Unreal Engine 5 C++ The Ultimate Game Developer Course

Section 1 – Getting Started

Installing Unreal Engine

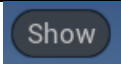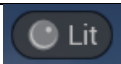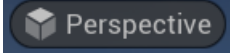| Description	Command/Icon
Play In Editor (PIE) Play tests the level in the Level Editor Viewport	 ALT + P
Stop Simulation Stops the simulation while a PIE session is running	 SHIFT + ESC
Get Mouse Cursor Gets the mouse cursor while in a PIE session	SHIFT + F1
Maneuver the Default Pawn in a PIE Session Moving around while a PIE session is running	Left-Click in the Viewport, Move Mouse, WASDCE

Resources
https://unrealengine.com

The Level Editor Viewport

Description	Command/Icon
Open the Content Drawer Shows the folder structure of the project. Click in the viewport to hide.	 SHIFT + SPACE
Dock in Layout Docks the Content Browser in the current layout	
Move Forward/Backward in the Viewport Moves forward/backward in the Level Editor Viewport	Left-Click in the Viewport, Drag up/down
Look Left/Right in the Viewport Looks left/right in the Level Editor Viewport	Left-Click in the Viewport, Drag left/right
Look up/down in the Viewport Looks up/down in the Level Editor Viewport	Right-Click in the Viewport, Drag up/down

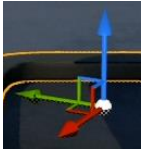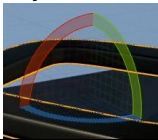|	
Look right/left in the Viewport Looks right/left in the Level Editor Viewport	Right-Click in the Viewport, Drag right/left
Rise and Sink in the Viewport Rises and sinks in the Level Editor Viewport	Double-Click in the Viewport, Drag up/down
Pan in the Viewport Translate left and right in the Level Editor Viewport	Double-Click in the Viewport, Drag left/right
Fly Around in the Viewport Flies around with the WASD keys in the Level Editor Viewport	Left-click or Right-click and hold, WASD
Zoom In Zooms in temporarily, releasing the mouse will zoom back out	Left-click or Right-click and hold, C
Zoom In Zooms out temporarily, releasing the mouse will zoom back in	Left-click or Right-click and hold, Z
Adjust Camera Speed Adjusts the camera speed in the Level Editor Viewport	📷 4 Click and adjust the slider

Resources

https://docs.unrealengine.com/5.0/en-US/level-editor-in-unreal-engine/
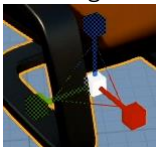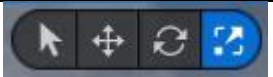
View Modes

Description	Command/Icon
Show Menu Enables us to set various flags to show or hide things in the world	Show
Lit Menu Change the lighting settings	Lit
Perspective Menu Change from Perspective to the various Orthographic Modes (Top, Bottom, Left, Right, Front, Back)	Perspective
Maximize/Restore Viewport Allows us to split the viewport and show multiple view modes	⊞
Hamburger Icon Menu Contains miscellaneous viewport options (Show FPS,)	☰ Show FPS – CTRL + SHIFT + H
Bookmarks	0 – Jump to Bookmark 0 1 – Jump to Bookmark 1

Saved positions in the viewport that we can access with the number keys. **Set a Bookmark** Set a bookmark with ⬤ -> Bookmarks -> Set Bookmark -> Bookmark #	2 – Jump to Bookmark 2 …etc. CTRL + 0 – Set Bookmark 0 CTRL + 1 – Set Bookmark 1 CTRL + 2 – Set Bookmark 2 …etc.
Game View See the scene as if the game were playing – all icons will disappear	⬤ -> Game View G
Immersive Mode Fullscreen the viewport	⬤ -> Immersive Mode F11
High Resolution Screenshot Takes a high resolution screenshot of the scene. Image is saved to the Saved folder in the project.	⬤ -> High Resolution Screenshot

Object Manipulation

| Description	Command/Icon
Select Object Selecting an object outlines it in yellow	Left-Click on an Object in the Viewport
Translation Allows us to translate objects in the viewport, showing the **translation gizmo** on the selected object: 	 W – Enter Translation Mode Click and drag an arrow on the translation gizmo to move object in that axis Click and drag a square on the gizmo to translate the object in two axes Click and drag the white sphere in the center to move the object in all directions
Rotation Allows us to rotate objects in the viewport, showing the **rotation gizmo** on the selected object: 	 E – Enter Rotation Mode Click and drag an arc on the rotation gizmo to rotate an object about an axis
Scale Allows us to scale objects in the viewport, showing the **scale gizmo** on the selected object: 	 R – Enter Scale Mode Click and drag a box on the scale gizmo to scale an object in an axis direction Click and drag a triangle on the gizmo to scale the object in two axes

	Click and drag the white box in the center to scale the object uniformly in all directions
Snapping Moving, rotating, or scaling objects can be done in discrete increments when snapping is enabled. Numbers to the right of the snapping icons determine the snap amount	 Snap mode icons: Translation (Left), Rotation (Middle), Scale (Right)
Local/World Space Transform gizmos will show directions relative to local or world space depending on the mode selected	- World space selected - Local space selected
Snap to Surface Controls how objects snap to surfaces. Change the Surface Offset for objects to snap to surfaces with a desired offset.	
Duplicate Objects Objects can be duplicated in translation or rotation transform mode	ALT + Click and drag an arrow on the translation gizmo ALT + Click and drag an arc on the rotation gizmo

Panels

Description	Command/Icon
Outliner Panel Contains a list of all objects in the level. Objects can be selected from within the Outliner panel	 Left Click and Object to Select it DELETE – Delete Selected Object
Show/Hide Objects from the Outliner Panel The eye icon allows us to show or hide objects in the level	- Object is visible - Object is hidden
Focus on Objects The view can zoom in on an object by selecting it in the level or the Outliner panel and pressing F	F – Focus on Selected Object
Details Panel Context-sensitive panel that shows detailed information about the currently selected object	
Transform Location, rotation, and scale information is shown in the Details panel for the currently selected object	