

# CS 485 Mid-term Project (100 pts)

Due: April 21<sup>st</sup> (Tuesday) 12:00pm

## 1. Objective

This is a group project to develop a 2D/3D game using a game engine.

## 2. Submission

- a. Upload one or more screen videos of your game on cougar course.
- b. Upload the whole source folder of your game project on GitHub or Bitbucket.
- c. Submit the remote Git URL of your game on Cougar Course.
- d. 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 2019.2.2f1 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. Game Requirements (70 pts) (10 out of 70 pts are for using Events)

In this assignment, you will develop a game with multiple scenes (at least two) including at least one game scene and one menu screen. Your game should start with a menu scene, from which players can start or quit the game.

Your game can be any type of games. Your game should present a clear gameplay including clear game goals, reasonable game rules, user-friendly feedback system, and entertainment. If you follow some tutorials, don't make your game look like exactly the same. Design your own game. If your game is based on a tutorial or an existing game, mention that in the reference section of your project report.

10 out of 70 points are for using Unity Event mechanism. On cougar course, read the lecture about "Event Handling" and look at the "Event Video". Hints: the simplest way to use Events is to use `UnityEngine.Events.UnityEvent`.

**This project is a mid-term exam. Every team member must make substantial contributions (coding, 3D modeling). In your project report, you need to clarify the novelty and your own contributions.**

Note: Your games will be graded based on the completeness, robustness, originality, and entertainment.

#### **4. Project report (15 pts)**

You also need to submit a project report for this assignment. The report must include (1) **every team member's name**, (2) **the URL of your game's repository**, (3) **a brief introduction to your game**, (4) **instructions of how to your game**, (5) **references to any outside resources that you used**, and (6) **every member's own contributions**. If applicable, you may also discuss future improvements to your game, and any comments to the instructor.

Submit your report on Cougar Course.

#### **5. Demo via Zoom (15 pts)**

Every team is asked to do a demo of your game via Zoom on the due date.

**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.*