

# **INTRODUCING OUR DEVELOPMENT ENVIRONMENT: UNITY**

# Topics

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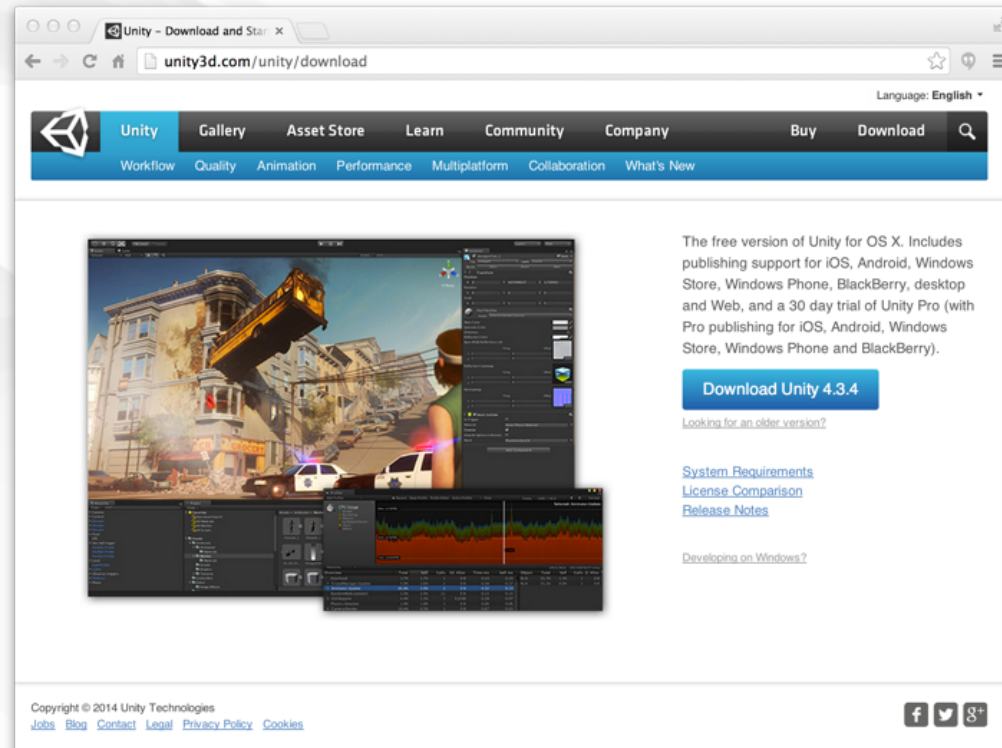
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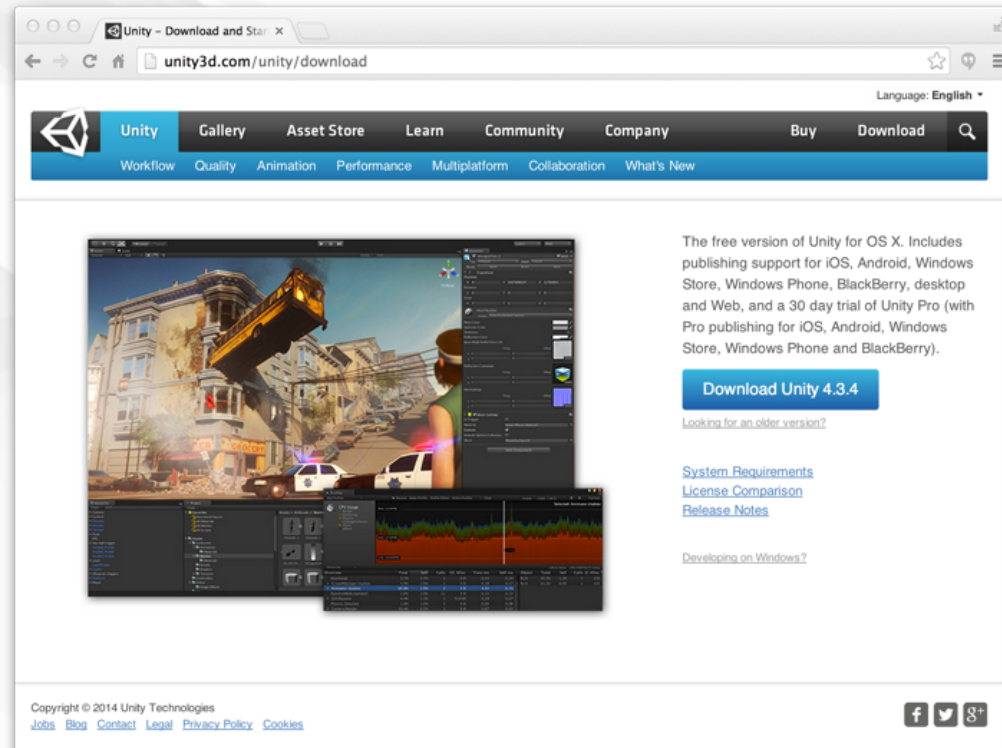
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# Downloading Unity



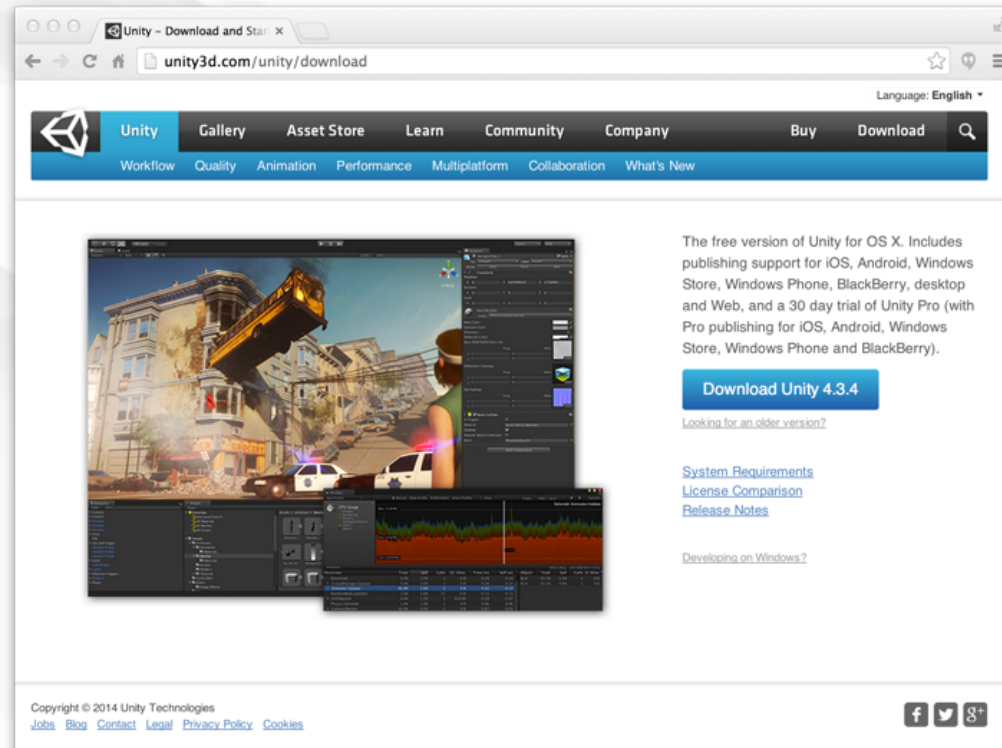
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  - Leads to greater student confidence and proficiency

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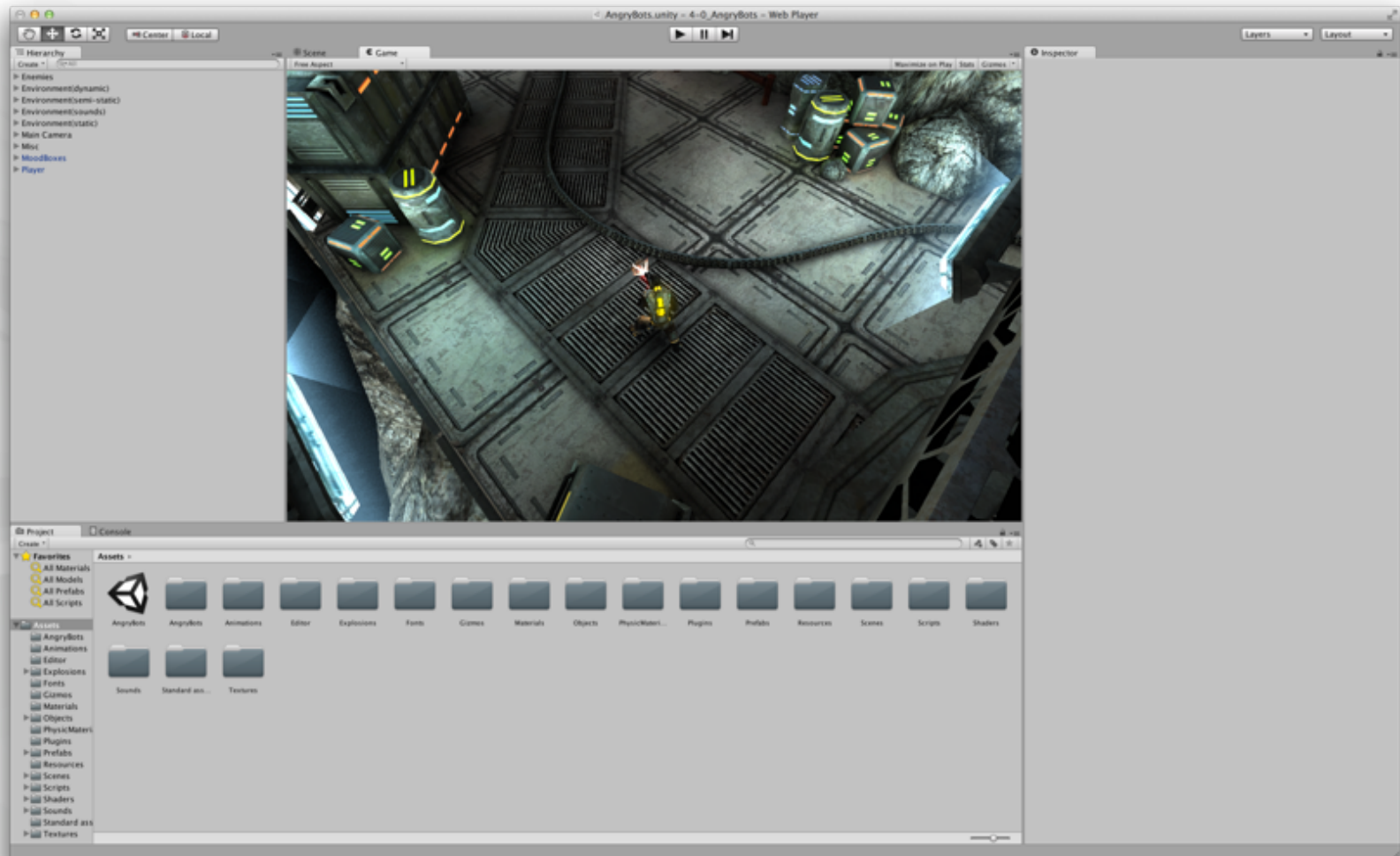
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- You can purchase a year-long student license for Unity Pro from: <http://www.studica.com/Unity-store>

# The Unity Demo Project: AngryBots



The Unity window when it opens for the first time

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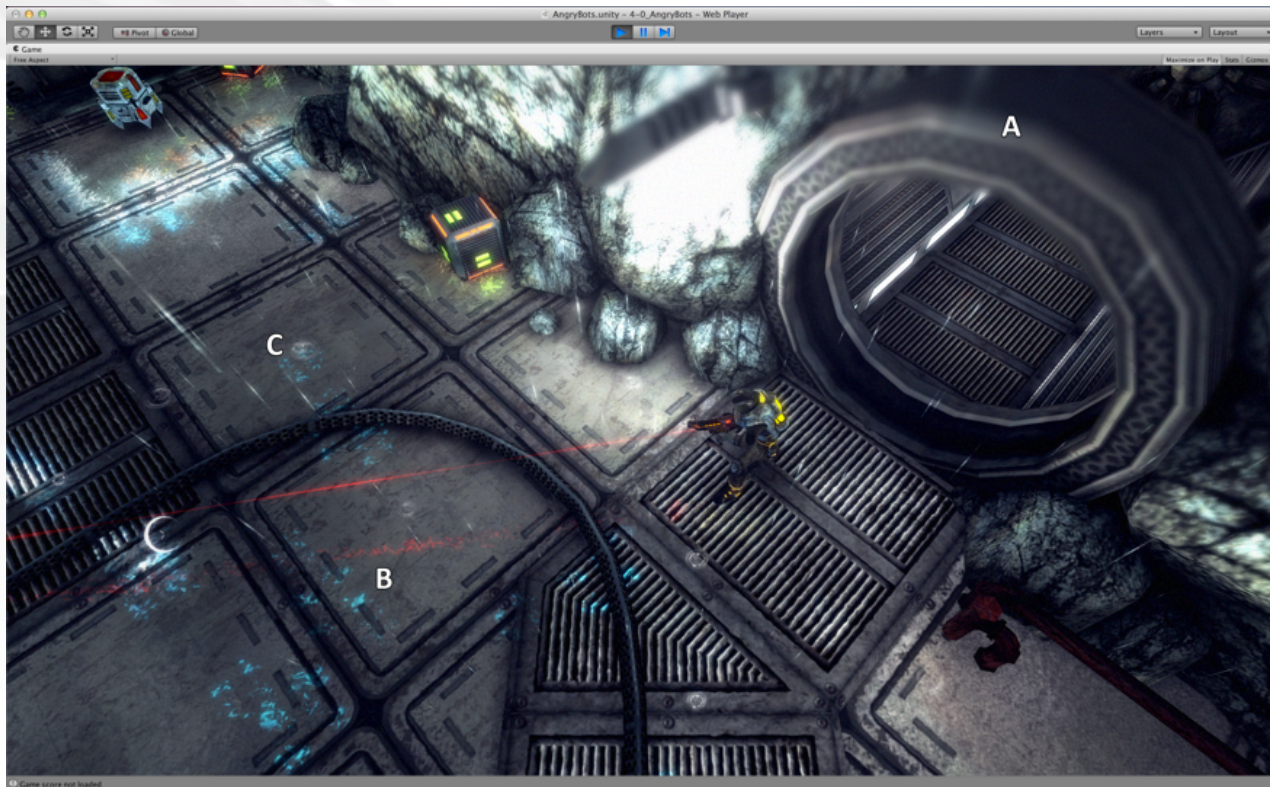
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## ▪ Try playing for about 10-15 minutes

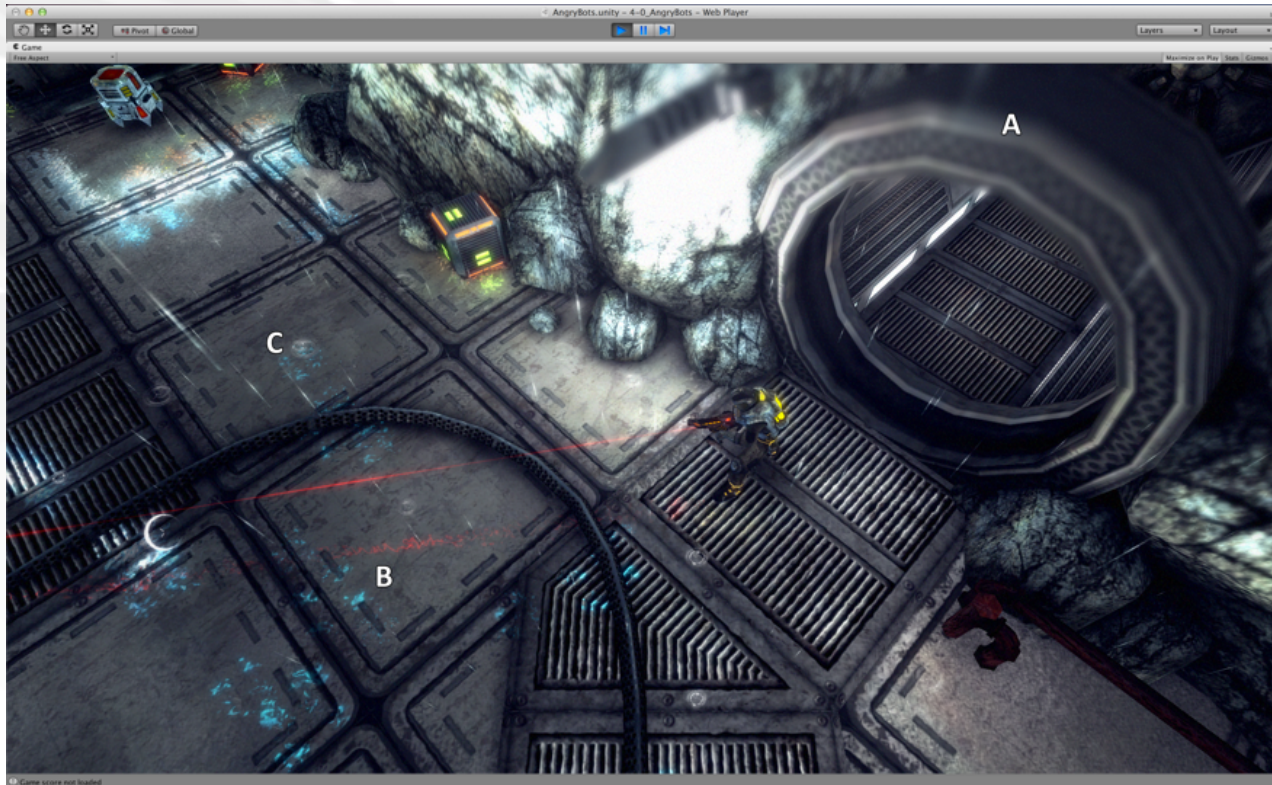
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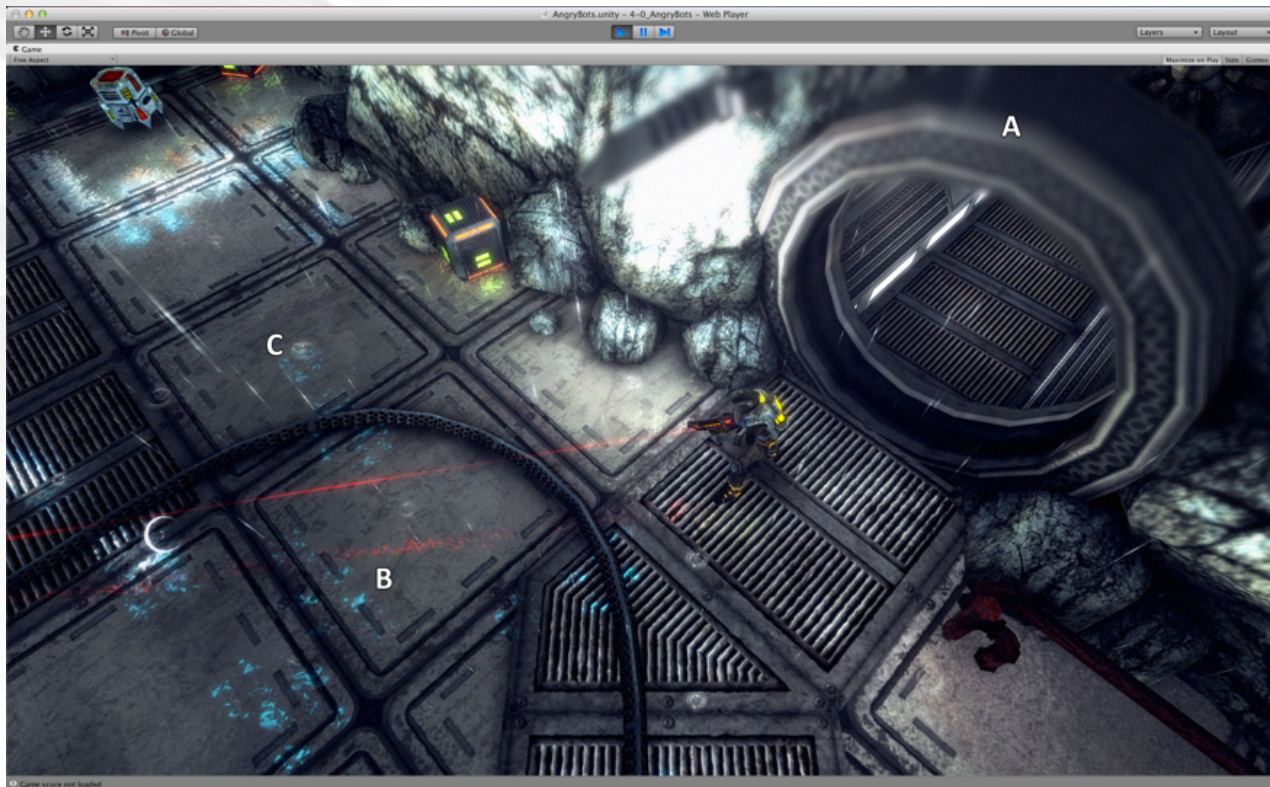
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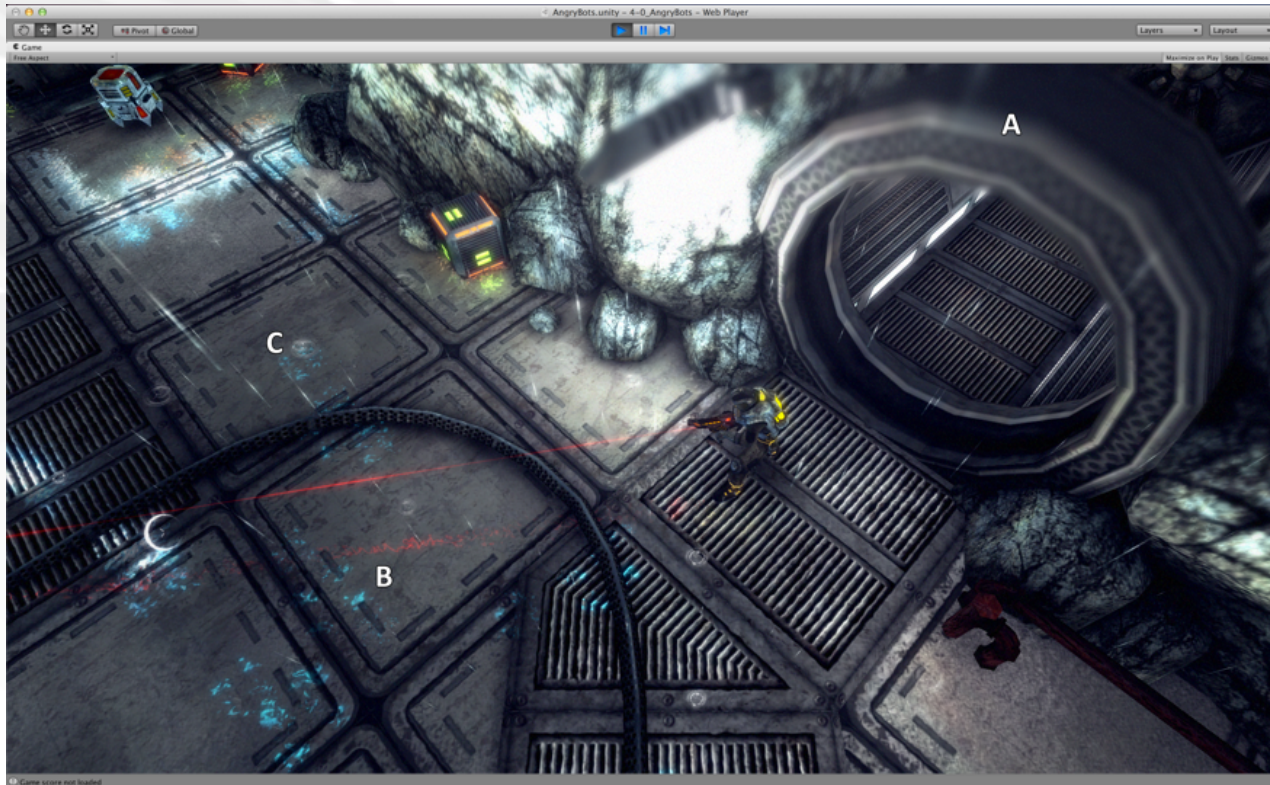




# Unity Features Shown in AngryBots

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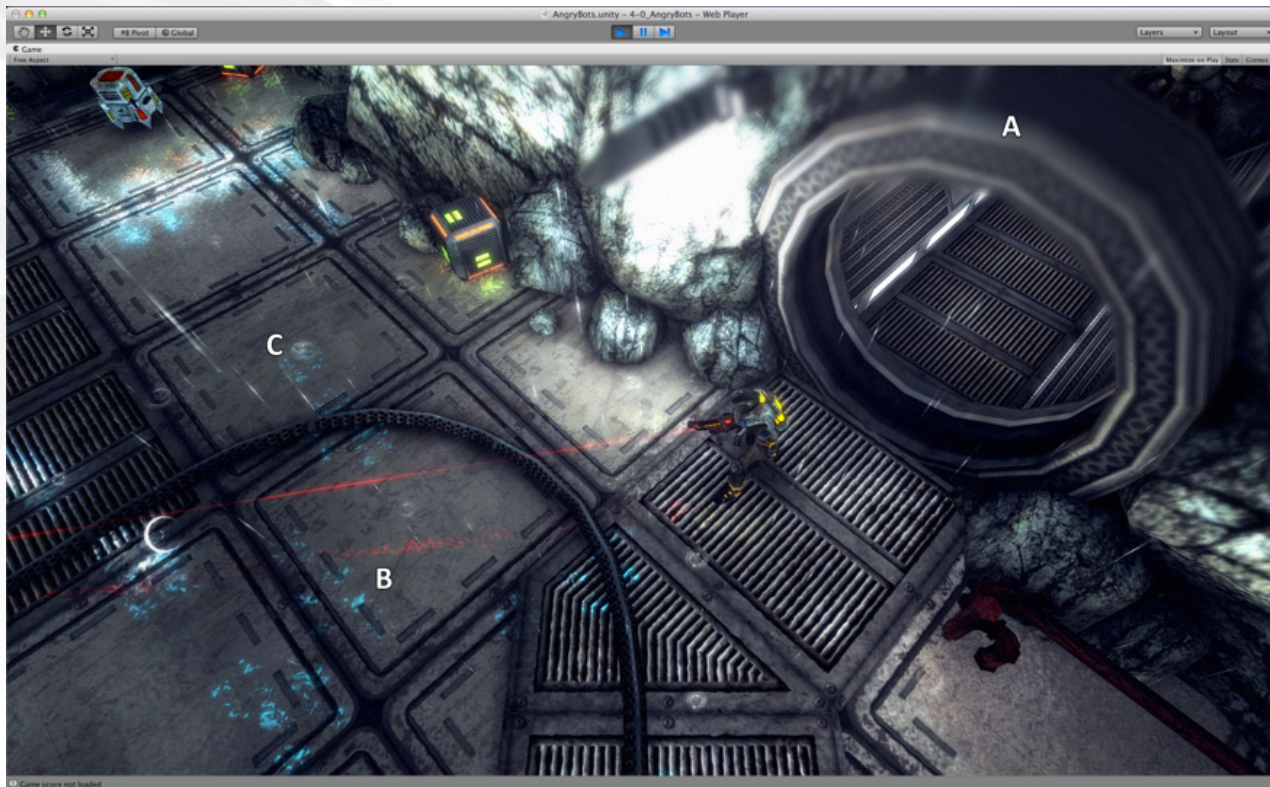




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## ■ Artificial Intelligence-based Pathing

- Enemies will move around objects in a room to track down the player

# Setting Up the Unity Window Layout

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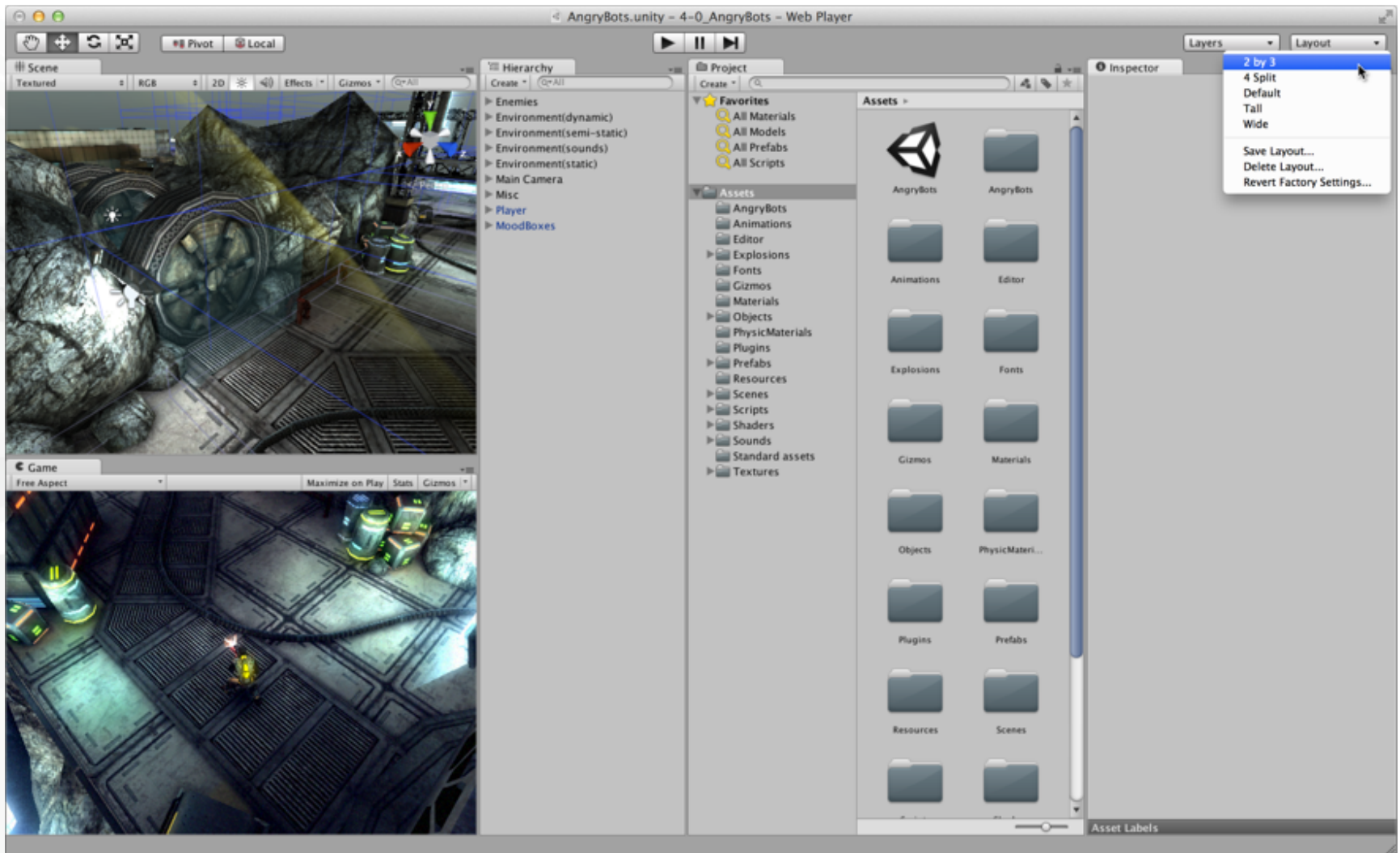
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# Setting Up the Unity Window Layout

- **Unity allows lots of flexibility in the layout of its window**
- **The following instructions will guide you to the layout that is used throughout the book.**

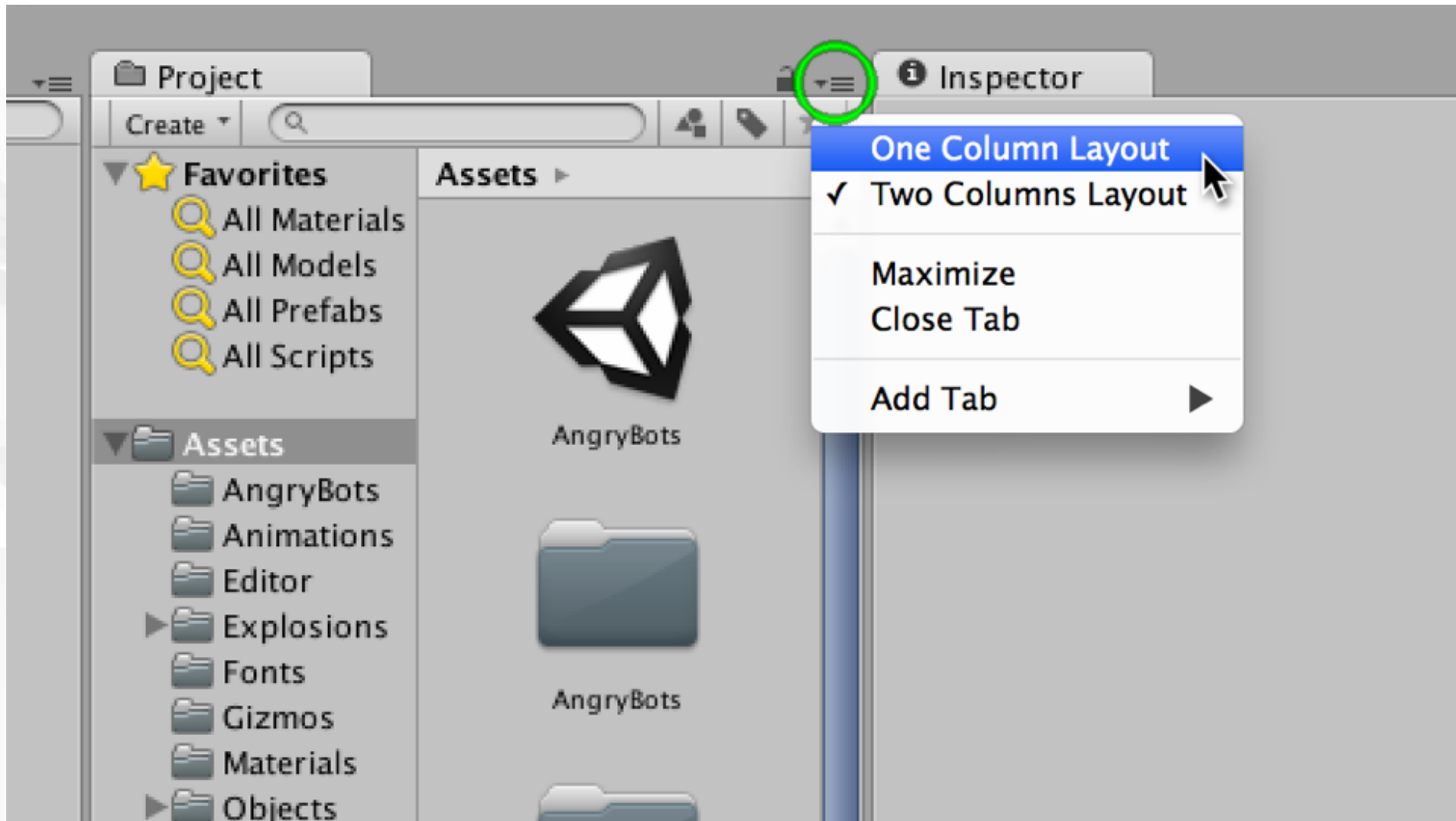


# Setting Up the Unity Window Layout



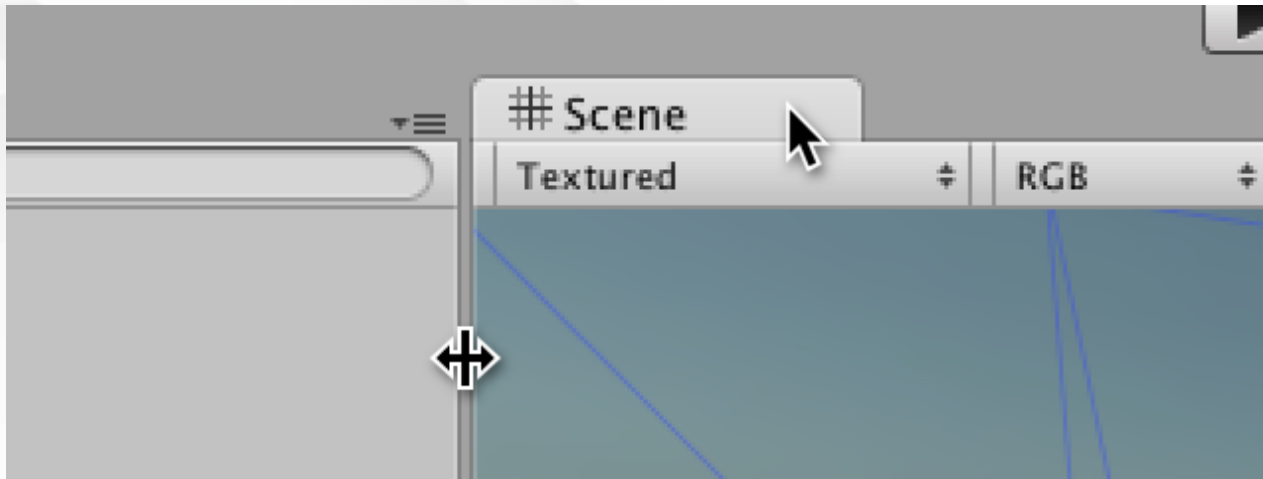
**First: Choose the 2 by 3 window layout**

# Setting Up the Unity Window Layout



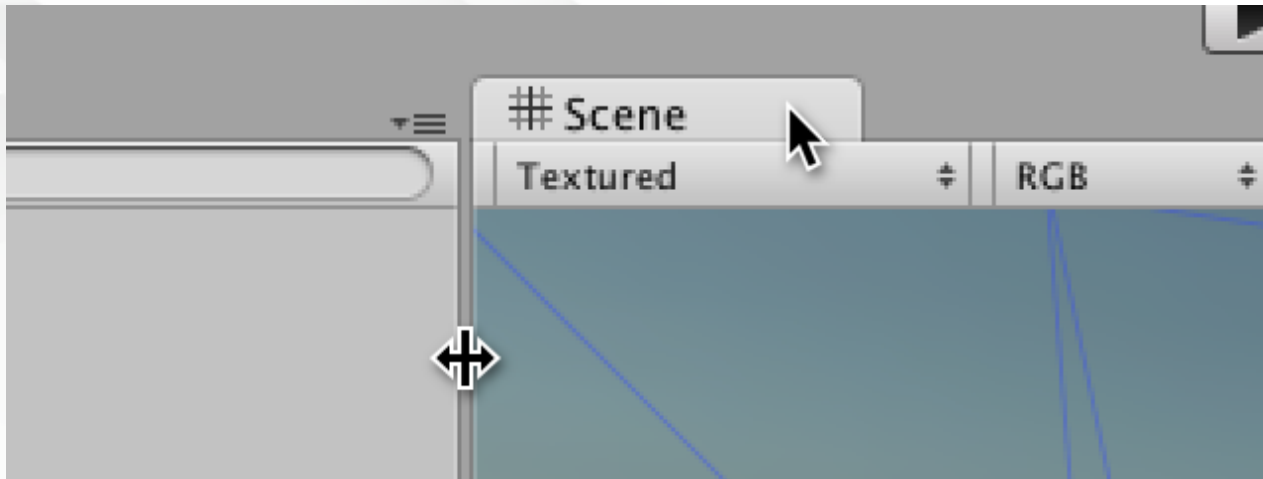
Set the Project pane to *One Column Layout*

# Setting Up the Unity Window Layout



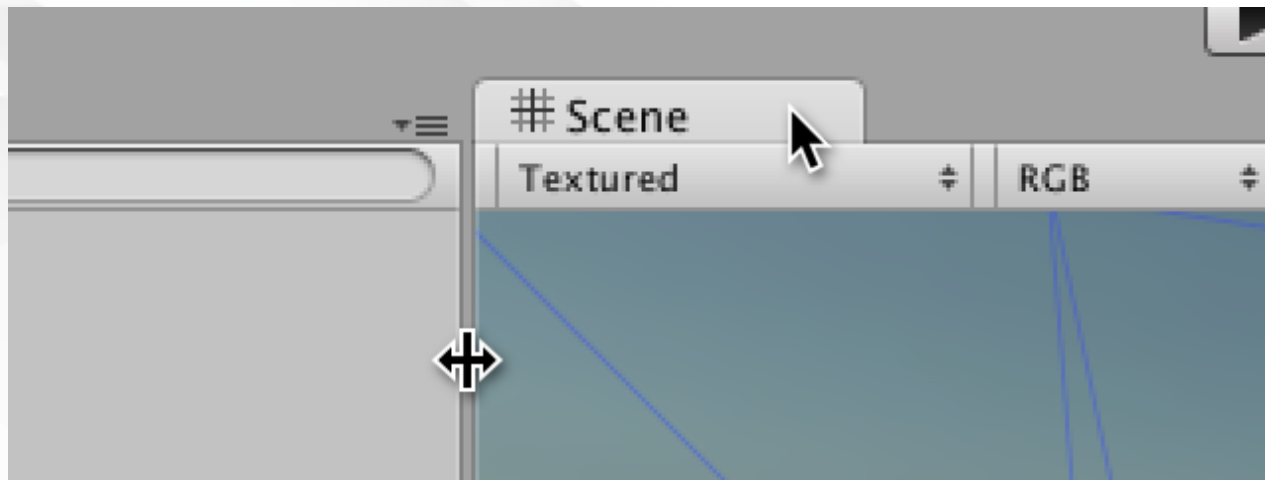
# Setting Up the Unity Window Layout

- Unity window panes can be moved in two ways:



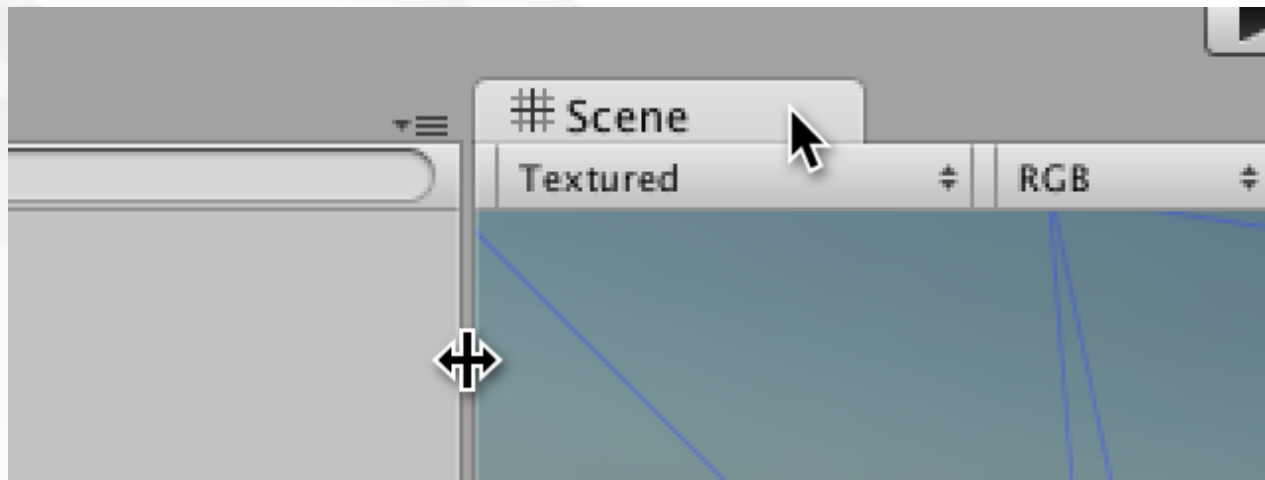
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- **Unity window panes can be moved in two ways:**
  - Panes can be grabbed by their tab and moved as shown by the Arrow cursor

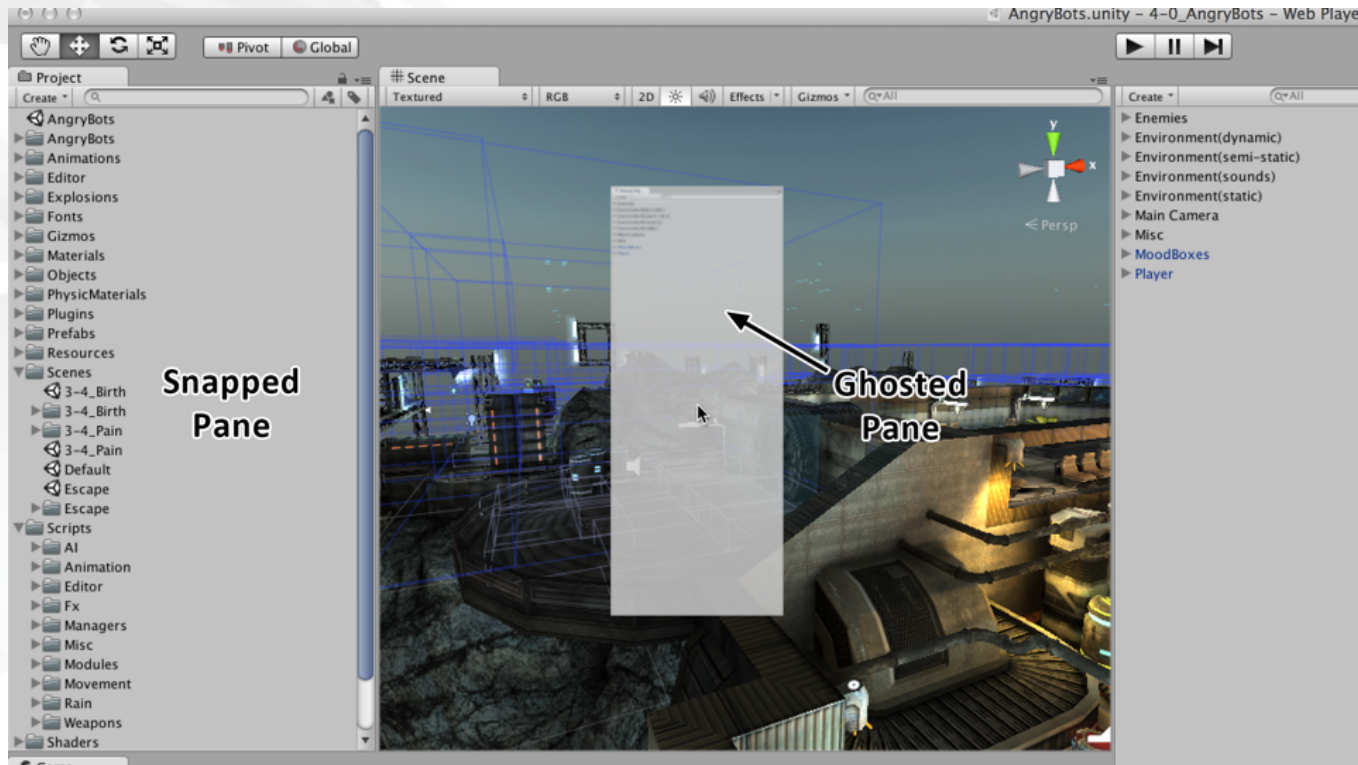


# Setting Up the Unity Window Layout

- **Unity window panes can be moved in two ways:**
  - Panes can be grabbed by their tab and moved as shown by the Arrow cursor
  - Pane borders can also be moved as shown by the Left-Right Resize Arrow cursor.

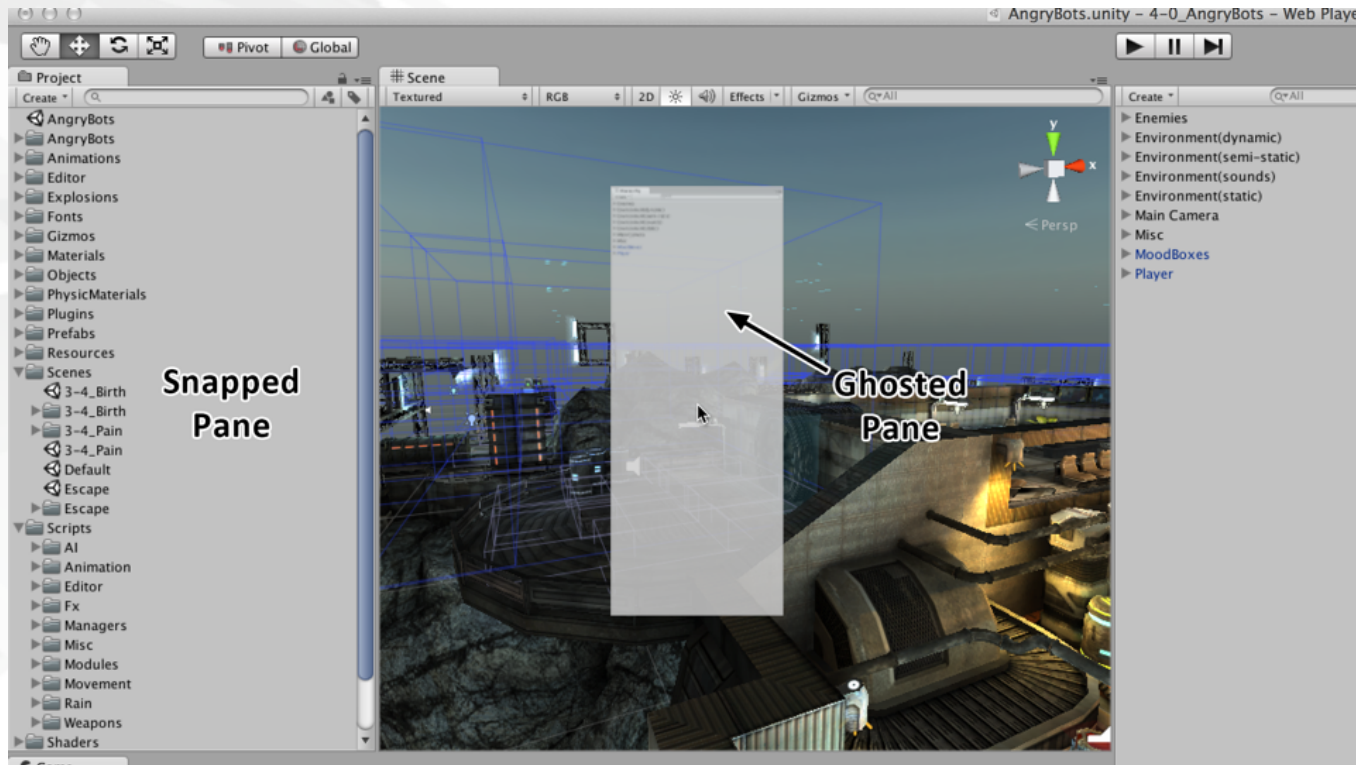


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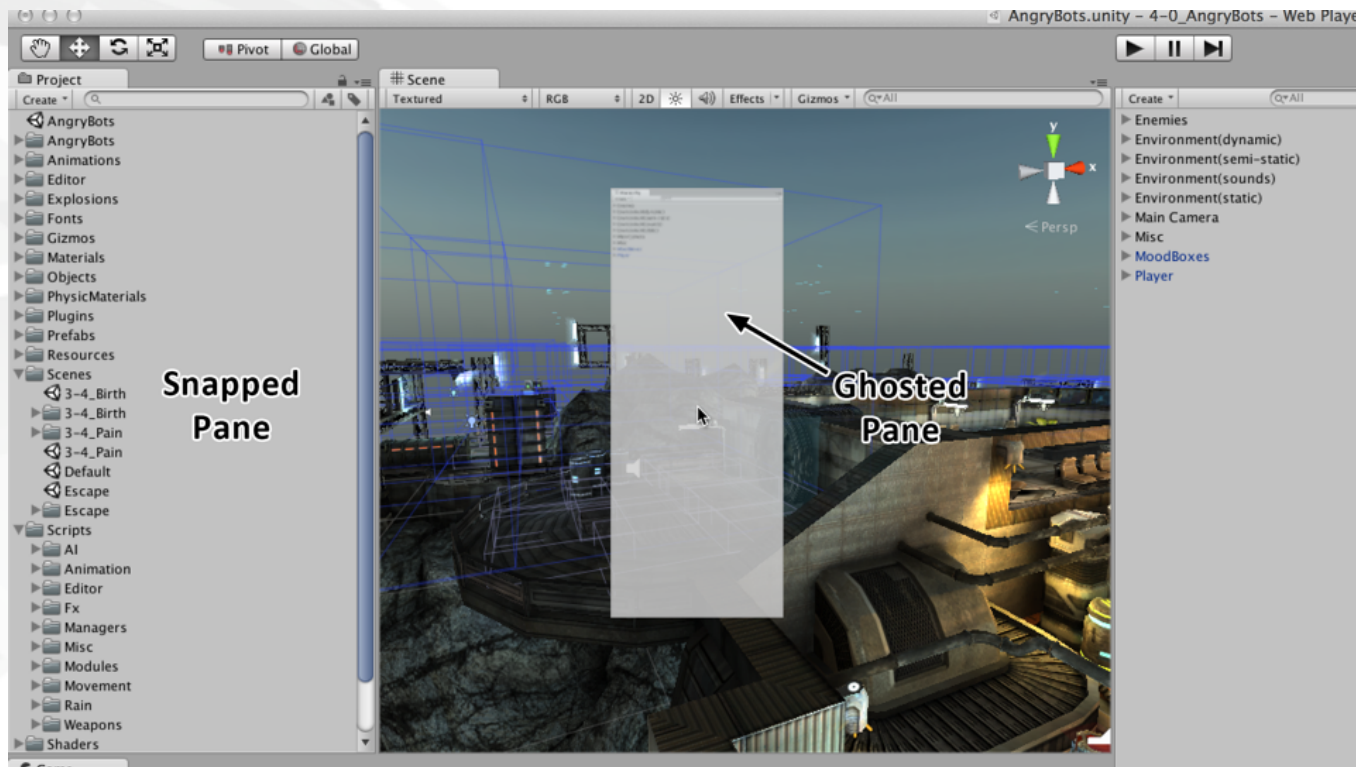
- When a pane is moving, it is ghosted



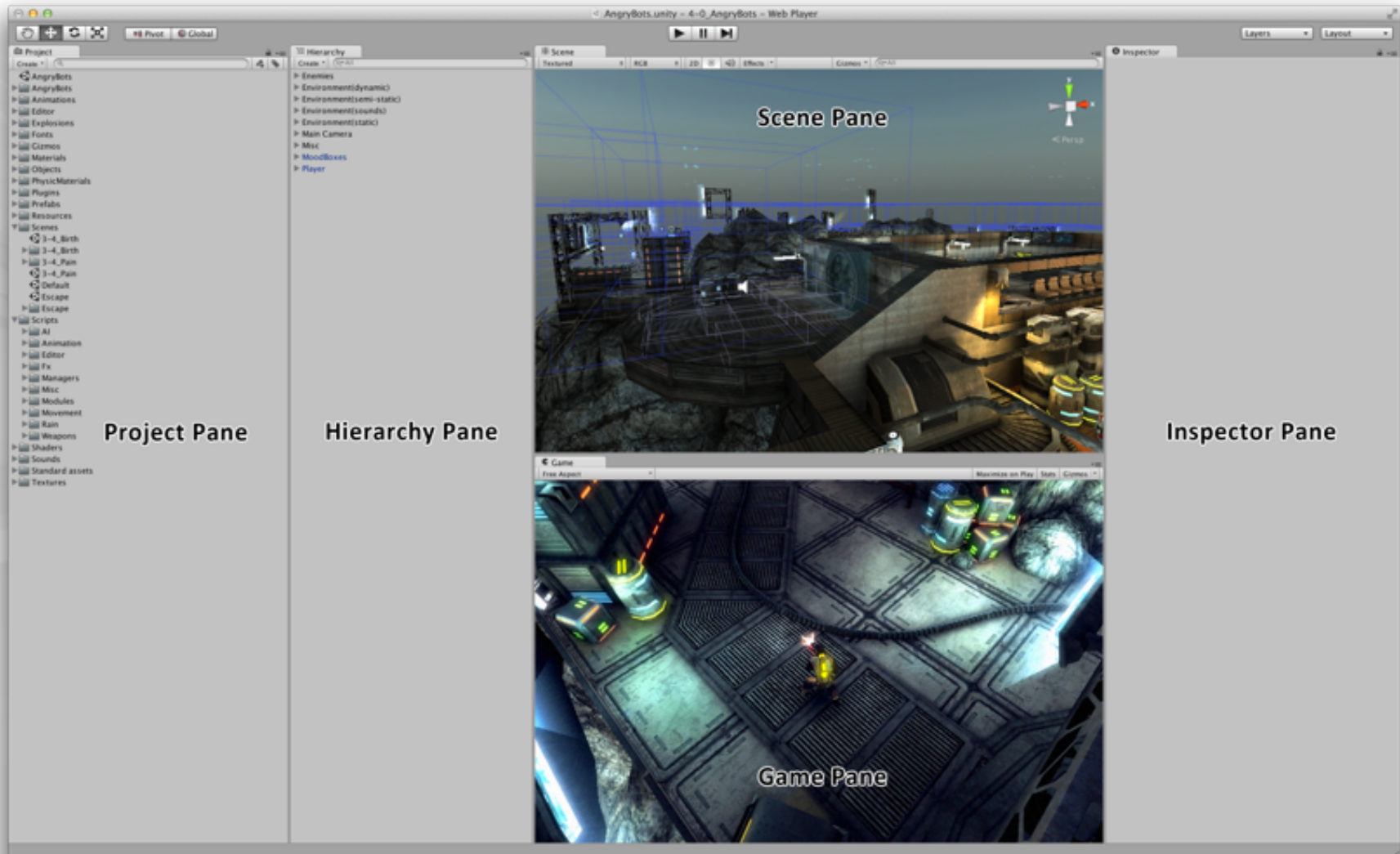


# Setting Up the Unity Window Layout

- When a pane is moving, it is ghosted
- When in a location that it can snap to, it will unghost and move into the snapped position

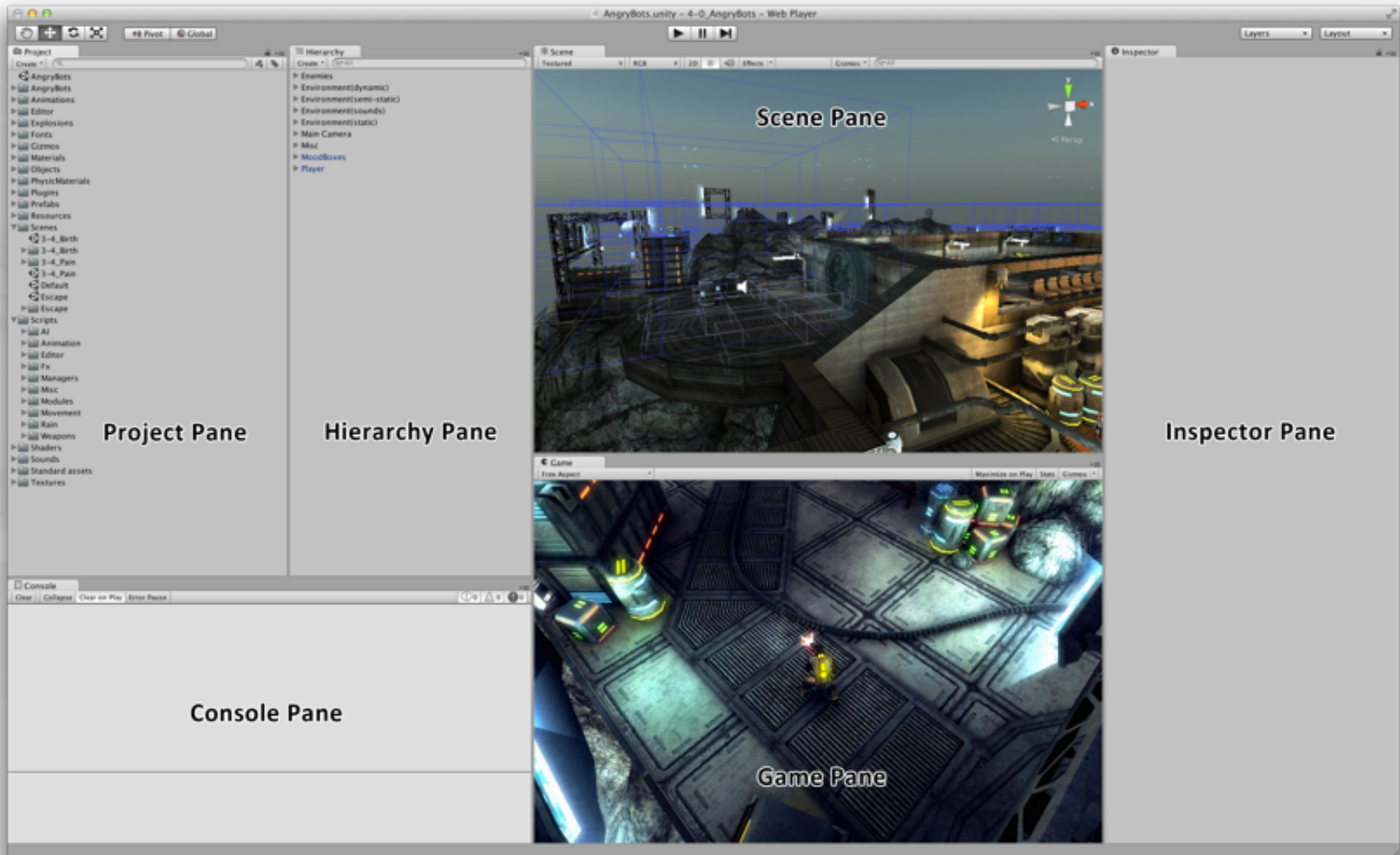


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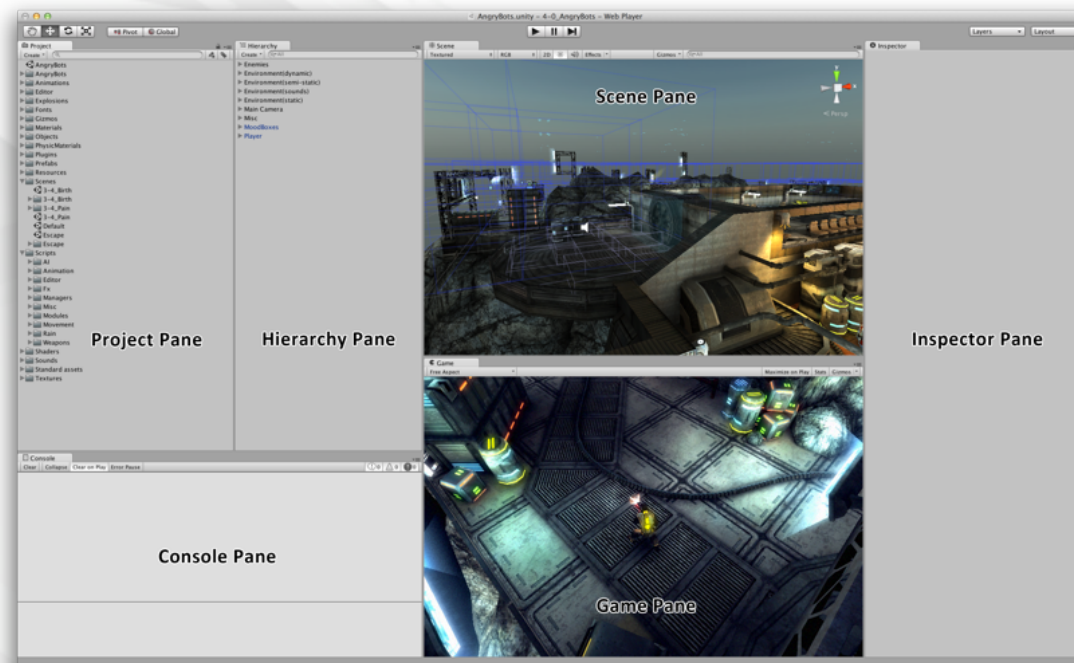
Move the panes to the locations shown above

# Setting Up the Unity Window Layout



You also need to add the Console pane

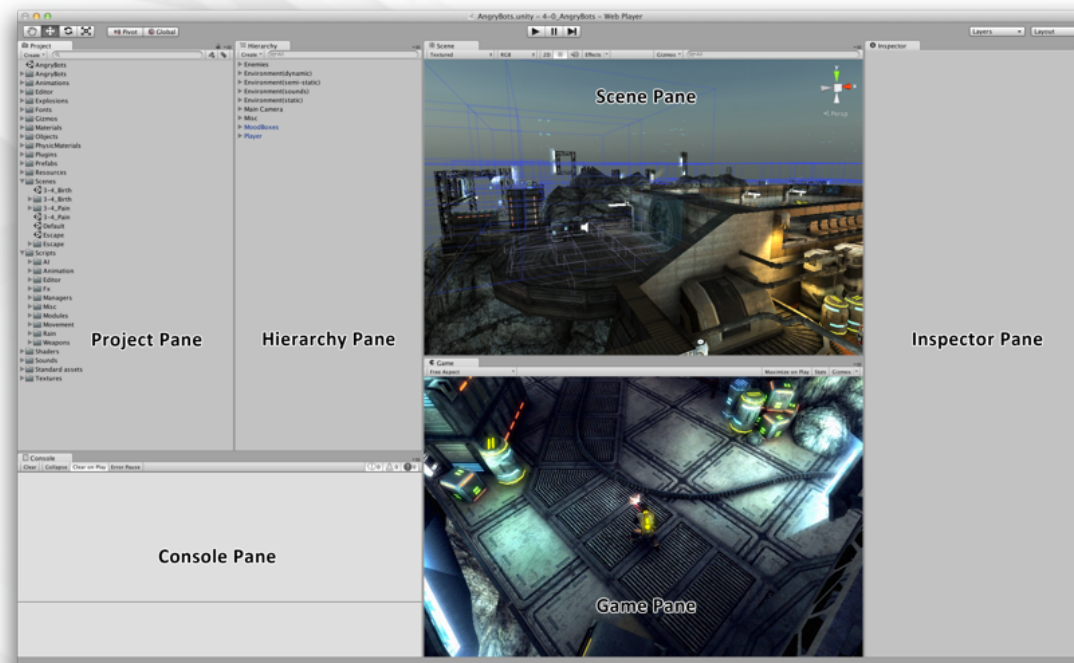
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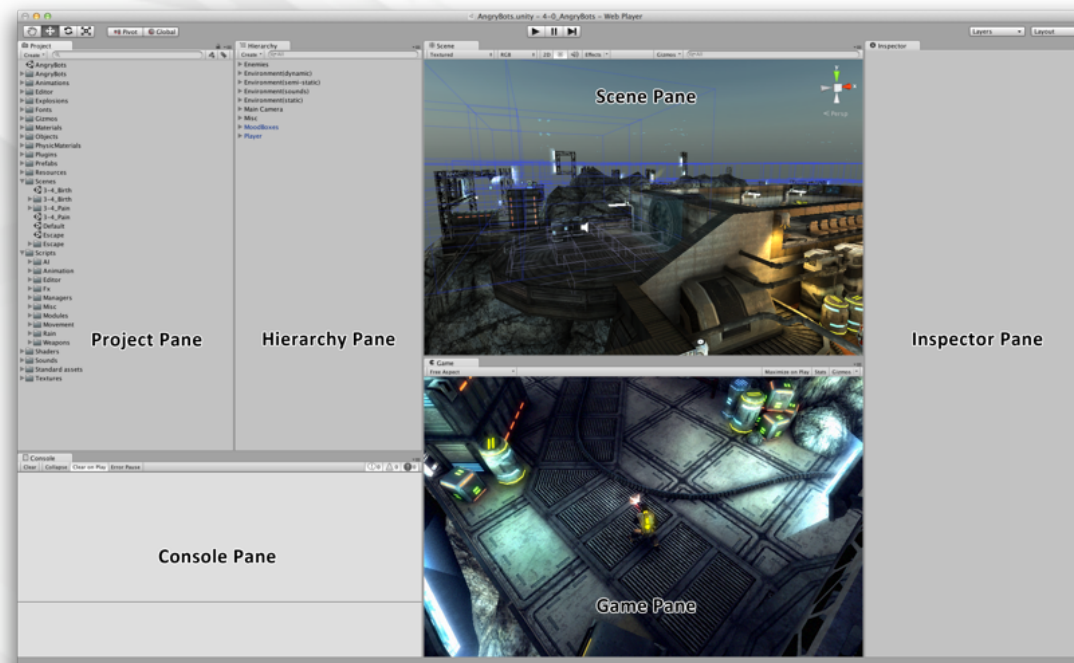
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- Adding the Console pane:



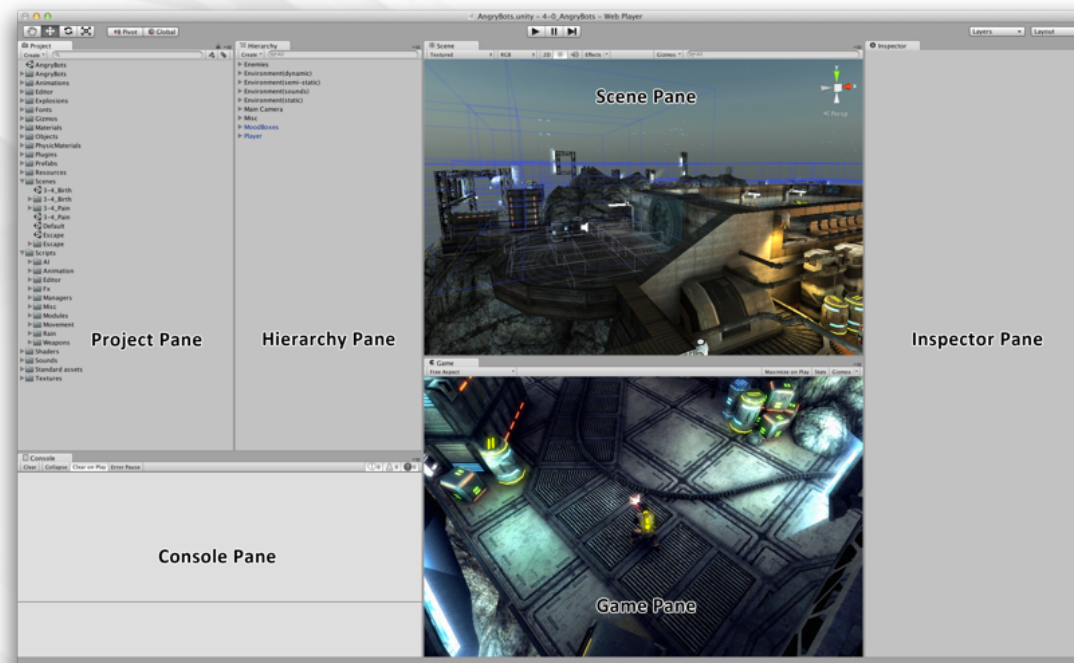
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- Adding the Console pane:
  - From the menu bar, choose *Window > Console*



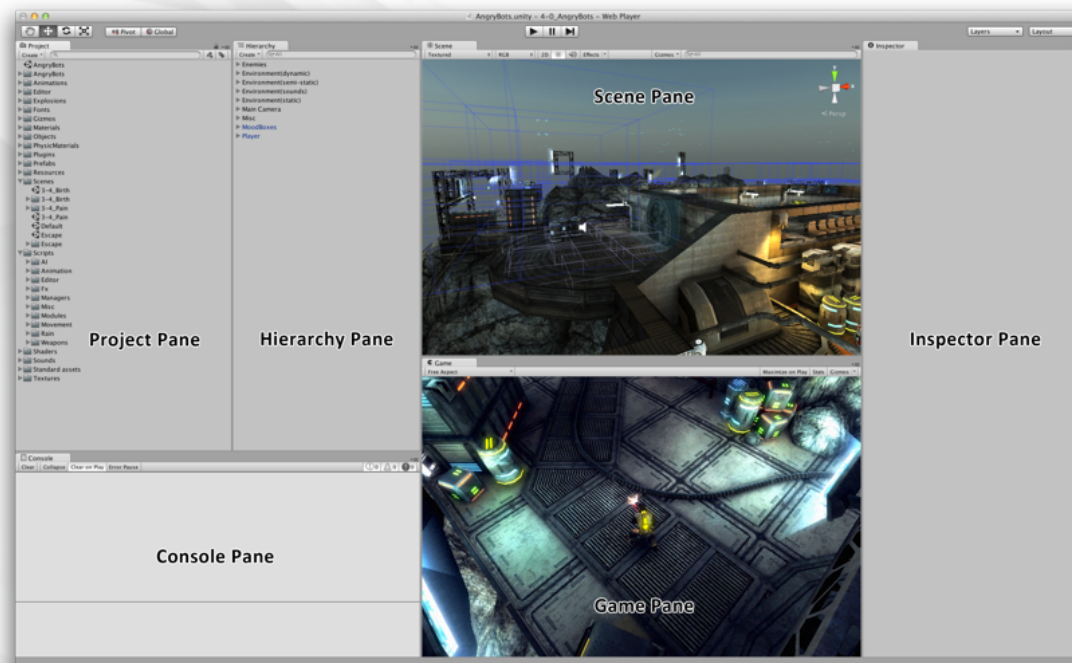
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- **Adding the Console pane:**
  - From the menu bar, choose *Window > Console*
  - Drag the Console pane below the Hierarchy pane



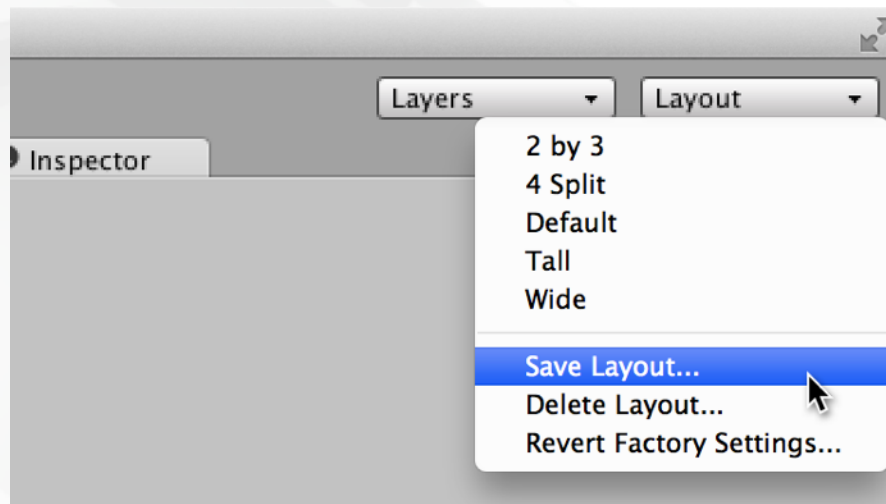
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- **Adding the Console pane:**
  - From the menu bar, choose *Window > Console*
  - Drag the Console pane below the Hierarchy pane
  - Move the Project pane to the left of the Hierarchy pane



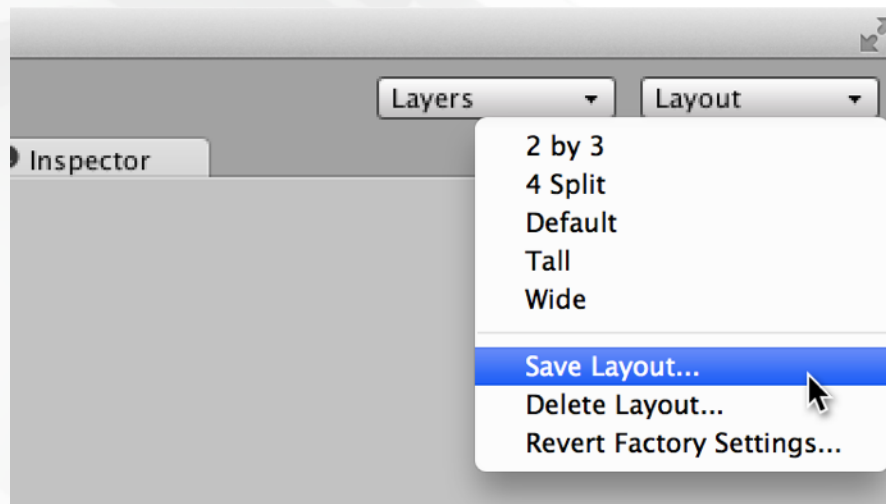


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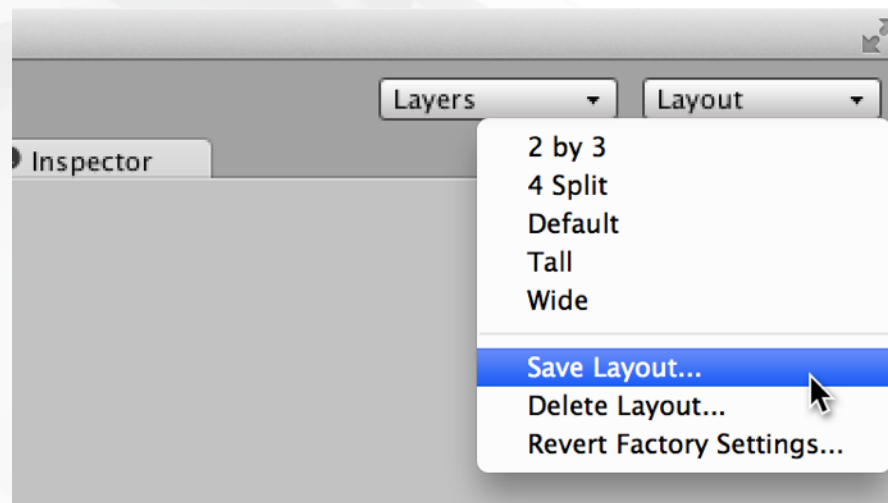
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- **Save this layout!**



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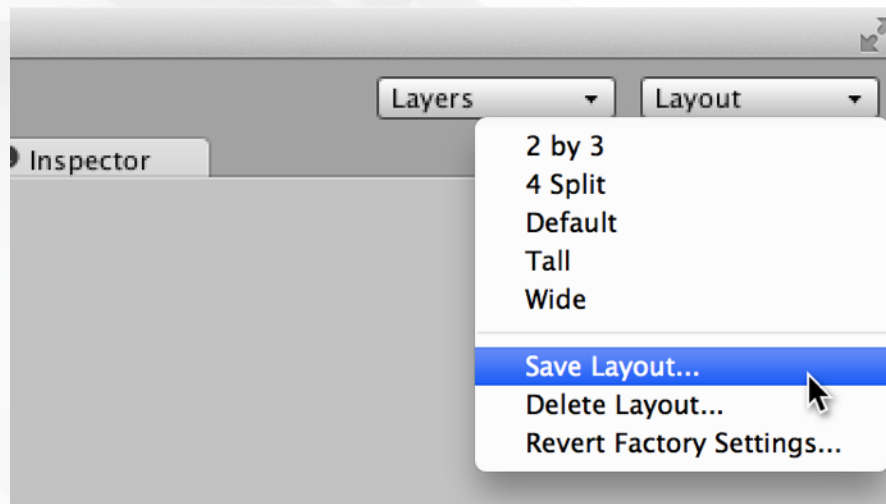
- **Save this layout!**
  - Choose *Save Layout...* from the Layout pop-up menu



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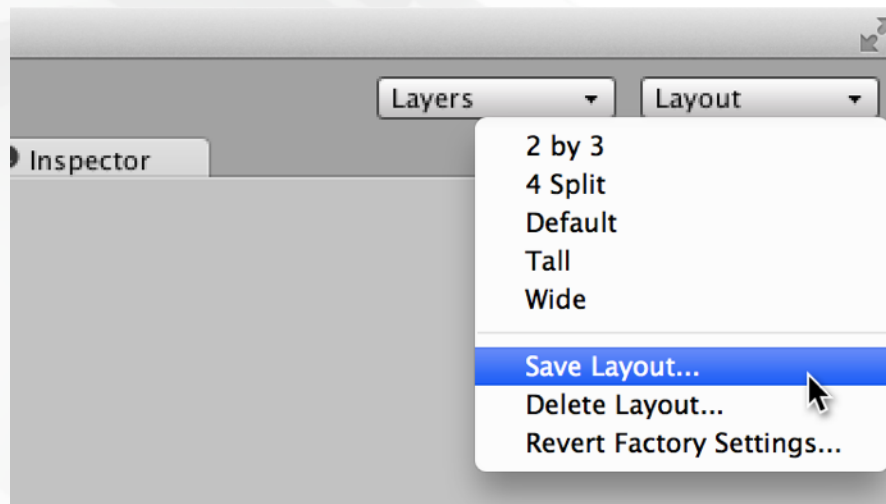
- Choose *Save Layout...* from the Layout pop-up menu
- **Name the layout:** (don't include quotation marks in the name)
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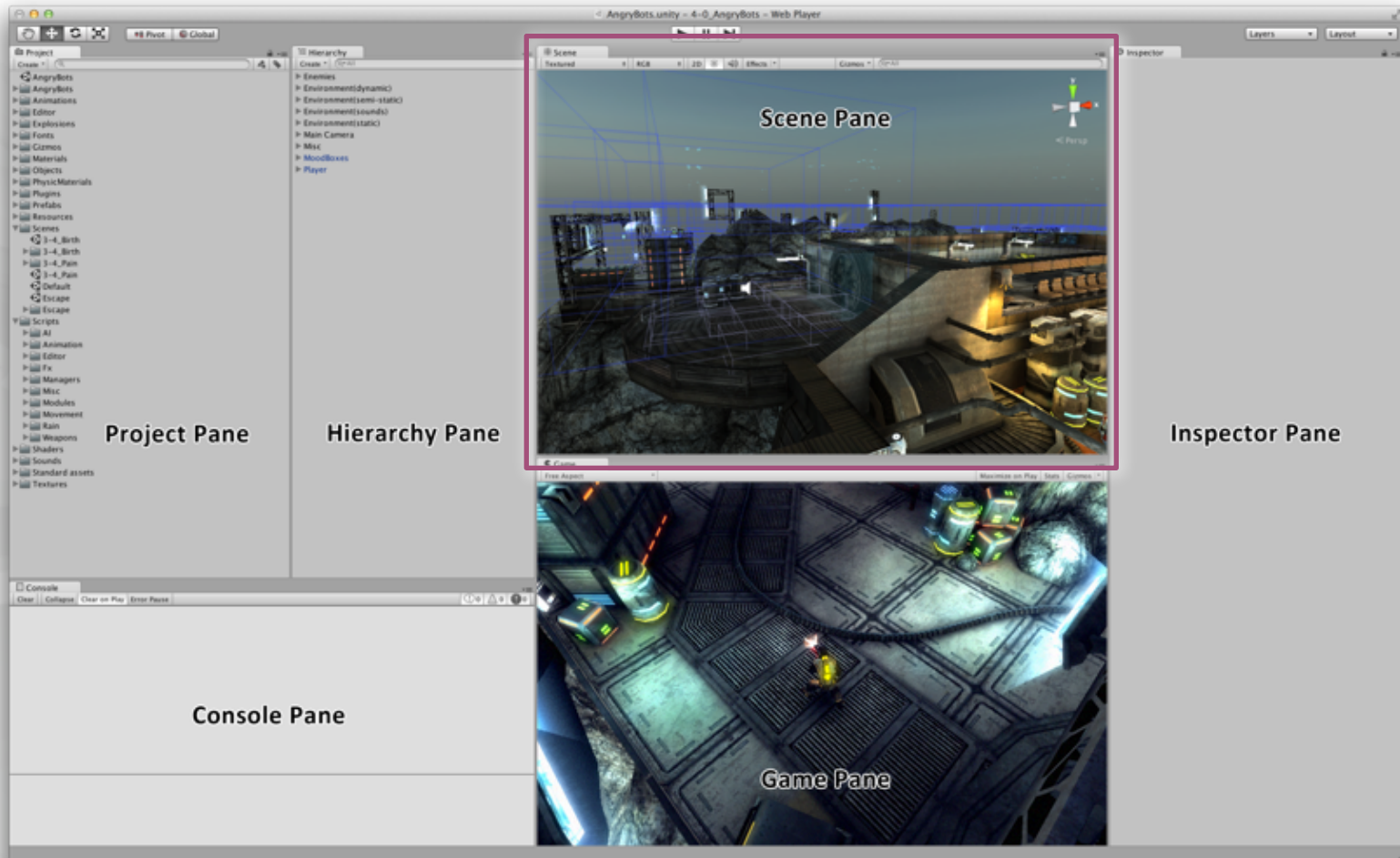
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- These names will sort the new layout to the top of the list

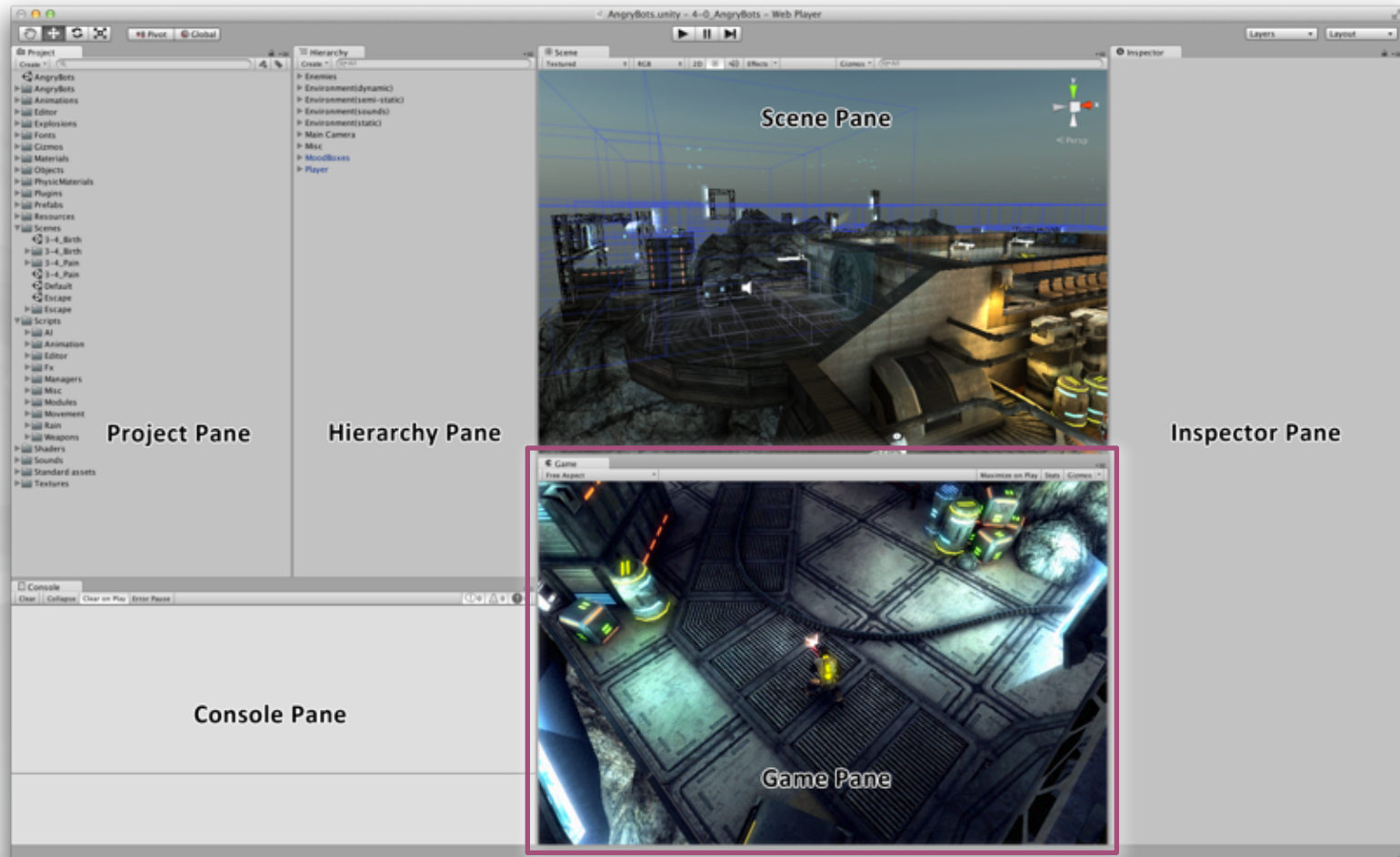


# Understanding the Unity Window Panes



**Scene Pane:** Allows you to move around the 3D scene and select, move, rotate, and scale GameObjects.

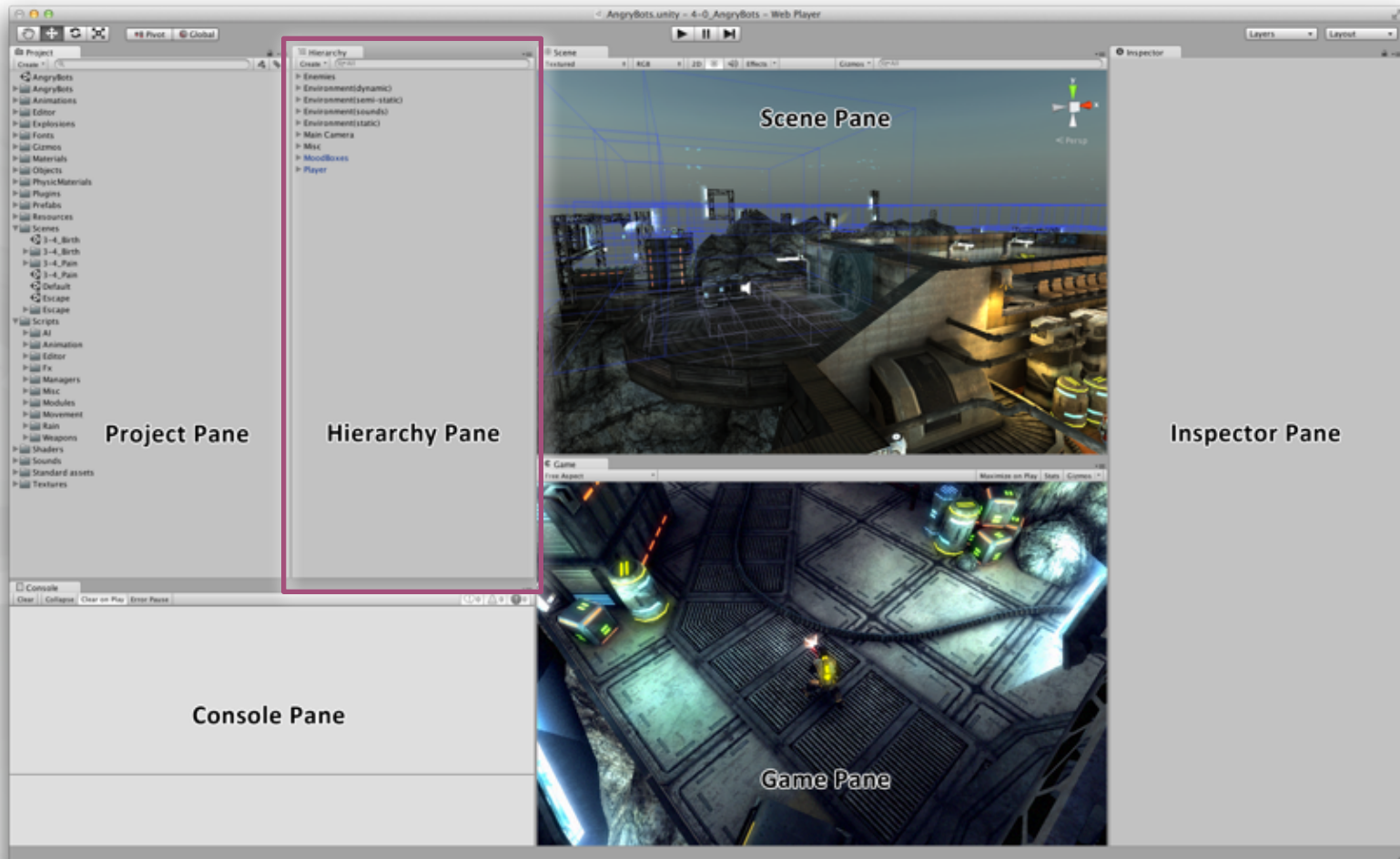
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**Game Pane:** Shows you a preview of the gameplay. Shows the view from the Main Camera in the scene.



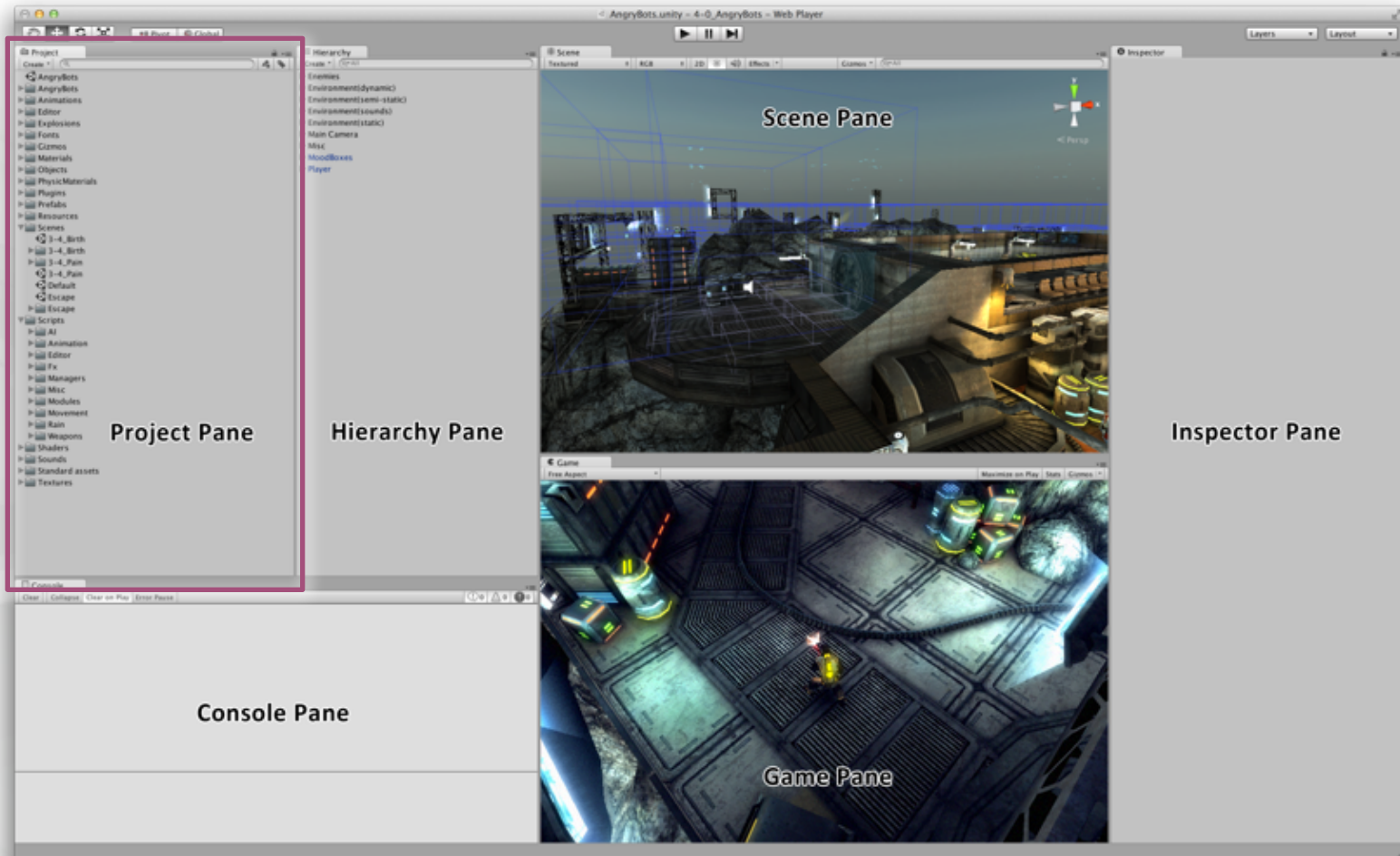
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**Hierarchy Pane:** A list of every GameObject in the scene. Maintains a hierarchy of parent and child GameObjects.

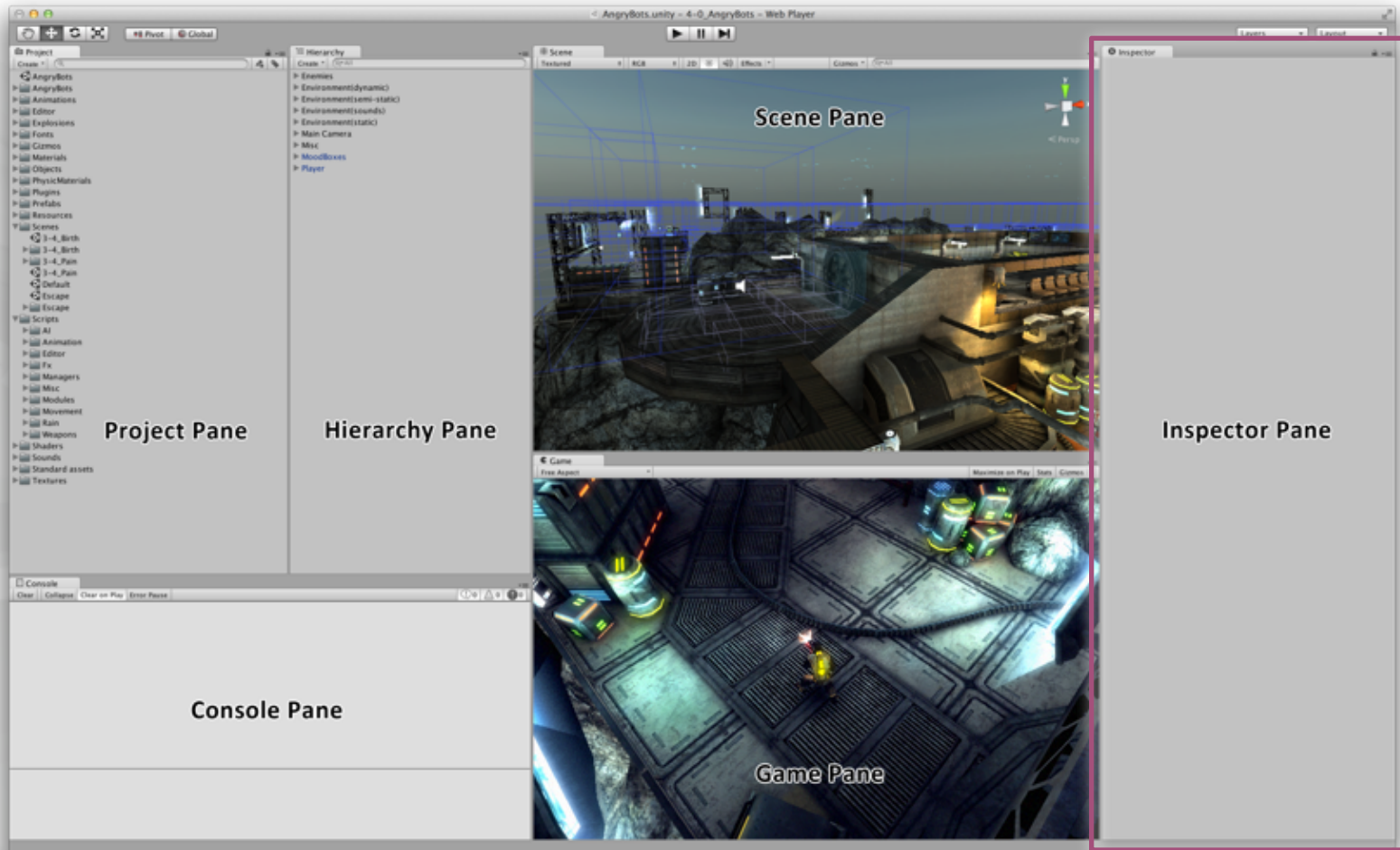


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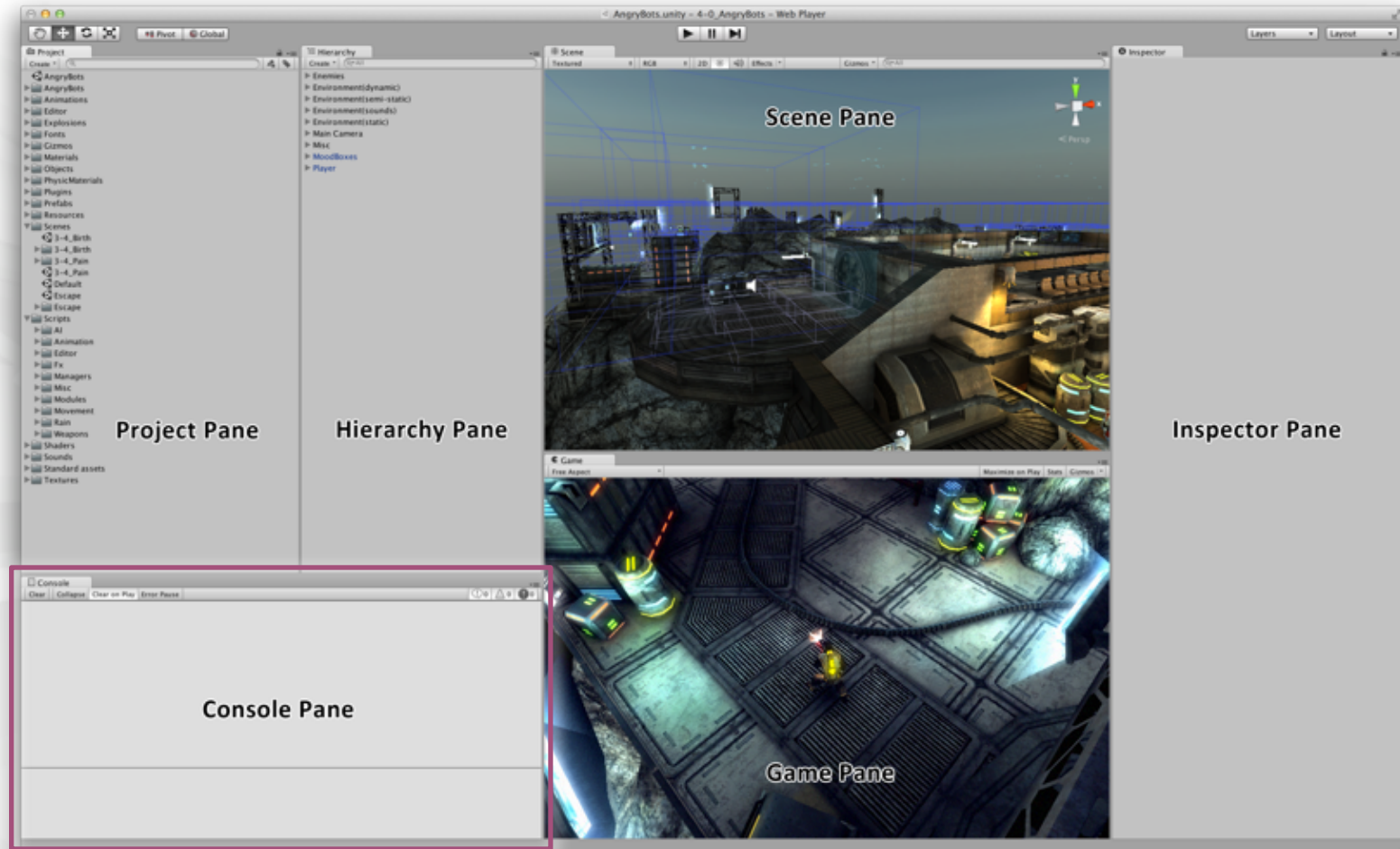
**Project Pane:** Collection of all assets in the Unity project: everything from models to C# code, images, and sounds.

# Understanding the Unity Window Panes



**Inspector Pane:** Shows details of any selected asset.  
Allows you to edit the details of any GameObject.

# Understanding the Unity Window Panes



**Console Pane:** Shows messages from Unity and from the C# scripts that you write. Used extensively in Chapter 18.

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- **Unity has several different licenses, but for now, you only really need to use Unity Free**
- **The Unity window can accept any number of layouts**
  - **You created the " Game Dev" layout that is used throughout this book.**
- **The next chapter will discuss C# in greater detail**