Property Tycoon Project Report

Team 35

[**Overview**](#_gi3y8kdk0a6v) **2**

[**1. Individual Responsibilities**](#_4agmavknhyoj) **2**

[1.1 Eliza Back](#_id5gpi9kyey1) 2

[1.2 Dzhan Hasan](#_c4y5pq9thwow) 3

[1.3 Rie Tse](#_jtqjihglglyh) 3

[1.4 Sean Wadsworth](#_6202b4n3oaek) 3

[**2. Overall Group Cohesion**](#_ofzmzas3afoi) **3**

[2.1 Communication Methods](#_ah3hhaubhga) 3

[2.2 Group Evaluation](#_h40jxdhsxld1) 3

[**3. Project Evaluation**](#_2fb9um4xd13v) **4**

[3.1 Project Successes](#_2pb8jmdjmvk7) 4

[3.2 Future Improvements](#_ldmzm8ol2e8j) 4

[**4 Peer Review**](#_e8104zcw9yp4) **4**

# Overview

This report will detail the responsibilities of the individual group members in Team 35 as well as discuss our general performance as a group and evaluate our project.

Overall, we have had smooth, productive communication throughout the development of this project. Despite some shortcomings with the functionality of the code, we have worked well together to bring the project to completion and successfully applied the agile development methodology.

# 1. Individual Responsibilities

## 1.1 Eliza Back

Throughout development, Eliza has taken up the role of project leader; this entailed responsibilities such as organising group meetings, taking notes for meetings, delegating tasks and checking in with other team members regularly.

In the design phase, Eliza contributed heavily towards planning documentation and design documentation (for example, Risk Assessment, Requirement Analysis, UML Diagram). As the project progressed, she took on more programming responsibilities and tasks, and ultimately wrote most of the code for the GameManager, PlayerController and other classes related to game rules and the gameplay loop.

## 1.2 Dzhan Hasan

During the entire development process, Dzhan has focussed on many of the more creative tasks needed to contribute to the project. He initially designed the Property Tycoon board, using similar boards as inspiration, before moving on to model the 3D player tokens used in the game.

Dzhan also created the sequence diagrams and finalised the UML diagram. He helped with the documentation towards the end of the project, when other team members were busy working on the code.

## 1.3 Rie Tse

Similarly to Eliza, Rie worked on initial documentation during the design phase, also contributing heavily. She worked well in a team with Eliza, and helped to finalise the Risk Assessment, Requirements Analysis and other design documents.

As the project evolved, Rie assisted the programmers and managed the Git repository for the project. On top of this, she was responsible for testing; she created testing scenes and wrote all of the testing documentation, and assisted with debugging.

## 1.4 Sean Wadsworth

At the beginning of the project, Sean was responsible for implementing the initial game functionality, such as movement, as well as making the class diagram documentation.

Throughout the project, he continued to focus on the coding side of development. He designed and implemented the game UI, and programmed it to work with the gameplay classes already written by Eliza. Sean also assisted with some documentation, such as code commenting and project report.

# 2. Overall Group Cohesion

## 2.1 Communication Methods

We have primarily communicated over discord, though formal team meetings have taken place in person. We have found that both methods of communication have been effective, with in person meetings facilitating more detailed communication, and making use of features within discord to log bugs and delegate tasks.

## 2.2 Group Evaluation

We have worked excellently as a group, with no disagreements and no major miscommunication. We have also taken well to the agile methodology, and enjoyed the ability to be flexible with our development due to our strong interpersonal relationships and communication.

One negative would be the intense workload as a result of operating as a smaller group, especially considering that some of the team members did not contribute to the code, meaning that there was a greater amount of coding work to do towards the end of development

# 3. Project Evaluation

## 3.1 Project Successes

One of the main highlights of our project would be our extensive documentation. Eliza and Rie’s work at the beginning of the project meant that we had a strong design foundation to build our code off of, even though we went on to diverge from the original class diagram, as its design wasn’t ideal for later iterations of the project.

Test scenes were created for each major feature introduced to the game. This allowed us to have scenes specifically for debugging and eased the documentation process. This also allows debugging to be done while development on the main scene could continue unhindered which avoids conflict in code. The test scenes are available via the debug menu after a game is initialized.

Furthermore, the functionality that Eliza worked on is solid, and works smoothly with the UI that Sean designed. For example, we included extra functionality such as board customisation, to align with the specification provided to us. We prioritised this over AI functionality and auctions, as it was more achievable to implement in the late stages of development, seeing as the code had already been written with customisation in mind. We believe that our ability to prioritise functionality like this is a strength, as we had to make decisions based on a number of factors, such as achievability and importance to the project overall, and our decision-making meant that we could include more, complete functionality rather than leaving many features unfinished.

## 3.2 Future Improvements

If we were to carry on with the Property Tycoon project, we would definitely like to satisfy all points of the specification as a starting point. To further improve the project, we would also improve the UI design and add extra functionality such as sound effects and music, improved graphics, and greater customisation.

If we could have done anything in the project differently, we might have worked harder on the coding side of development earlier in the development process, to lessen the workload later down the line and potentially allow more time to add greater functionality to the project. We could have also spent more time on testing as not all test scenes that focus on major features could be built, and such half of the testing was done in the main scene instead. Also, we would have begun the project using Git for collaboration over Unity Collab, since we started with Unity Collab but due to technical issues had to migrate the project over to Git in the middle of development, which was not ideal.

However, due to time constraints, we were left with little time to test the game build, which unfortunately does not function entirely in line with the program when run from the Unity Editor. As such, we have enclosed a copy of the project itself, alongside video evidence of it’s functionality in order to supplement the delivered product.

# 4 Peer Review

As all team members completed roughly similar levels of work in different aspects of the project, we have elected to split the peer review marks evenly between the four of us, as such the results are:

Eliza Back: 20

Rie Tse: 20

Dzhan Hasan: 20

Sean Wadsworth: 20