

Video Gaming Design

Final Project – Urban City Racing Game

One of your goals in this class (or maybe your main goal) was to create your own video game! Well the time has come to do just that!

For your final project, you will create your own game (and not work in teams like we previously discussed might happen). However similar to the rest of this year, you will be able to ask questions and get advice from your classmates. If we all help each other out, things will go so much more smoothly when building your game.

Premise of the Game

The main idea of your game is to create a game where a race car is collecting items throughout your scene. A score will be kept while this is taking place. You will also be adding a timer where they have to collect these items before the timer hits :00.

What You Need to Start

- Create a new project (called “Final Project”) so that way you start off with a clean project with no errors.
- Make sure you copy/paste the following from the “Handouts” folder into your “Assets” folder: (1) Outback, (2) Standard Assets, and (3) Streets

What You Will Need to Add to Your Environment

Note: *anything that is in italics in the directions below reference how you should name your gameobjects in “Hierarchy”*

- Creation of a Game Environment (Terrain, Trees, Skybox, Water). But leave some space for....
- Streets (from the “Streets” folder you downloaded). Minimum 10 intersection pieces (*Named “Intersection_”*) and 10 other street pieces (*Named “Street_”*)
- Dirt path on the terrain (that goes from a street to dirt path and later reconnects to another portion of your street)
- Buildings on both sides of the streets (from the “Outback” folder you downloaded). (*Named “Building_”*)
- Good use of other game objects throughout the streets (traffic signals, mailboxes, others).
- Addition of at least (2) Particle Effects (test them out from the “Standard Assets” folder; there are some cool ones in there like fireworks and smoke; *Named “Particle 1” and Particle 2”*)
- Addition of (2) other game objects you download from the Unity Asset Store that is part of your Urban City (*Named “Download1” and “Download2”*)

What You Need to do to Make It an Actual Game

- Sports Car and Controller (from the “Standard Assets” folder)
- Attachment of the Sports Car to your Camera (the camera must follow your car during game play)
- Minimum of (15) Collectables (Be Creative! This can be from the Asset Store; for example, they collect gas cans)
- Use of either Loops or Ramps (you choose) Minimum of 3 (*Named “Loops_” or “Ramps_”*)
- Script to keep score (similar to Roll-A-Ball)
- Text Box in the upper corner keeping a running score of each item being collected
 - When they collect all 15 items, text reads “You Win!”
- A running timer (this code will be provided to you in the “Final Project” page of my website. Copy/Paste this into a blank script (called “Timer”); attach the script to your Camera GameObject;

Extra Credit Opportunity

You can add up to (3) things from the following list (Note: Please only do the extra credit if you are done with everything else; don’t do this first and then run out of time doing the other mandatory requirements):

- Door Trigger (similar to the tutorial we did; this door would be trigger when the car enters)
- Any of the tutorials you see on my website page titled “You Pick the Tutorial”
- Other (let me know if you have another idea and I’ll see if I approve it) Example: speedometer for your car

How This Will Be Graded

One-fourth of your overall grade will be based on does the game run **and** does it run properly. Error message(s) in either the Console Window in Unity and/or your script in Visual Studio running will result less points (or if the game does not run at all, NO points for this part of your project grade). As such, make sure your game runs before I grade it!

Non-Seniors – Your game will be due to me at the end of the first hour on your schedule finals day (which is Thursday, 5/23 at 10:50 AM).

Seniors – Your game will be due to me by Monday, 5/21 at 3:00 PM. I have to have it no later than this time (as senior grades are due the next day)

This is the moment and the project you have been working towards all year long!!! Let's show off all the incredible things you have learned in here with this project. I know this will be a lot of work. But it will be so rewarding in the end when you can tell other people that you made a video game! Good Luck Titan Game Designers!