Fixed shooter game

FIXED SHOOTER GAME WITH DESIGN PATTERN

Description

In this assignment, you will develop a fixed shooter game that uses Manager/Singleton. The game will consist of a start screen, three levels of gameplay, an end screen displaying the player's time and score, and must incorporate the chosen design pattern effectively.

Requirement

- Develop a basic fixed shooter game where the player controls a character that shoots at incoming enemies.
- The game should have transition between levels
- Include player controls for moving left and right and for shooting.
- Implement collision detection between the player's bullets and enemies.
- Keep track of the player's score, which should increase when enemies are destroyed.
- Game has 3 playable levels, 1 Start screen, 1 End screen (Screens can be in different level or be part of an existing one)
- Game contain die and retry feature
- Keep a running score, time, lives across levels
- Singleton design pattern needs to be part of your game solution.
- When all the levels are won, load an end screen that contain the following information
 - Player score
 - How many times he died
 - Time it took to finish the game starting from level 1 to level 3

Project submission guideline

- Create a repo on github.com with the following naming FS-YourProjectName (YourProjectName should be replaced by any appropriate name that suits your projects)
- Git project should contain a readme.md file that indicates the following information:
 - Your name

- A how to play instruction
- The git should contain a Build version of your game within a .zip
- Add me as collaborator for the project fjellouli@dawsoncollege.qc.ca
- Submit on Lea a text file that would contain the link to your git repository

Misc

- The game shouldn't take more than 5 min to be completed
- if that's the case please add some debug in order to go through it easily

Grade: 15%.

Delivery Method: Lea.

Deadline: September 12

RECOMMENDED READING:

Unity: Don't destroy on load

Singleton

C# Static

Architecture, Performance, and Games

The Gang of Four patterns as everyday objects

Game programming pattern