GameWithUS
Beginner Tutorial

Jason Bowey and Colby Johanson
Outline

• Learn the Interface

• How GameObjects are constructed

• Starter Projects:
  • Building a platform
  • Building a top-down shooter
  • Introduction to a First-Person 3D game
Hierarchy Panel

- Lists all the objects in the scene
- Can be grouped together in a hierarchy (parent-child relationship)
- A child’s transform (position, rotation, scale) are based on it’s parent’s transform
Project Panel

- Lists all assets you are working with
- Create button at the top to create new assets
- Import assets by:
  - right clicking inside the panel
  - ‘Assets’ in top menu
  - Put files in the actual folder in your filesystem
Scene View

- Where you visually construct your game
- Pan (Q), Translate (W), Rotate (E), Scale (R), and Sprite Edit (T)
  - Also buttons at top-left
Game View

• Where you preview and test your game

• Play, Pause, Step Frame buttons at top centre

• Changes made while in ‘play mode’ are not saved (ex., resizing or moving GameObjects)

• You can change the default colour tint while in play mode in the preferences
Inspector

- Shows the properties of the thing currently selected
- Lock button at top right of inspector to keep the current object’s information while clicking other objects
- Each horizontal section is called a component
GameObjects

- Everything in your Scene is a GameObject
- GameObjects are made up of components
- Components are individual sets of instructions that define how a GameObject behaves or looks
- Unity comes with pre-made components (ex., physics colliders, animators, spriteRenderers)
- You can also create custom components through scripting
GameObjects

Component Component Component
Component Component Component
Component Component Component
Component Component Component
Component Component Component
Component Component Component
Component Architecture

• To add functionality to a GameObject add a component which defines that functionality

• Each component should do a single thing so they can be reused
Examples of Components

- SpriteRenderer
- RigidBody2D
- BoxCollider2D
Platformer
Top-Down
First Person