

CS 485 Assignment 1, Due: September 18th 12:00pm, 2017

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.

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.

Submission

Please read the academic honesty policy on the syllabus. Remember that this assignment is to be done individually.

Submit your project on GitHub and upload your project's Git repository URL on Cougar Course.

More specifically, you can do the following:

- (1) Develop your Unity3D game project;
- (2) In unity open Edit-> Project Settings -> Editor, then in Inspector of project Settings;
- (3) Change "Version control mode" to "Visible meta files";
- (4) Change "Asset serialization mode" to "Force text";
- (5) Make your project folder to be version controlled by Git using "***git init***";
- (6) Create a new repository on GitHub for your project;
- (7) Connect your local project to GitHub repository using "***git remote add origin URL***";
- (8) **(optional)** Put the attached ".gitignore" file in your project root folder;
- (9) Add, commit, and push your project to GitHub;
- (10) Submit the URL of your project's Git repository on Cougar Course.

You must include in your project's root folder a README file that lets me know how to run your game.

Below are two links that may help you work on Git.

<https://help.github.com/articles/adding-an-existing-project-to-github-using-the-command-line/>

<https://docs.unity3d.com/Manual/UnityCloudBuildVesGit.html>

Description

In this assignment, you will develop a game with two scenes. At the beginning of the game, users can choose either scene to play.

The first scene: Roll-a-ball (40 points)

Create a new scene by following this "Roll-a-ball" tutorial.

<https://unity3d.com/learn/tutorials>

The second scene: your own game (50 points)

You are asked to develop your own personal game as the second scene in this assignment. Your game can contain some sorts of enemies to avoid or destroy, and some additional gameplay features or polish. An example can be found at <https://unity3d.com/learn/tutorials/projects/space-shooter-tutorial>. Don't make your game look exactly like this example. Design your own game. If your scripts are based on some tutorials, mention that in the references of your report. For grading this second scene, your originality takes 20 points, the robustness of the game takes 20 points, and the game entertainment takes 10 points.

Project report (10 points)

You also need to submit a report for the assignment. In the report, you need to include (1) **your name**, (2) **a brief introduction of your game**, (3) **instructions of playing your game**, (4) **references to any resources that you used**, (5) **your own contributions**, and (6) **what you learn from this assignment**. If applicable, you may also discuss future improvements to your game, and any comments to the instructor. Put your report in your project folder for submission.

Extra Credits (50 points)

If you make the second scene of your game to be a Virtual Reality (VR) game that can run on an Android or iOS phone/tablet, you will obtain 50 points as extra credits.