CS 485 HW Assignment 1 -- Individual Project (100 pts)

Due: February 5ᵗʰ (Tuesday) 12:00pm, 2019

1. Objective

Develop a 2D/3D game using a game engine. Be familiar with the user interface of Unity3D. Learn C# or JavaScript scripting for player control and camera movement. Gain experience in game design.

2. Submission

a. **Upload the whole source folder of your game project on <u>GitHub</u> or <u>Bitbucket</u>.**

b. **Submit the remote Git repository URL of your game on Cougar Course. In the root folder of your project, put an executable build file (for Mac OS).**

c. **Submit a project report as well on Cougar Course.**

Note: The instructor will clone your project by using the Git URL you submit to his local machine for grading. The instructor will use Unity version 2018.2.6f1 or higher to run your project. You want to make sure your submission can be compiled.

More specifically, you may follow the following steps.

(1) In unity, click "Edit-> Project Settings -> Editor" and look at the Inspector view "project Settings".

    a. Make sure "Version control mode" is set to "Visible meta files".

    b. Make sure "Asset serialization mode" is set to "Force text".

(2) Initialize your project folder as a Git repository by typing "*git init*".

(3) On GitHub, create a new project/repository and write down the repository URL.

(4) Connect your local repository to GitHub repository by typing "*git remote add origin URL*".

(5) **(optional)** Put the attached ".gitignore" file under your project's root folder.

(6) Commit your project to GitHub by typing "git add –A", "git commit –m'log'", and "git push".

The following two links may help you learn Git.

https://help.github.com/articles/adding-an-existing-project-to-github-using-the-command-line/
https://docs.unity3d.com/Manual/UnityCloudBuildVcsGit.html

3. Requirements

3.1 Game scene 1: Roll-a-ball (70 pts for the replicating the tutorial, 20 pts for extension)

Create and extend a roll-a-ball 3D game by following this "Roll-a-ball" tutorial.

https://unity3d.com/learn/tutorials

You want to have your own contribution in the extension of the tutorial.

For example, you may replace an object model, change a texture, decorate the background, extend the gameplay, add a sound effect or a background music, etc. It's not necessary to do many changes. One or more interesting improvements should be fine.

Besides, your game should have a button so that players can go back to the main menu scene.

3.3 Project report (10 pts)

You also need to submit a project report for this assignment. The report must include (1) **your name**, (2) **the URL of your game's repository**, (3) **a clear clarification of your own contributions**, and (4) **references to any outside resources that you used**. If applicable, you may also discuss future improvements to your game, and any comments to the instructor. Submit your report on Cougar Course as well.

ACADEMIC HOMESTY: *Please read the academic honesty policy on the syllabus. Remember that this assignment is to be done individually. If you use any resources (3D models, 2D pictures, sound clips, videos, scripts, libraries, tools, etc.) from others, reference the original sources explicitly in your project report.*

WARNING: *This assignment will catch you off guard if you leave it to the last minute. Make sure you are getting enough time and learning for the assignment. This assignment is critical for your knowledge of Unity and basic game programming concepts.*