyping

Done when we have finished our validation test.



Get feedback from Merel.

Luisa designs the test of empowerment and awareness.

Luisa continues working on the creation of UI.

Ben starts working on the prototype on Unity.



Luisa works on the ethics application and gets feedback.

Ben and Luisa work on the prototype.



The project got ethics approved.

Ben and Luisa work on the prototype.

Sprint 1 : Design

This sprint was used to collect data and research different ideas. We researched exhibitions from real-world sources like the Christchurch museum and checked online for global displays of Antarctica. This way we could develop ideas for the game. We started designing a Scavenger Hunt at the beginning, but after we did more research on the Antarctic center we found that the centre would benefit more from a different idea, so we moved on and focused on Climate Change.

Sprint 2 : Prototype

Sprint 2 was about creating the prototype. We used Unity as we wanted to publish this on phones and unity allows that free of charge. We needed to research mobile games for (U.I, Gameplay, design, etc). We created a new mood board of design we liked and built off of them. We needed a prototype as quickly as we could to get into testing and collecting data on the product itself to see if the hypothesis were correct.

Sprint 3 : Testing

Sprint 3 in a nutshell was Build it, Test it, Break it, Fix it. This was when agile was implemented the most as we found lots of small design choices needed small changes. A Simple example was the way we displayed the greenhouse gases. Instead of increasing the bar we instead decreased it to show a negative effect, This clearer as people fear loss greater than gain. We also spent most of the time creating user tests and getting ethics approval for the tests themselves.

SOFTWARE MANAGEMENT

Co-decks is a simple online manager that is aimed at game developers/designers. We used this instead of Trello or Jira because of the focus on the area that we work on. It's free and also has some small features that Trello doesn't have like timeline milestones and a clearer way to display tasks. GitHub was used instead of GitLab as we wanted to have a public display of our code repository. University of Canterbury's GitLab is hidden and can't be shown publicly and, although transferring the commits to GitHub from GitLab is possible, it need the file to be relatively small and with games this tends to not be the case.

The screenshot shows a GitHub repository page for 'frozenwispstudios / IACmobileApp'. The repository is private. The 'Code' tab is selected, showing the master branch with 1 branch and 0 tags. There are 28 commits from LuisaSoriano. The commits are listed as follows:

File	Message	Time Ago
Assets	changed around UI	3 hours ago
Packages	2D Scene completed for testing with the camera script made	2 months ago
ProjectSettings	Redo the UI asset	12 days ago
UserSettings	2D level design complete ready for testing	23 days ago
.gitignore	Initial commit	2 months ago
README.md	Update README.md	2 months ago
TETS.txt	TEST	23 days ago

The README.md file contains the following content:

```
IACmobileApp  
Final Year project from UCs Applied Immersive Game Design. This application is for the IAC and is used to help people understand the small things we can do to help save the planet in your day to day life with a fun game to help.
```

On the right side of the page, there are sections for 'About', 'Readme', 'Releases', 'Packages', and 'Contributors'.

The screenshot shows the Co-decks software management interface. The top navigation bar includes 'Hand', 'Decks', and 'Milestones'. The 'Milestones' tab is active. Below the navigation, there are six cards representing different milestones:

- Game Design: 1 task
- Code: 6 tasks
- Art: 2 tasks
- Bugs: 1 task
- Test: 2 tasks
- Deliverables: 4 tasks

A button labeled 'Add deck' is located on the right side of the interface.

EVALUATION

INDUSTRY PARTNER VALIDATION

For valuation of the idea we have used the help of Heide Lukosch as our industry partner and our industry mentor. She was very helpful on guiding us in the process and pointing out different ways in which we could include the International Antarctic Centre in our game. After our final meeting with Todd, our project sponsor, we showed him the product and we got validation from his in the product as he saw value in it. His main feedback was to focus more on designing the game for young children of about 12 years old. However, he understood our research and reasoning for the idea and why he chose the target audience.

USER TESTING

We were testing 2 things in our hypothesis: awareness and empowerment. Because of this we had 2 different sections in our questionnaire for each of them. We tested 5 people, however 1 person's data didn't get recorded due to internet connection.

For the awareness test, most people who took the test had a more positive attitude on the questionnaire after playing the game.

When asked "Climate Change is a natural phenomenon, we can't do anything about it", before playing the game only 1 person "completely disagreed" with the statement, but after playing the game 3 people "completely disagreed". Interesting enough, the only person who had "completely disagreed with the statement was the only one who "somewhat agree" after playing the game.

3 out of 4 thought that the government should give incentives for people who try to reduce climate change after playing the game. Before playing the game, only 2 people completely agreed with the statement. Interesting enough, one of the people who initially completely agreed with that statement after playing the game only somewhat agreed.

One of the most interesting tests was how people rank in order the items which they think are the main sources of their climate change emissions (1 for most important, 5 for least important). The options were: Transport, food waste, groceries, clothes, leisure. 3 out of 4 people changed their ranking after playing the game.

After playing the game, 3 out 4 people ranked transport as the #1 source of their emissions. and 3 out of 4 people had groceries as the #2, only one person demoted groceries to #4. Leisure activities in every case was #5.

This ranking may have been influenced by the game since we show both transport and groceries. This may have impacted how the players view these emissions compared to the clothes and leisure activities which we didn't show any emissions for.

For the empowerment test, most people felt the same way after playing the game. There was one question being the exception: "I understand how my choices contribute to climate change". Before playing the game, 2 people "strongly agreed" and after playing the game, 3 people "strongly agreed", but again one of the people who initially had strongly agreed changed their answer to "somewhat agree".

This might be due to the fact that they had thought before they understood but after playing the game they realised there is a gap in knowledge.

However, there was one person who felt more empowered after playing the game. Strongly agreeing to statements such as "My choices do make a difference", "I understand how my choices contribute to climate change"; and disagreeing to statements such as: "I feel overwhelmed when thinking about the changes I could make to help climate change" and "I do not know what to change in my behaviour to help reduce climate change". This person also changed their answer to "How difficult is to have an impact on climate change as an individual?" from somewhat difficult to somewhat easy after playing the game.

FEEDBACK

After the testers played our game they also provided valued feedback on it. Although this is a prototype, they saw potential on the idea and seemed excited to have a product that could help them understand better their impact. Their feedback was:

- To add more products to the store including clothes, more food and beverages.
- To add a garden where you can grow your own food.
- To be able to interact with the 3D world and do actions there.
- To be able to store food for later so you can choose what to eat after buying it.
- To be able to visualize the CO₂ kgs in volume, so it is not just a number. For example: if 500gr of beef make 11Kg of CO₂, show that 11Kg is equivalent to 40 apples, or 15 bottles of juice, etc, so people can create an idea of the impact in their head.
- Make the CO₂ symbol better. Perhaps some people don't know what CO₂ means, or they can't recognize the symbol.
- Try colours that contrast more for buttons
- Make images buttons too, so its easier to purchase stuff.
- Make a overlay image stating how many stars you need to unlock an item, so its more visible.
- More explanations on how everything fits together for people who want to learn more.

We also received feedback from Todd Schmidt, our industry sponsor.

- Try to make the application for kids around 12 years old since they are the ones creating their habits and would benefit greatly from learning more about emissions and the environmental impact of their actions.
- The Tips and Facts sections is a great idea and important feature of the game.
- He was glad we listened to his constraints and what he wants to achieve with the International Antarctic Centre.

SUMMARY

At the start our hypothesis was that 1) the game would make people aware of how they impact the environment; and, 2) it would empower people to make more eco-friendly decisions by showing them alternative options. The main mechanics we designed as part of our game such as buying groceries, choosing transport, having needs to fulfill for the user, and having game achievements, missions and daily tasks to complete, are there to support the users and show them how their choices impact the environment.

After creating our prototype, we tested it allowing players to interact with it for 5 minutes. Our testing results show that the game was able to create some small changes on awareness and empowerment for most players, and it allowed one player to feel more empowered on different aspects than before playing the game. We also learned that although all of our players knew that Climate Change is an issue, they still struggle to know what is the main source of their emissions, and exposing them to the game changed the way they perceived their emissions. We believe that by expanding the game and the items (showing their emissions), people will become more aware of how their choices impact the environment, which in return will empower them.

After our final meeting with Todd the industry sponsor, he felt like the idea was great and understood our research/reasoning for the idea and the target audience. He did think that we should aim lower in the age range instead of 18 to 30.

Our next steps suggestion would be to continue building this game, researching more products and their emissions, and adding more tips and facts; there is a strong recommendation to talk to environmentalists about it and finding others who would like to participate in the project as well as experts on the issue. Moreover, make sure younger audiences such as 12 year olds could easily understand the content of the game, and if possible, add collaboration activities in the game to build a community where people help each other out.

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Stella Smith



"I want Earth to be a healthy again
and I want to play my part"

Age: 22

Work: Uni Student, studying
psychology

Family: Parents, 1 Sibling,
Grandparents

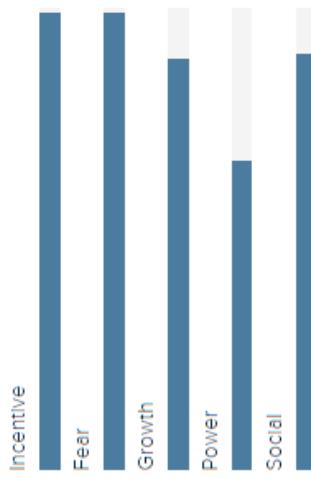
Location: Belfast, Christchurch
Character: Consul

Likes: Reading and visiting the
botanic gardens

Goals

- To live a more environmentally friendly life
- To live on a healthy Earth in the future
- Have an orchard when she buys a property

Motivation



Brands & Influencers



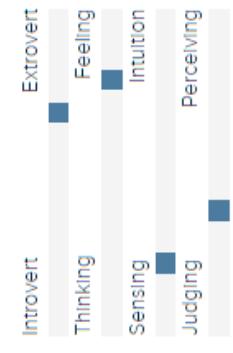
Frustrations

- She hears about Climate Change all the time but doesn't really know what her impact is.
- She feels overwhelmed about the Climate Change topic.
- She doesn't know how to help reduce her emissions in her everyday life.
- She fears that if people don't act to protect the environment, there won't be a real change.

Bio

Stella loves nature and is really happy to live in New Zealand which takes the environment issues more seriously than other countries. However, she has always wondered how she can make an impact on the environment as an individual. Although she volunteers to pick up rubbish at parks and the beach, she feels she could be doing more in her everyday life, but it's hard for her to find information that can help her. After visiting the International Antarctic Centre and watching the last video of the tour, she felt she had no time left to act and she needed to change her life, along with her close ones, or the world would be in a point of no return.

Personality



Preferred Channels

