IM3080 Design and Innovation Project (AY23/24 Semester 1) Individual Report

Name: Nurul Rushdina Binte Rosli

Group No: 6

Project Title: ARvatar (Mobile Chat Application)

Contributions to the Project (1 page)

Part of the front-end team focusing on the UI design of the mobile application.

1. Figma Design:

• Created the interface layout for the chat list page.

2. Colour Theme Choices & Illustrations:

- Curated a pastel colour palette and gradient background using Adobe Illustrator, defining the app's theme.
- Created illustrations for the logo featured on the welcome page, ensuring an engaging entrance for users, using Adobe Illustrator.

3. UI Interface in Unity3D Scenes:

- Designed the user chat main page within the ChatList and NewChat interfaces, using a vertical layout group component for vertical scrolling.
- Designed the chat conversation interface between two users. Implemented the auto-resizable chat bubble according to the text with Nicole.
- Created the user friends' header for the ARchat page, integrated with animations for smooth open and close functionality.
- Meticulously refined the overall design elements of the UI spacing, colours, alignment, and sizing.

4. UI Page Transitions:

- Employed Unity's Animator component to script animation transitions between different chat interface states, coding the logic for smooth transitions between scenes.
- Coded the loading animation to maintain user engagement during transitions.

5. Poster Design & Video Marketing:

- Designed a poster template aligning it with our colour palette.
- Created video content highlighting the app's innovative features.

Reflection on Learning Outcome Attainment

Reflect on your experience during your project and the achievements you have relating to <u>at least</u> 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
- (I) Lifelong Learning

Point 1: Design/development of Solutions

My role in the front-end team allowed me to design the mobile application's user interface within Unity3D scenes. At the beginning of the project, working with Figma for the first time presented an opportunity to delve into a new design tool. While working on Unity3D, I learnt to create transitions between pages. I discovered that transitions not only added aesthetic appeal but also communicated the app's structure, aiding navigation and enhancing the overall user experience. Moreover, making critical colour theme choices taught me the importance of harmonising colours to establish the visual tone and appeal for the application, enhancing its aesthetics. Throughout the project, I also learnt that balancing creative design elements with functional usability is crucial as it is important to make sure that visual elements not only look good but also contribute positively to the application's usability. For example, implementing the creative transition animation between scenes, such as smooth sliding using C# scripting, added a sense of fluidity to the app's navigation.

Point 2: Communication

Throughout the project, I learnt critical importance of communication, particularly within a shared platform like GitHub. Our team encountered recurring conflicts upon pushing changes due to insufficient communication regarding the specific scenes we were modifying in Unity. This lack of transparency resulted in simultaneous alterations, causing conflicts within GitHub and impeding our progress. I had not yet grasped conflict resolution, which led me to seek guidance from Tianchu, a team member who experienced in GitHub. He taught me how to revert to earlier versions, which resolved my issue with my rejected push. It was a significant learning point for me as it emphasised the significance of asking for help and learning the expertise within the team. Reflecting on this, I realised the importance of communication in collaborative projects, especially in version-controlled environments. Subsequently, I made a conscious effort to inform my team about the specific scenes I was working on, aiming to prevent clashes and enhance overall coordination. Additionally, I sought assistance from Aloysius in the backend team to learn the process of editing and removing text messages within Firebase whenever I typed wrongly during the testing of the chat application.