Instructions for Unity Developer Test

Preparation

- This test should not take more than 3 hours to complete. Please do not spend more time than this.
- Once you have finished the project please zip it up, add your name to the file name and send it to **kirsten.berry@yallaplay.com** via Dropbox, Google Drive, WeTransfer etc.
- Good Luck !!

Instructions

Top down shooter

In this section we are interested in assessing your Unity Development and Codebase Architecture skills. Your task is to rapidly prototype a concept that we believe could turn into a huge smash hit! In particular you need to implement:

- 1- On screen joystick to move the Player. The Player should be able to navigate uneven terrain and go up/down on slopes.
- 2- Make the camera follow the player
- 3- Have 2 UI buttons. One to shoot and one to swap weapons.
- 4- The Player will have 2 weapons. Pistol and SMG
 - Pistol: slower fire rate and shoot button has to be pressed every time to shoot
 - SMG: faster fire rate and shoot button can be held down to shoot.
- 5- Implement 2 types of enemies
 - Enemy1: Randomly moves across the map
 - Enemy2: Moves towards the player and stops and shoot when the player is in range
- 6- Implement UI for Player health and Enemy Health











Your project will be evaluated on these terms:

- Clear, reusable, modular code and architecture. Design, code/project structure, choice of data structures.
- How well this code can be scaled to implement multiple weapons, players and enemies.
- Mastery of coding principles, concepts and abstractions.
- Mastery of Game and/or Graphics Programming.
- Codebase architecture respecting features requested.

NOTES

- DO NOT focus on art assets, just use primitives with plain colors or art from the internet.
- This game SHOULD NOT use any 3rd party tools or frameworks for structuring or architecture of the project (like ECS, dependency injection etc.), just your implementation unless it is necessary. Using support libraries like tween etc. perfectly fine.
- Preferred engine is Unity3D and preferred language is C#.
- Do not create any dependency to OS or OS variables.
- Do not create any dependency to IDEs or Unity versions if possible. If you have to please document this requirement properly.
- Graphics used are not that important, you can use programmer art (squares and circles) or a free pack. Focus on smooth gameplay, code structure and bug free code rather than visuals.
- Make sure your code runs on both Editor and device (Android). (support both touch and mouse events)