**IM3080 Design and Innovation Project (AY2021/22 Semester 1)**

**Individual Report**

Name: Evy Widya

Group No: 3

Project Title: Jio

**Contributions to the Project** (1-2 page)

1. **Character design**

In this DIP project, I was tasked to design one of the four cats. All the cats were drawn using Pixilart, which is a free online pixel drawing tool. I started designing different cats of different art styles. However, to fit with the 8-bit art style map, a round-body style cat was chosen as the character for our app.

Currently, we have 4 cat designs, namely Black cat, Garfield, Jiggly and Pusheen. Users can choose any character that best suits them before starting their “fishing” expedition. The cat that I designed was inspired by an existing cartoon character called “Pusheen”.

The cats have different actions corresponding to the things they do. Some actions include walking, idling, and fishing. Furthermore, all the cats will be able to do each action facing four different directions. Since all the cats were drawn from scratch, multiple frames were needed to animate each of the actions. On average of three frames are needed to be drawn for each action.

A white cat with a black background

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Description automatically generated with medium confidenceA picture containing text, dark

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1. **Sprite design**

Besides designing characters for the app, I also designed some tile details to be added into the maps. Since the app has different maps for users to explore, we added some small details that fit the theme of each map. For example, adding floras into the spring expedition and adding snow in the winter expeditions.

A picture containing dark

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Description automatically generatedA picture containing flower, plant, daisy

Description automatically generatedA picture containing text, plant, flower, leaf

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Description automatically generatedA picture containing silhouette

Description automatically generatedA picture containing gear

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Description automatically generated

1. **Tilemap design**

We used Unity to create everything in the app, including the maps. To create a more interesting app, we included a variety of maps for users to explore. I had the opportunity to design a map of different themes. Hence, I chose to create a map with an Autumn theme. To create a map that fit its theme, I added some brown / orange tiles and fallen leaves into the map. The map design was inspired from Lake Ashi in Japan.

There are 4 different layers for the tiles, which include water level, ground level and two elevation layers so that the map would not look too flat.

A screenshot of a video game

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**Reflection on Learning Outcome Attainment**

**Reflect on your experience during your project and the achievements you have relating to at least two of the points below:**

1. Engineering knowledge
2. Problem Analysis
3. Investigation
4. Design/development of Solutions
5. Modern Tool Usage
6. The Engineer and Society
7. Environment and Sustainability
8. Ethics
9. Individual and Team Work
10. Communication
11. Project Management and Finance
12. Lifelong Learning

**Point 1: ( d ) Design/development of Solutions**

Through this 13-week Design & Innovation Project module, I was tasked to design the characters and maps for the app. Initially, I was not confident in my designing skill and was unsure if my designs would be suitable for the app. However, after presenting my designs to the group, my design was chosen as one of the characters to be used in the app. It raised my confidence level and made me want to design more elements in the app.

Since it was my first time doing the character design, there were many things for me to learn from. Firstly, I had to learn and understand how to use Pixilart to draw the characters. Next, I had to adjust the design to fit into the map. Since we are making an isometric map, all the characters would need to face isometrically in four different directions. Lastly, to add movements to our characters, I had to draw different frames for each action.

**Point 2: ( i ) Individual and Team Work**

Working in a group of 10 was quite challenging for us, especially during this pandemic period, where restrictions apply, and we could not meet up face-to-face to work on the project. Hence, we had spent most of our time working on different parts of the project individually or in a smaller group of 3. We would also have regular group meetings at least twice a week to give an update of the progress of our individual part. This allows us to check if everyone is on track or would need some help from other group members.

Working with such reliable group members enabled me to do my part well, knowing that I have my group members to help me if there is anything that I was unsure of. Everyone was friendly and helpful when one had some issues with their part.

All in all, although all of us were doing our individual parts, we also did well in working as a team, combining all our individual parts together completing the app.