EECS 290 – Spring '16
Game Project

Due date I (Concept Paper): 2:45 p.m., Thursday, March 31, 2016
Due date II (Prelim. Game Demo): 2:45 p.m., Thursday, April 21, 2016
Due date III (Final Game Delivery): Monday, April 25, 2016
Due date IV (Final Game Presentation): 12:30-3:30 p.m., Thursday, April 28, 2016

For this assignment your team, consisting of from 2-4 students in the class, has the task of creating a single-player game completely of your own design. There are four stages to the project: the concept paper, the gameplay demo, the final game submission, and the final game presentation.

General Guidelines

- All assets for the game should be either of your own creation or in the public domain
- All team members must contribute and will be held responsible for the required elements of the game
- The game should be implemented in Unity3D
- The games may be either 2D games or 3D games (from the player's perspective)
- All submissions and game elements must be in English
- Games must qualify as having an equivalent ESRB rating of T.

Deliverables and Grading Criteria

By Tuesday, March 29:

The Concept:

The concept paper is the most rudimentary step in game development, and the idea here is to describe a simple picture of what you intend to be doing. The grading of this project will be focused on the non-triviality and feasibility of your game and the overall experience (game play) so you will probably want your design to take this into account. Most importantly the end product of this group assignment must be a playable game! There will be severe deductions given for games that crash during play. Don't even consider submitting games that don't compile! So while feasibility of designing the game and building the game is of importance to us…it should be even more important to you!

We will be looking for a brief discussion on all of the points listed below (1-2 pages submitted **as a printed copy in class**!).

- What is the title of the game?
- What's the basic idea of the game?
- What will the game look and feel be like?
- What is the primary play mode and what will it be like to play the game.
- Game Genre: Strategy, First Person, …
- How is scoring done
- 2D or. 3D
- What is special about the game -- what are its most interesting features?
- A preliminary statement of how the work will be divided among the members.
- What art and/or music assets you might you need.

All members of a group must contribute to the concept paper and sign the document.

By Thursday, April 21:

Preliminary Game Demo:

You should be able to demonstrate what your game will eventually play like in a short playable demo. Final graphics and sound/music are not needed but they should be representative of the conceptual art direction the game will have. You can use any of the material found at the tutorials, models, code samples, articles, and complete game code starter kits from the Unity Asset Store.

By Monday, April 25

- The game should be submitted in a manner that contains the entire game solution folder (NOT in a zip file format!) and any additional required documentation or screenshots. You should test that the project can be built on a computer other than the one that was used to develop and test the game! Remember that a non-functioning game will result in an extremely low grade.
- Instructions on how to play the game and any needed clues/cheats to help us grade your game without having to spend hours on gameplay! Game instructions may be embedded within the game.

On Thursday, April 28

You will be required to give a demonstration of your game to the class during the course exam time. In addition to a demo of the gameplay, your presentation should briefly describe the background of your game…how the game was put together, i.e. the artwork, the sound/music, the coding structure, the team organization…the playtesting that you conducted and address the "good, bad, and ugly" aspects of how the game came to fruition.

Grading Criteria

In addition to grades for the preliminary documents (the Concept Paper and Final Design Summary) and the presentations (the Game Demo and the Final Presentation), your final grade for the game assessment will be based on four factors:

Is the game fully functional?

> The most important thing that we're looking for is a working game. It must include scoring that reflects (at least in a significant way) player ability, multiple lives for the player, and the ability to play multiple games. If the game is almost but not quite finished or still contains bugs your grade will suffer much more than if it is a working game with fewer features. When you design your game make sure you can finish the project within the given time frame. Create a schedule and stick to it. The best plan is not to try to code the whole thing before getting anything to run. Do incremental development – get something running and then add more features.

Is the game nontrivial?

> You won't get a good grade if your final game is just pong or breakout with different colors and a bigger paddle. Your game should be something you of which you are proud. More specifically, we will be looking at how many objects can be in the game at once, how they interact - how good/realistic are any physics and/or collision detection, sound, (your own) music, originality, artwork, etc. Other ways to make the game more complex are having terrain, a playing area larger than the screen with scrolling, the use of tiles, objects that behave independently of the player (Artificial Intelligence!!), etc.

Is the game well designed?

> This includes things like how much fun it is to play, whether it looks good (has good graphics), if it has good "feel" in controlling the objects, ... The game should not be too easy or too hard (maybe it can have different levels of difficulty!).

What was your individual contribution to the game project.

> The grade that you receive will be a combination of the overall project grade (a team grade) and an *individual* grade for your contribution to the team as determined by your team members.