

Warm-Up Project 1: Object Creation

CS 4803 PG, Spring 2018

The purpose of this project is to help you learn how to use Unity. The particular parts of Unity that you will learn include creating primitives, grouping objects together in a hierarchy, transforming objects, and using prefabs.

Due Date and Grading

This project is due on Friday, Jan 19 at 11:55pm. Each day late after Friday will cause your grade on the project to drop by 5%, and we will not accept the project after four days beyond the due date.

Unlike the later, larger projects, this warm-up project will not have an “effort” component. If your main object meets all of the listed criteria, you will get full credit on this warm-up project.

Authorship Rules

Each student must work on this assignment on their own. Feel free to seek out the TA's and the instructor for help with Unity.

Project Description

You will create a Unity project and one scene in that project. You will then use the built-in geometric primitives to create an object or a character (your **main object**) and place it into this scene. Your main object can be anything you like, so long as it shows off the necessary aspects of this assignment.

Here are the characteristics that you must include in your main object:

- Your main object should be a single Game Object that has a number of child objects (and some of these can have child objects of their own).
- It should contain at least ten primitives.
- It must contain at least two of the four solid primitive types in Unity: sphere, box, cylinder, capsule.
- It should be a recognizable object or character, instead of a random jumble of shapes.
- It must use at least two different colors.
- At least one of the primitives must be scaled non-uniformly.
- At least one of the primitives that is not a sphere must be rotated so it is not axis aligned.

Once you have created your main object, turn this main object into a **prefab**. Place at least two instances of your main object into your scene at different locations.

If you also want to add other objects (besides your main object) to your scene, that is fine. For instance, you may wish to use a plane primitive as a floor. Before creating additional objects, however, be sure that your main object satisfies all of the above criteria. As with all of the projects in this course, all of your objects must be created in Unity, rather than being imported into the scene.

Turning in the Project

You will turn in your project on T-square. To do this, first create an empty folder that is called your name. Next, determine where Unity stores your projects, find the directory that contains your warm-up project, and copy its two sub-directories called Assets and ProjectSettings into the empty folder. Zip up the folder that contains Assets and ProjectSettings, and submit this zipped file to T-square. Do not create a .rar or .tar file – please create a .zip file. If your zipped file is more than a megabyte in size, you copied too many sub-directories, and in particular the Library sub-directory should **not** be included because of its large size.