Assignment 0: Installing and Running Unity

Your task in Assignment 0 is to install Unity and build a simple project, just to make sure that you have downloaded the tools you will need for Assignment 1 and that they are functioning properly. At this point, we do not expect you to understand many of the concepts needed to create a project in Unity. Therefore, we have provided you with step-by-step instructions. It is crucial, however, that you complete Assignment 0 this week, so that if you run into problems installing and running Unity, we can help you address them now.

Please begin by visiting the TA page (http://graphics.cs.columbia.edu/wiki/doku.php?id=wiki:installing_unity_and_vuforia) and follow steps 1 and 2 on that page. Please note the minimum system requirements listed above step 1.

Once you have installed Unity and have activated your copy, we would like you to create a simple scene on your desktop or laptop computer (i.e., you will not need to use a mobile device yet) to verify that everything is working. To do this, you’ll first need to run Unity.

The first time you run Unity, it will ask you to activate it (which you will have already done when following steps 1 and 2 on the TA page), and the new project dialog window will open. Choose the path where your project will be stored and name your project. Then, press Create (your version of Unity might call this Create Project).
Next, add a cube. In the menu bar, select **GameObject→Create Other→Cube**:

When the cube is created, it becomes the currently selected object. If you happen to deselect the cube after creating it, please reselect it by clicking on either the image of the cube in the **Scene View** (Unity’s name for a tabbed window) or the word “Cube” in the **Hierarchy View**.

Next, in the **Inspector View** on the right, click on the “gear” icon at the upper right corner of the **Transform** box and select **Reset** from the menu.
Now, add a light. (We’ll learn more about lights shortly.) In the menu bar, select GameObject→Create Other→Directional Light

As above, If you happen to deselect the directional light after creating it, please reselect it by clicking on either the iconic representation of the light (see the image directly below) in the Scene View or the words “Directional Light” in the Hierarchy View.

Next, in the Inspector View on the right, select the “gear” icon in the upper right corner of the Transform box and select Reset from the menu.
Now, rotate the directional light 10° about the $X$ axis. To do this, in the Transform box, select the text input area for Rotation in $X$, type “10”, and press Enter.

Next, move the light “up” by 5 units, by setting its $Y$ coordinate to 5, to move it out of the way. (As we will discuss later, changing the position of a directional light will not affect how it interacts with objects in the scene.) To do this, in the Transform box, select the text input area for Position in $Y$, type “5” and press Enter.
Your scene should look something like the following image.

At this point, you can’t see the light’s icon. Therefore, this is a good time to navigate around the scene as a sanity check. You can accomplish this when your cursor is in the Scene View by using Unity’s mouse and keyboard commands for Scene View Navigation. (Note: As we’ll discuss later, the Unity documentation mistakenly refers to camera motion in and out of the scene as “zooming.”) If you use these navigation commands, your scene may look something like this:
Now it’s time to run your project. Press the Play button (the left icon) in the toolbar above the Scene View:

![Play button](image)

Unity will automatically open the Game View, which is where the project will run, as viewed through the “Main Camera” that you may have noticed earlier in the Hierarchy View, but which we haven’t manipulated. When the Game View is shown, the Scene View will be hidden by default. Your running project should look something like the following image:

![Game View](image)

Press the play button again to stop the project. Unity will once again display the Scene View.

Now it’s time to save your scene, which we’ll need for Assignment 0.5, by selecting File→Save Scene:

![Save Scene](image)
The Save Scene dialog window will then appear. Name your scene “TestScene,” and press the Save button. This will save the Scene in the Assets folder at the root of your Unity project directory:

![Save Scene dialog window](image)

Congratulations! You have created your first Unity project!