CGD6334 GAME PHYSICS

PROJECT #1 (20%)

TRIMESTER 1, 2024/25

OBJECTIVES

The objective for this project is for you to experience in making a game that uses physics as the core mechanics of the game.

REQUIREMENTS

You are required to create a physics-based game with the following compulsory requirements:

- use Phaser.JS with Arcade physics engine,
- no 3rd party game engines or libraries unless with prior permission,
- the projectile should not be the core mechanics of your game.

It's up to you to decide what game you would like to design; the simple rule is that you must create a game that people want to play.

The theme of the game is:

To Be Voted In Class Later

DEADLINE

The submission deadline is **12:00 noon on Monday, 20 May 2024** (Week #09). Deadline extension is unlikely.

GROUPING

This Project is to be done in a group of **NOT MORE THAN 2 members**. STRICTLY NO COPYING from other groups or from any other sources (Internet, books, etc.). Plagiarism and cheating are serious offences in MMU, and you can be failed for this subject and be reported to the faculty for actions.

PROJECT DEMONSTRATION

You are to demonstrate your project after the deadline, please refer to the announcement later. All members of the group must be present during the demonstration session. You and your group member must be ready to explain what you have done. Each member is required to state which part he/she has done. You must be able to answer questions asked regarding your parts as proof of your contributions. If you cannot prove that you have done the parts of the game on your own, you may be given a mark of zero.

DELIVERABLES

Your submissions must include:

- **Source Codes**
  - You need to provide the source codes of your game. It is your full responsibility to make sure that the source codes are error-free. Your game must be able to work minimally in the Chrome browser.

- **Documentations**
  - Your root folder should contain a **README.md** file in markdown format that contains at least the following contents:
    - **Group Members**: State the full official student names (as registered at MMU) and student IDs, and state each member's contribution clearly.
    - **Introduction**: Briefly introduce the purpose of your game.
    - **Documentations of Your Game**: Describe what your game is all about.
    - **User Manual / Instructions**: Instructions on how to install your game, how to use and play your game, buttons and keys to be pressed, what to look for and what special features your program has.
    - **Screenshots**: Screenshots of the major screen output of your system. This is especially important but often neglected. The examiner may not remember what you have in your game even after seeing the demo.
    - **Link to Video Demo**.
    - **Acknowledgment**: State who have helped you in doing the project, and the people whom you have collaborated with.
    - **References**: Cite and acknowledge all the sources of materials you have borrowed.

- **Video Presentation**
  - Prepare a video recording of not more than 20 minutes explaining your game.
  - Upload your video presentation as a unlisted video on YouTube, and share the link in the documentation.

SUBMISSION INSTRUCTIONS

Put all your files in GitHub and share the link in an online form to be made available later.

Only one member of each group needs to submit the GitHub link in the online form.

Make sure you put your GitHub repository as **private** and add GitHub ID ypwong@mmu.edu.my as your collaborator. Apply for a GitHub Education student account immediately if you have not done so.

EVALUATION CRITERIA

Overall Evaluation Criteria:

	Max
1. **Written Report (20%)**	
a. First Impression (bad = 0, okay = 1, good = 2)	*2*
b. Introduction / Problem Statement	*2*
c. User Guide / Instructions	*5*
d. Documentations of Game	*7*
e. Screen Shots (Pictures with Descriptions)	*4*
2. Source Code (30%)	
a. Code Efficiency and Strategy	*7*
b. Modularity (small functions)	*7*
c. Error Reporting Capabilities	*6*
d. Style - Self Documentation	*4*
e. Style – Code Formating, Indentation etc.	*6*
3. Program Execution (50%)	
(If the program cannot run, 0 mark will be given for this section)	
a. General Impression (Appearance and Beauty)	*5*
b. Fun to Play	*6*
c. Good Game Objectives / Goals.	*6*
d. Good Game Balance (Challenging enough but not too hard to play)	*6*
e. Good Scoring System	*5*
f. Good Game Mechanics	*6*
g. Good Use of Physics	*6*
h. Reasonable Quality of Game Asset (art works, graphics, sounds etc.)	*5*
i. Error-free During Runtime	*5*
TOTAL	*100*

Pay careful attention to the evaluation criteria to maximize your marks. Good luck and enjoy the learning process!

END OF DOCUMENT.