

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

Individual Report

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Group No: **3**

Project Title: **JIO**

Contributions to the Project (1-2 page)

For week 1-3, we split ourselves into small sub-groups to brainstorm ideas and what kind of apps we wanted to do. Proposed our ideas and finalize our ideas with the team our respective professor. Finally, our team decide to design “a cat fishing” themed productivity and social app called “**JIO**”.

Our group is divided into program team and design team, I am in the design team.

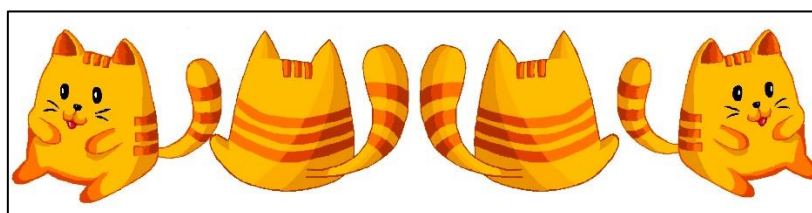
For week 4-5, we decided to produce the app using 2D isometric graphic and the graphic will be in pixelated style. Each member of the design team came out of cat character designs, and we choose the better one out of them to proceed to next stage.



My first draft cat character design.

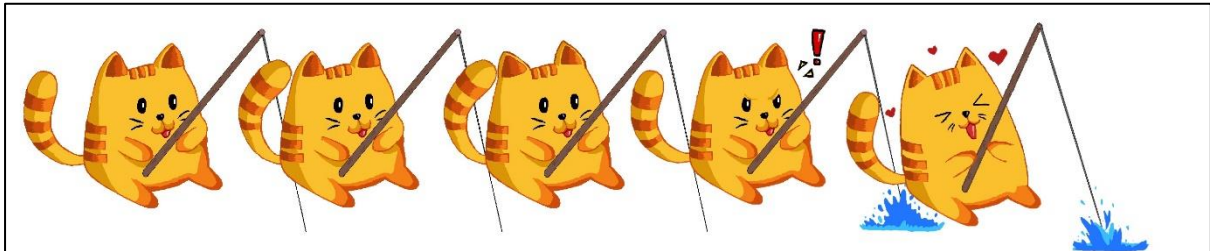
After team discussion, we concluded that we do not want the cat to look too realistic and flat. We want a mild pixelated style and by using isometric drawing method, we can make the character looking like 3D in the game although it is a 2D drawing. Thus, we will modify the design of cat from our draft into isometric style and less pixelated.

For week 6-8, Evy and I were assigned to produce the character designs. I chose to work on the **orange cat** from the first draft while Evy works on the grey cat. Both of us work on our own individual cat character. Also, to fit a 2D drawing into the game and have the sense of 3D, we need to produce the character cat facing all 4 directions for every action.



Orange cat sitting down in 4 directions

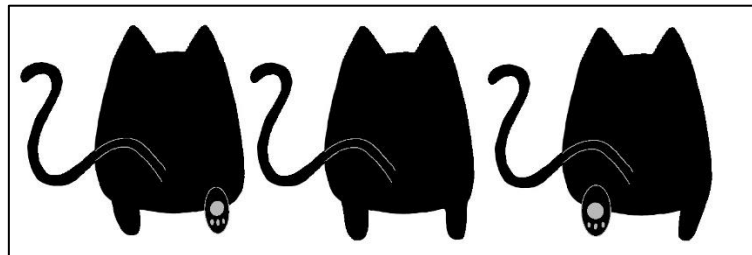
As the character will be having moving animation in the game, we planned out the frames for every movement before drawing. For example, when the cat is standing still, there is an animation for the cat, such as tail moving. I produced a set of 44 frames for different movements in the game, which are sitting down, standing still, walking, fishing in all 4 directions. A total number of 44 frames of drawings are produced to minimally satisfy all the animation of each character in the game.



An example of different frames in a fishing animation (orange cat)

For week 9-11, I designed items to maximize the richness of the maps, such as campfire, trees, rocks, and lamppost. (Not all the designs were used, as it doesn't fit into the map aesthetic)

Also, to increase the choices for the users to choose for characters. I moved on to design another set of 44 frames for a new character, the Black cat.



An example for the set of frames for waking, back view (black cat)

For week 12-13, I focus on creating the poster for the game and final touch up and modification for the character if needed.

To conclude, my contribution to the team is mainly designing 2 game characters, some decorative items for in-game and doing the poster.



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:

- (a) Engineering knowledge
- (b) Problem Analysis
- (c) Investigation
- (d) Design/development of Solutions
- (e) Modern Tool Usage
- (f) The Engineer and Society
- (g) Environment and Sustainability
- (h) Ethics
- (i) Individual and Team Work
- (j) Communication
- (k) Project Management and Finance
- (l) Lifelong Learning

Point 1: (i) Individual and Teamwork

Team of 10 for a pure software school project is too many in my point of view. Due to the different experience and level in programming skill, it is almost impossible for everyone to get involved in the software development part and at the same pace. John has the most experience in programming, thus he in-charge of the main coding and the rest of us work and assign around him. I am mainly doing character design for the game, so most of the time I am doing individual work and only meet up with the team, when standardizing the sequence of frames or review of the character design. For teamwork, I mainly work with Evy and Wei Xuan, as they both in charged of designing other 2 game characters. We have meetings to ensure our designs are not too far off from the style and ensure the number of frames for each action is logical. Also, I work with John and Joedi, for handing over the frames so they can transform the frames into animation inside Unity.

Point 2: (j) Communication

At the start, the communication between the character design team is not detailed enough, which leads to the frames we produced not standardized. For example, the frames for some actions are overlooked and did not produce or I designed too many unnecessary actions for the characters, leads to number of frames for each character are different. Result in the need to do modification and adjustment after designing.

So, if next time, there is a similar group project, I will communicate well with the team and planned out the information needed in more detailed. So that we can improve efficiency of the workflow and minimize the need for modification and synchronization issue after designing.