Job application exercise

The exercise you are about to do will be used to assess your programming skills and how much you could fit in the job position.

You have been provided with an incomplete 2D Unity game that resembles space invaders. The exercise is split into different tasks. If some tasks prove to be too difficult, you may decide to complete them partially.

Note that all the work done will be discussed on your interview.

1. The score on the top left of the screen should increase of one point for each alien destroyed.
2. A health point should be removed for each alien passing the ship’s “horizon”
3. A health point should be removed for each collision of an alien with the ship
4. When the health points reach the count of zero, the game should stop and display a game over screen with the score. Users should be able to decide whether quit the game or retry.
5. (plus) The current game difficulty is represented by the velocity and frequency of alien spawn. You may implement a way to handle such difficulty. Starting from an easy setup, shifting toward a more challenging game.
6. Store in an arbitrary file information regarding user inputs and score. Other information such as the total played sessions and total played time should be stored.
7. (plus) Upload such data in a local database or remote database or remote system (azure, amazon S3, …)

You are more than welcome to improve and refactor the provided code in any way (e.g., the controls of the ship can be modified to be made smoother). Feel free to implement any change you find useful to improve the game experience.

If you have any question do not hesitate to contact us at [zeno.menestrina@studiobliquo.com](mailto:zeno.menestrina@studiobliquo.com)

You may create a pull request on the provided repository or send us the updated code by mail (pull request is preferred).

Please, call your branch with your name.

LINK to code:

<https://github.com/zeno-bliquo/SpaceInvadersExample.git>