

# **Standard Unity View** (Window > Layouts > 2 by 3)

- Scene View = the editor view that allows you to navigate the 3D world, as well as select and manipulate 3D assets in the world.
- Game View = Upon hitting "play" in the top middle of the screen, you'll compile and preview the gameplay in this view. By default the view shows the active camera.
- Hierarchy Panel = This is a hierarchical list of objects in the game. You can select objects, rename them, and delete them (Shift-Delete)
- 4) Project Panel = This shows all the usable "assets" located in the project's Assets folder.
- 5) Inspector = Allows you to view and edit the component settings for the selected gameobject in the Scene View, Hierarchy, or Project Panel.

### **Scene View Controls**

- Toggle Full Screen Panel = Shift + Spacebar
- Rotate = Alt + Left Mouse Button
- Panning = Alt + Middle Mouse Button
- Zooming = Alt + Right Mouse Button

# **Object Manipulation**

Click to select object in Scene or in Hierarchy

- Q = switch to pan view with mouse
- W = switch to move/translate tool
  - Control+Drag = Snapping
  - Shift+Control = Snap to Surface
  - Hold V = Vertex Snapping
- E = switch to rotate tool
  - Shift+Control = Look At Rotation
- R = switch to scale tool
- F = frame select (zoom to selected object)
  Shift+Delete = delete object



Axes (RGB = XYZ)

### **Camera Manipulation**

- · Move scene to desired view.
- · Select camera.
- · Choose GameObject->Align with View
- · Also can move camera like an object

#### **Essential Unity Concepts**

- Project = a folder that contains your entire game and all its assets (contains a library and assets folder)
- Assets = Items used to make your game including models, images, sounds, scripts, and prefabs.
- **Packages** = A precompiled group of game assets. Unity ships with several packages and you can make you own.
- GameObject = Every object in the game is a GameObject. They do not technically add any functionality to the game but are simply holders for components, such as the Transform, Light, Script, and RigidBody components.
- Components = components are the nuts & bolts of objects and behaviors in a game. They are the functional pieces of every GameObject. By default, all GameObjects automatically have a Transform Component. This is because the Transform dictates where the GameObject is located, and how it is rotated and scaled. You can make numeric changes in Transform Component in the Inspector.
- Scenes = Scenes are where your GameObjects are placed to make a game level. Games are made of one or more scenes (aka, levels) linked together.
- Prefab = A Prefab is a reusable GameObject that is stored in the Project View. Prefabs can be inserted into any number of scenes, multiple times per scene. When you add a Prefab to a scene, you create an instance of it. All Prefab instances are linked to the original Prefab and are essentially clones of it. No matter how many instances exist in your project, when you make any changes to the Prefab you will see the change applied to all instances.
- Build = An exported version of your game containing all the scenes necessary for playback on the specified platform (in Build Settings...)



# **Standard Unity View** (Window > Layouts > 2 by 3)

- Scene View = the editor view that allows you to navigate the 3D world, as well as select and manipulate 3D assets in the world.
- Game View = Upon hitting "play" in the top middle of the screen, you'll compile and preview the gameplay in this view. By default the view shows the active camera.
- Hierarchy Panel = This is a hierarchical list of objects in the game. You can select objects, rename them, and delete them (Command-Delete)
- 4) Project Panel = This shows all the usable "assets" located in the project's Assets folder.
- 5) Inspector = Allows you to view and edit the component settings for the selected gameobject in the Scene View, Hierarchy, or Project Panel.

### **Scene View Controls**

- Toggle Full Screen Panel = Shift + Spacebar
- Rotate = Alt + Left Mouse Button
- Panning = Alt + Middle Mouse Button
- Zooming = Alt + Right Mouse Button

### **Object Manipulation**

Click to select object in Scene or in Hierarchy

- Q = switch to pan view with mouse
- W = switch to move/translate tool
  - Command+Drag = Snapping
  - Shift+Command = Snap to Surface
  - Hold V = Vertex Snapping
- E = switch to rotate tool
  - Shift+Command = Look At Rotation
- R = switch to scale tool
- F = frame select (zoom to selected object)
  Command+Delete = delete object



Axes (RGB = XYZ)

### **Camera Manipulation**

- · Move scene to desired view.
- · Select camera.
- · Choose GameObject->Align with View
- · Also can move camera like an object

#### **Essential Unity Concepts**

- Project = a folder that contains your entire game and all its assets (contains a library and assets folder)
- Assets = Items used to make your game including models, images, sounds, scripts, and prefabs.
- **Packages** = A precompiled group of game assets. Unity ships with several packages and you can make you own.
- GameObject = Every object in the game is a GameObject. They do not technically add any functionality to the game but are simply holders for components, such as the Transform, Light, Script, and RigidBody components.
- Components = components are the nuts & bolts of objects and behaviors in a game. They are the functional pieces of every GameObject. By default, all GameObjects automatically have a Transform Component. This is because the Transform dictates where the GameObject is located, and how it is rotated and scaled. You can make numeric changes in Transform Component in the Inspector.
- Scenes = Scenes are where your GameObjects are placed to make a game level. Games are made of one or more scenes (aka, levels) linked together.
- Prefab = A Prefab is a reusable GameObject that is stored in the Project View. Prefabs can be inserted into any number of scenes, multiple times per scene. When you add a Prefab to a scene, you create an instance of it. All Prefab instances are linked to the original Prefab and are essentially clones of it. No matter how many instances exist in your project, when you make any changes to the Prefab you will see the change applied to all instances.
- Build = An exported version of your game containing all the scenes necessary for playback on the specified platform (in Build Settings...)