

GameWithUS Beginner Tutorial

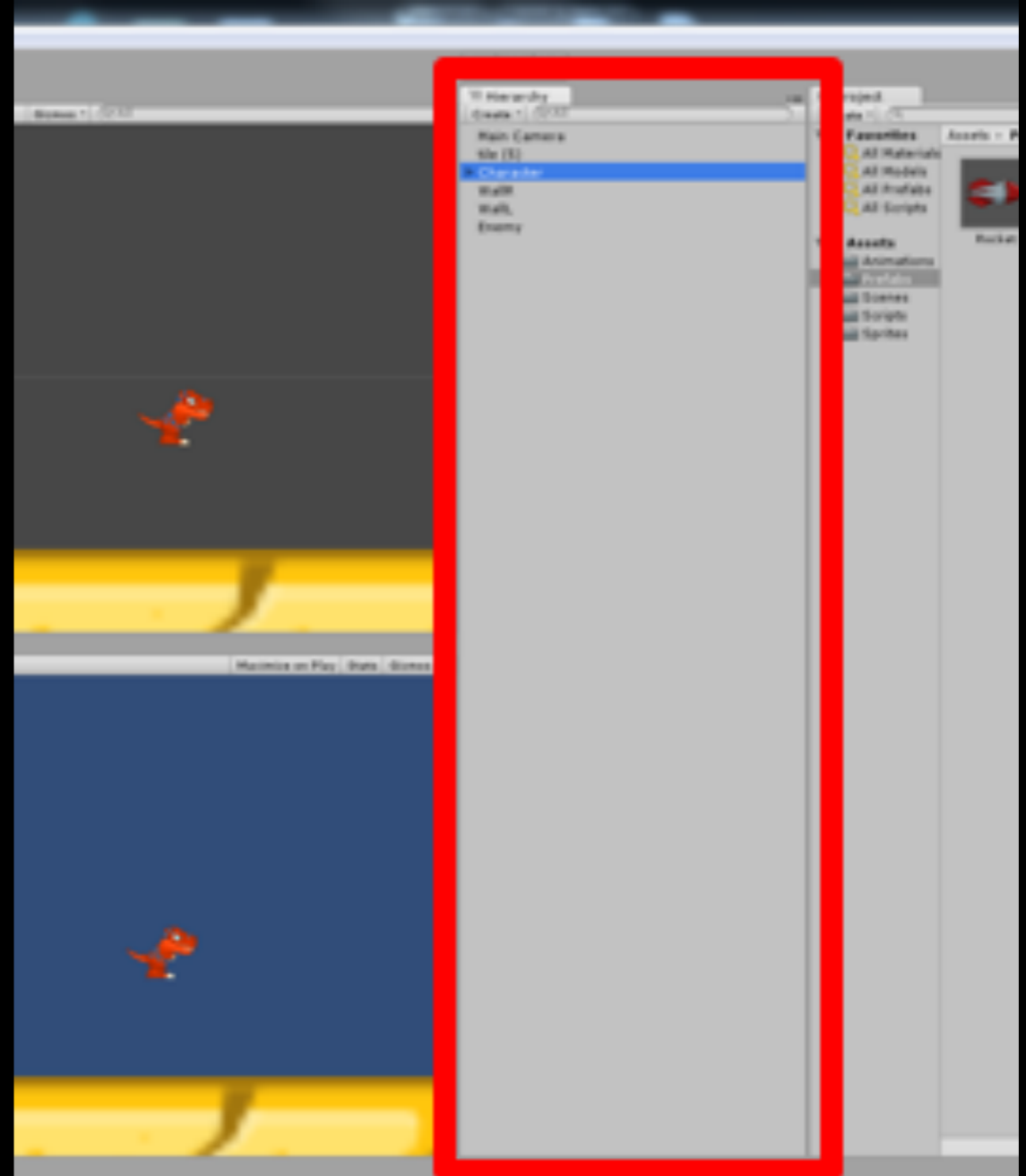
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Outline

- Learn the Interface
- How GameObjects are constructed
- Starter Projects:
 - Building a platform
 - Building a top-down shooter
 - Introduction to a First-Person 3D game

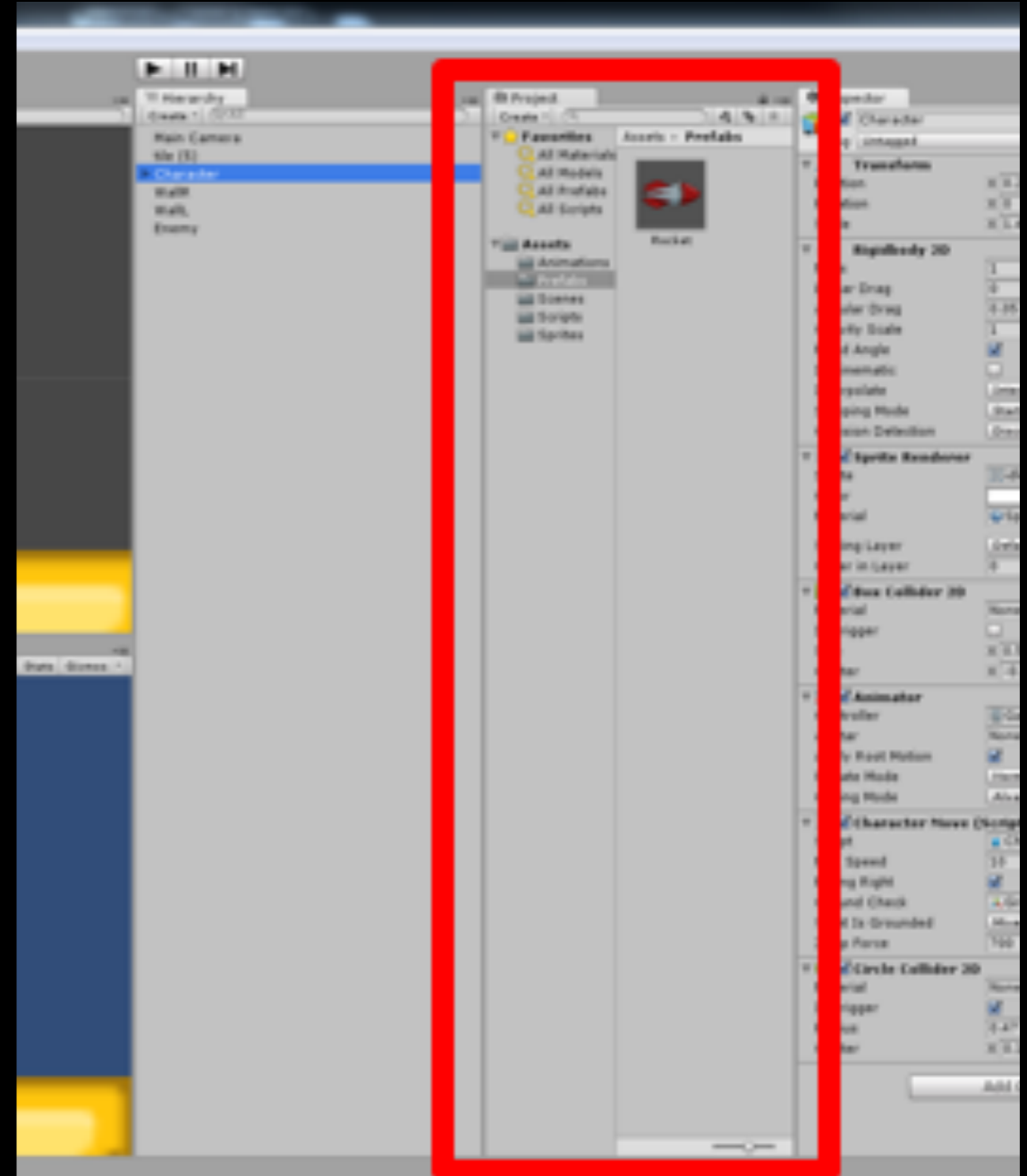
Hierarchy Panel

- 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



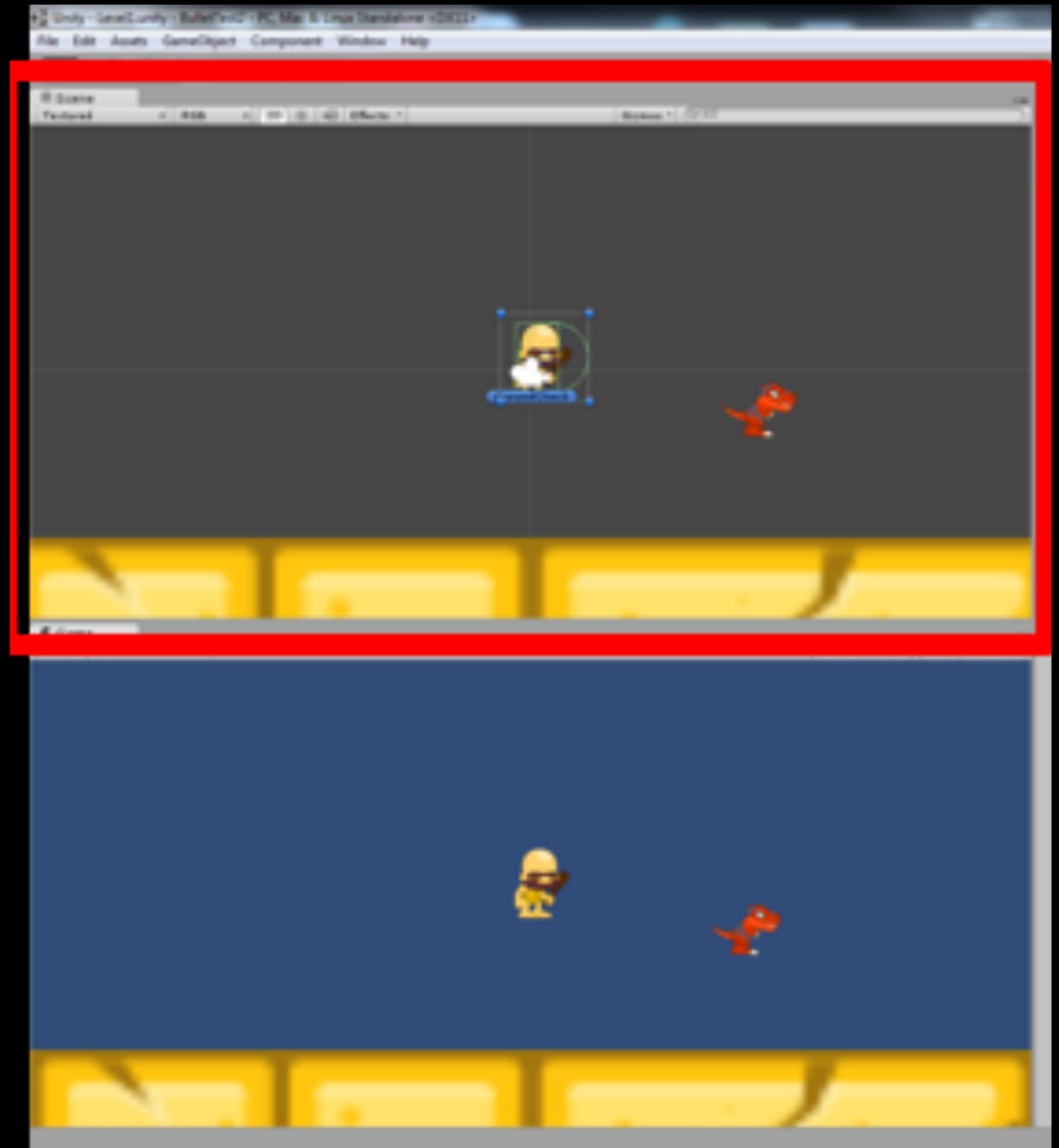
Project Panel

- 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



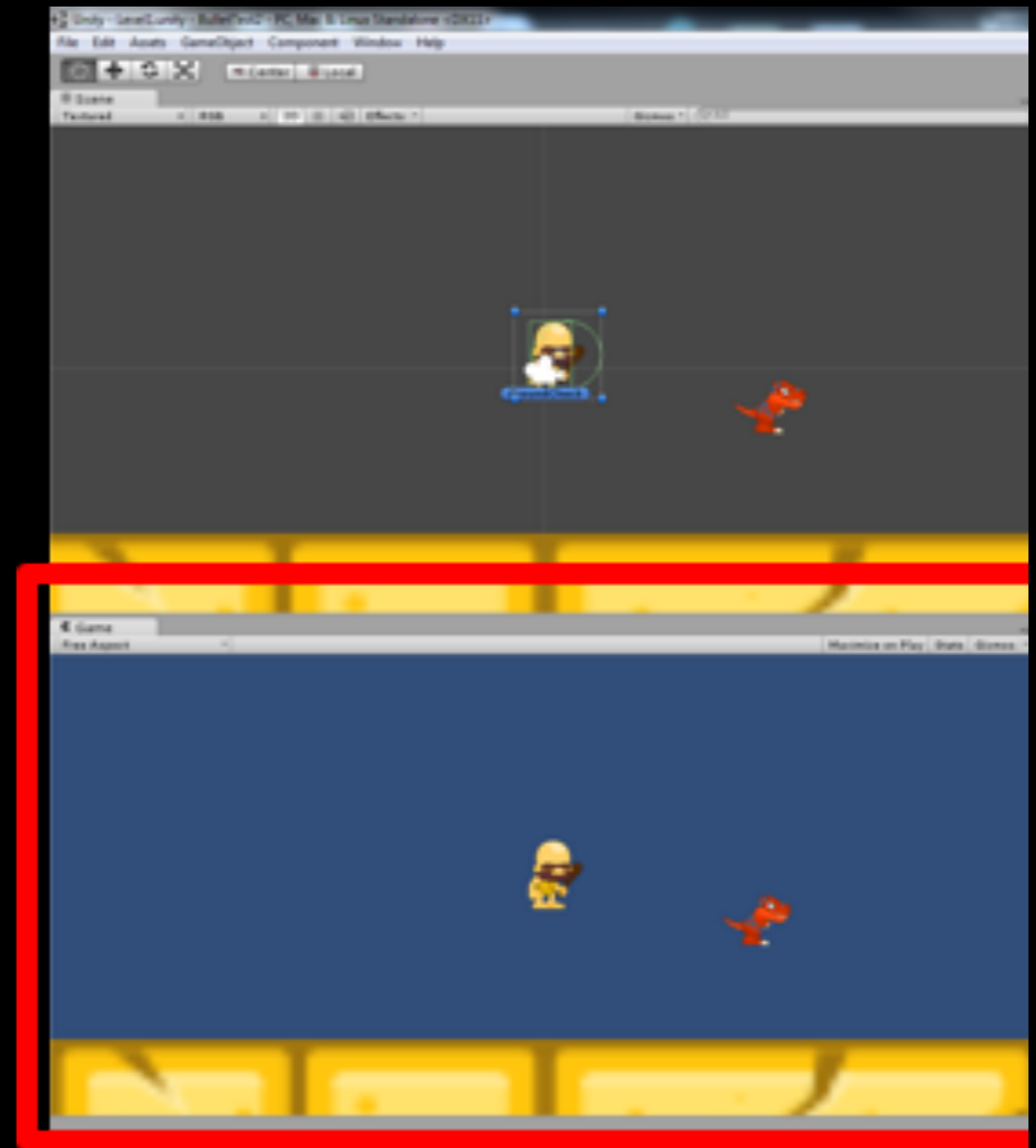
Scene View

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



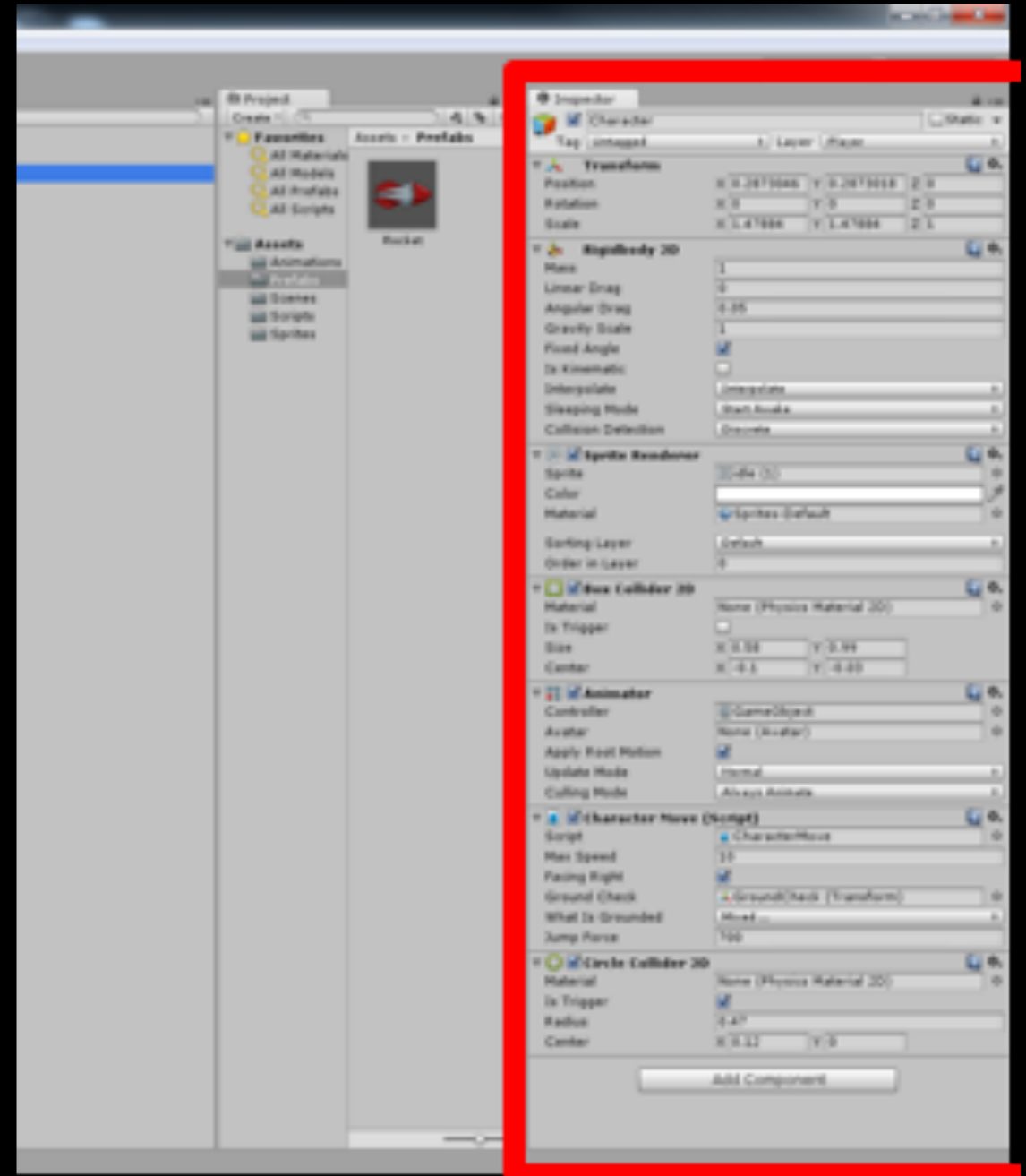
Game View

- 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

GameObject

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