Unity Developer

Tech Task

Objective

- To evaluate the applicant's technical skills via the produced project
    - Architecture design choices
    - Focus on readability, maintainability and extensibility of the solution
    - Applying good development practices
- To evaluate the applicant's ability to follow a list of requirements

Game Description

The objective of this task is to create a very simple game where you can knock down pins with a bowling ball to gather score. The functional requirements are as follows:

Gameplay Requirements

- When knocking down a pin, 10 points get added to the cumulative score.
- After 30 seconds, the game ends.
- The score is recorded after the end of the game, and the highest score ever achieved is updated (if applicable).

Feature Requirements

- There is a menu in the game that allows you to pause and reset the game
- The current score and the highest score ever achieved are displayed on screen while playing
- The timer is displayed on the screen while playing
- The Highscore must be persisted between sessions

You've been provided with a project that contains a partial implementation of these requirements. Make any additions or changes required to this project to satisfy all the requirements. Additionally, feel free to make any improvements to the code in terms of structure, readability, maintainability, performance, or otherwise. Some of the code was intentionally created to have room for improvement and discussion, and there might be some bugs!

Rules

- You must use either Unity 2022.2.2f1 (which the project was created in) or a newer version. Using a newer version is at your own risk, as things could break in the upgrade process.
- Delivery consists of an archive file containing the Unity Project:
    - Minimum essential directories to compile and run the Unity Project
- In general, we expect that this task would take you between 2 to 3 hours over one week. However, please contact us if you need more time for whatever reason.
    - If all requirements are satisfied, but you still have more ideas on how to improve the code, then we can also discuss this during the next interview.

Evaluation

- How the delivery matches against the specification (validate which requirements are met)
- Focus on the overall structure and organization of the project
- Proper execution of good programming practices
    - For example, if consideration was given to design patterns and abstractions
- Readability, maintainability, and extensibility of the project