

National Design Project - Optio

Theme: Environmental Wellness

BY: METHODIST GIRLS SCHOOL

Project Overview

How can we contribute to environmental sustainability?

Importance of Environmental Sustainability

There are many environmental issues that has to be dealt with on the world today. Without practicing habits that can contribute to environmental sustainability in the present, environmental conditions of the earth will continue to degrade, and quality of lives will be affected.

Research Findings

Firstly, we researched on reasons why people are not environmentally friendly, along with the Sustainable Development Goals (SDGs). While most people are aware of how to do their part for the environment, living an eco-friendly lifestyle is considered expensive and inconvenient, so people do not want to invest time into trying to be environmentally friendly. Others may feel that it is pointless to try as their actions will not make a big difference in the grand scheme of things, or be overwhelmed by the difficulty that comes with trying to be eco-friendly.

Next, we researched on current environmentally friendly games such as Fate of the World, Plasticity, etc. We also went through the design thinking process, asking our target audience, Primary Schoolers, what type of game they would enjoy.

Our Aim

With the goal of ensuring sustainable consumption and production patterns (Goal 12 of Sustainable Development Goals),

We aim to show how **one's efforts do make a difference**, no matter how small by providing and suggesting **easy ways** that one can contribute to environmental sustainability through this game.

We hope that this game will be able to **increase the public's willingness** to be environmental friendly overall.

Problem statement: How might we show people that their efforts matter, and raise their knowledge about environmentally friendly efforts in an engaging way?

Research Findings

The Climate Index found that the top two reasons for not adopting green practices were cost and inconvenience, followed by reasons such as finding it hard to maintain sustainable habits, feeling that the status quo is sufficient, not caring about the issue, and believing that individual action is too small to make an impact.

- **Source: The Straits Times:**

Sporeans highly aware of environmental issues but adoption of green practices lags: OCBC climate index

Our Target Audience

Our target audience is Primary schoolers in Singapore, for them to play during school education lessons - 10 - 15 minutes of gameplay.

After the game is introduced, students can then continue playing the game in their own time in order to find out alternate storylines or dialogues or to advance to another country.

This game will create environmental wellness amongst the younger generations, allowing them to learn and make decisive actions towards achieving environmental sustainability, thus working towards a better future for all generations.

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Proposed Solution

Game Concept:

Optio is a story-oriented game that continuous interaction and decision making between user and character, this the name "Optio" in Latin, meaning choice in English.

Optio also includes educational fun facts to achieve the aim of creating awareness and providing simple sustainability habits for users to do in their everyday life.

Setting:

This game will be set in a present day world, depicting a day in a life of a student in an urban environment.



General details of game:

At the start of the game, the user chooses their player character from a group of animals and controls the decisions made by that character for three days.

Each day has 4-6 different actions the user can take, and every action will then lead to a different outcome, making it a story-oriented game e.g. the character chooses between different clothing brands.

Features of game:

Aside from the choices the character has to make for each day, there will also be:

- special minigames related to the story, e.g. sorting out trash into different recycling bins
- fun facts related to environmental sustainability

Game Structure:

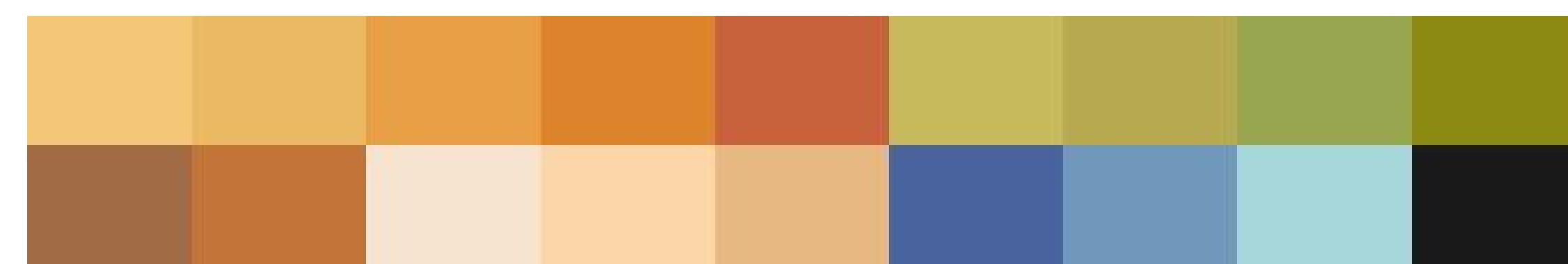
In this game, there will be a few different countries e.g. Singapore, Japan, Germany. In each country, there will be unique tasks and interactions related to environmental sustainability. This will let the user understand the different environmental issues happening throughout the world, and how it affects people and the countries.

The user will only progress to different countries when they reach a certain environmentally friendly score/low carbon footprint, counted when the players make environmentally-friendly choices.

Game Design:

- Cartoon/graphic design in order to attract both younger audiences and teens for the aesthetic
- Warmer colour palette in relation to environment

Suggested colour palette and character designs:



Features of game: Ending

At the end of the game, it will show a message, showing the results of the character's actions the last three days, such as how much water saved, and will also tell the player whether they can advance to the next country.

After the player's carbon footprint is calculated, the positive (or negative) impact on the environment caused by the character's actions will be shown with an encouraging message to users, rallying them to take a step and make a change in their environment.

minigame:



ending animation video:



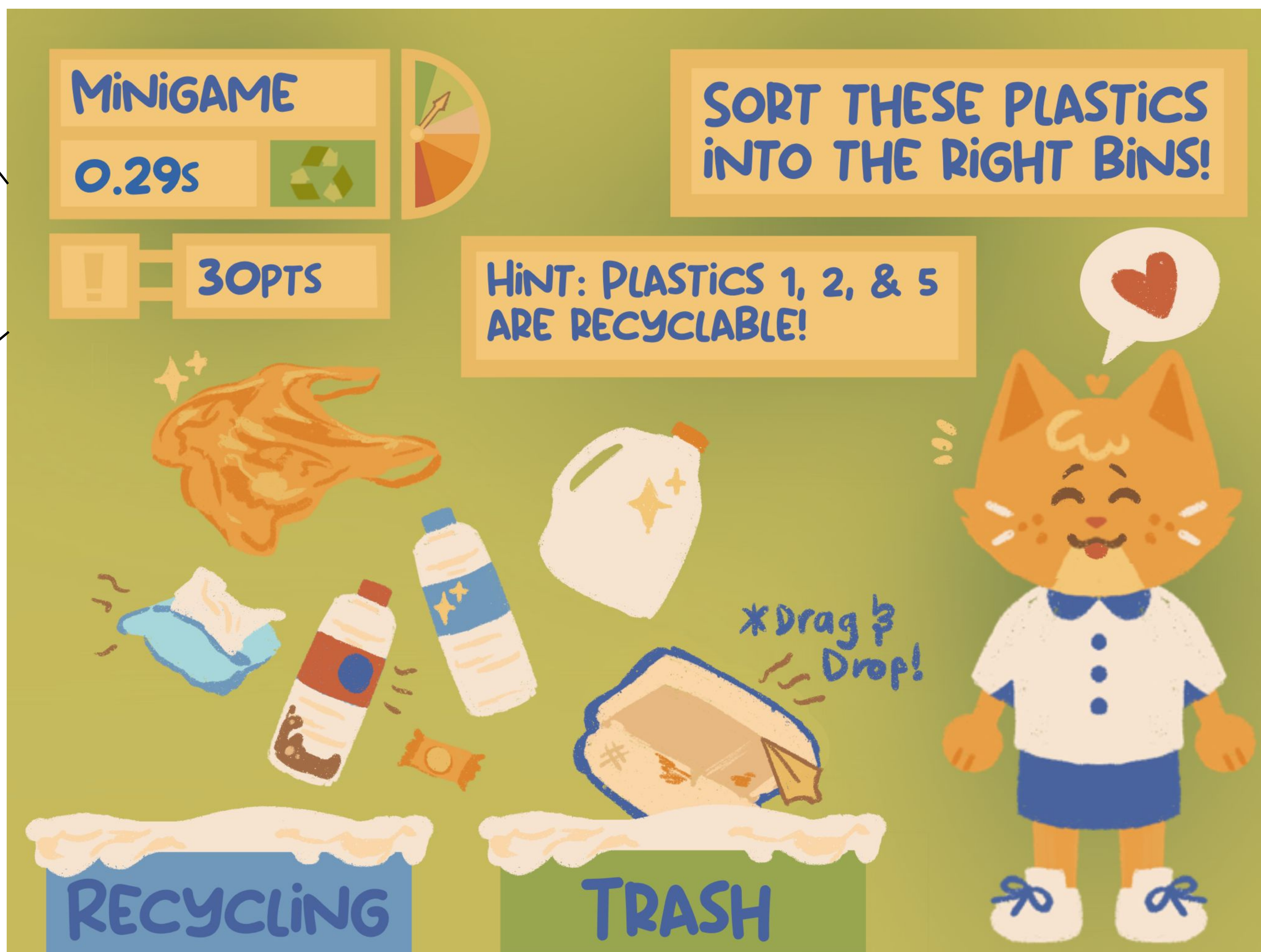
Prototype of game, minigame and homepage behind

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Prototype of Minigame:



There will be a time limit and point counter

Different items will appear on the screen and players will have to sort out the plastics into the right bins (by dragging and dropping the items)

Emotes to show the player's progress

For an added level of difficulty, different recycling bins may be added such as aluminium, glass etc to enhance player's knowledge

Prototype of Homepage:



Optio, the title of the game, is latin for "choice", as this is a game which allows players to make choices for the character

Players will get to replay minigames that they enjoyed

The globe represents how this is a game where players can travel to other worlds to learn about environmental situations in other countries

Characters from the game in the home screen