COSC341 Lab Assignment1 Report

Group members:

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Project Description:

In this project, we developed a game where user control player to move between multiple platforms, collect coins and avoid enemies. When coins are collected, the user's score increases, and when it encounters an enemy, the game ends and scoring stops.

Task Allocation:

Guohao Ma - task allocation and coordination, GitHub uploads and version control, platform modelling, enemy coding, conflict resolution, testing, video recording

Shirley Xu - player modelling and coding, coin modelling, testing

Ming Xu - platform construction, testing, report writing

Brian Yang - enemy modelling, coin configuration, score display, testing

Challenges:

1. At the beginning, configuring the Unity environment and collaborating on GitHub was challenging for us, with multiple conflicts arising during content uploads. Additionally, we were unsure about how to allocate tasks.
2. In the coding process, we found that the movement speeds of players and enemies needed precise adjustment, otherwise, they could easily fly off the platform. Furthermore, we discovered that for collisions between rigid bodies, we needed to consider the trigger mechanism and set multiple attributes to ensure the correct game logic.

Solution:

1. At the start, with the help of the TA, we solved the issues with environment configuration one by one through multiple adjustments and merges, completing the initial construction of the project.
2. During the project, team members kept close contact and cooperation. Through multiple group meetings, we determined the task allocation and construction ideas, and rationally discussed when encountering conflicts.
3. When encountering technical problems, we asked the professor and TA for key guidance, and implemented multiple functions such as collision triggering and edge detection. Through studying video resources, we gradually met the project requirements. Through multiple tests, we discovered problems and continuously optimized the models and codes.