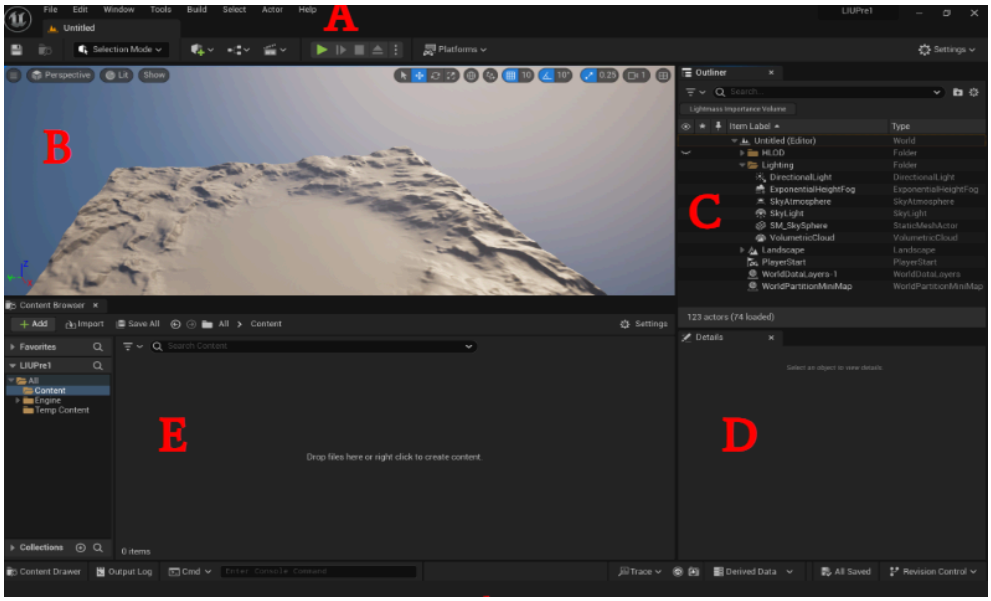
Unreal Level Design- Modeling

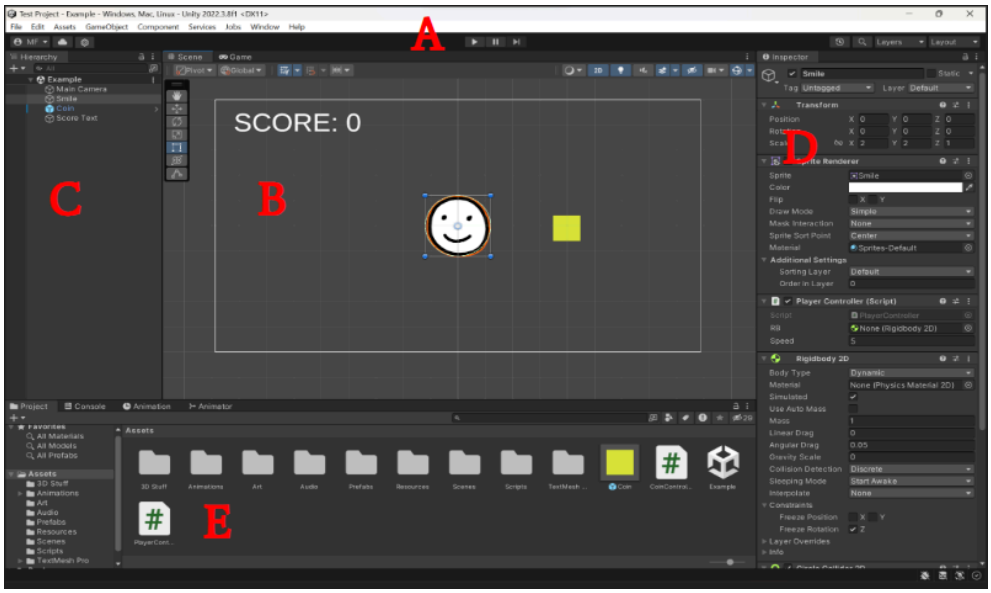
▼ Shortcuts

- Vertex Snapping: Hold V key while moving an object allows you to snap the objects vertices to another
- Q select object
  W move
  E rotate
  R scale mode
- F to frame an object (zoom in on it)

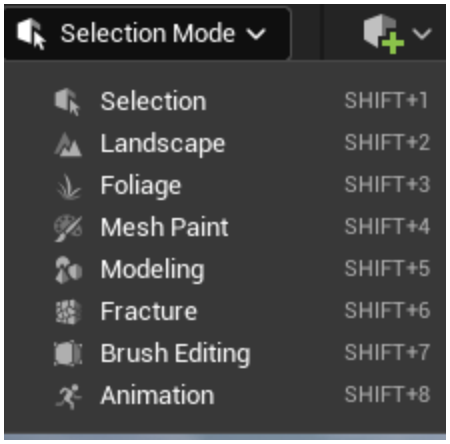
▼ Unreal Interface



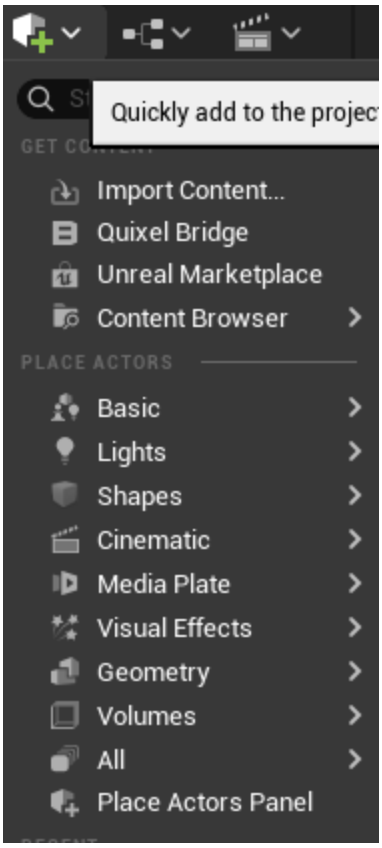
Grid Snapping



- Window → Load Layout
- Open Content drawer → Dock in Layout
- Different Modes (selection mode is like scene view in unity)

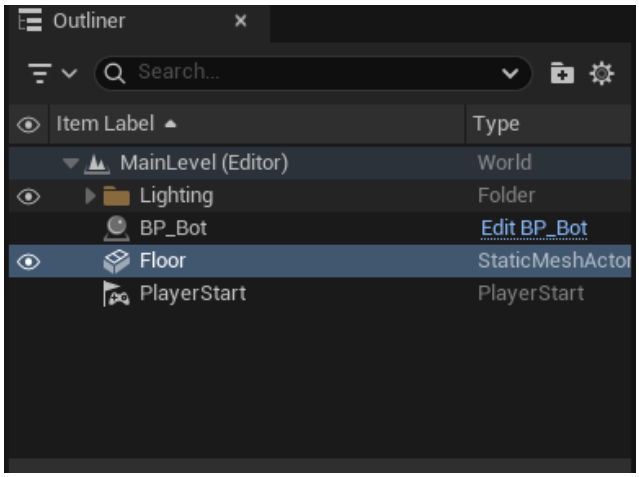


- Quickly add to your project

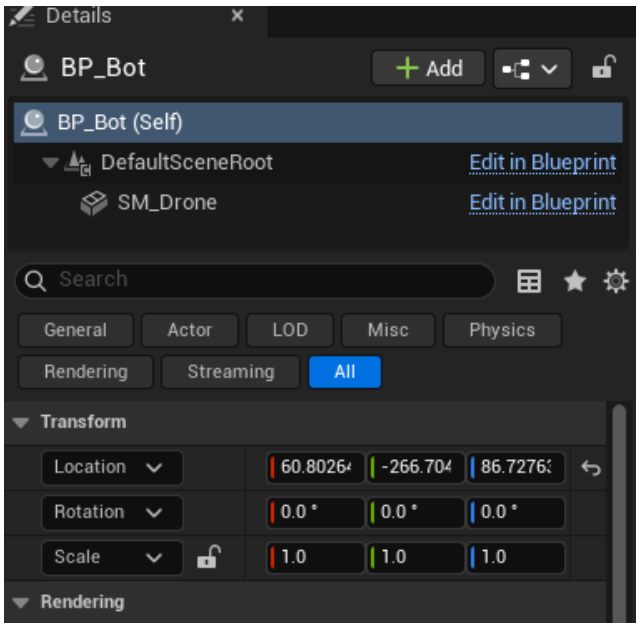


- Play mode

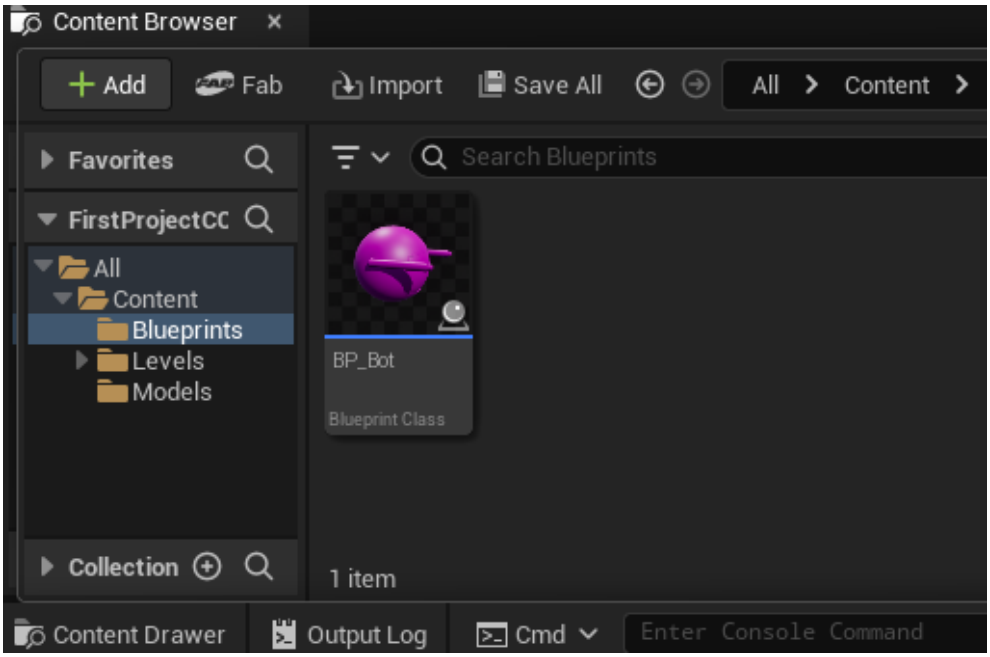
- Outliner which is hierarchy in Unity



- Details panel which is inspector in Unity



- Content Browser where all our assets are similar to “Project” in Unity

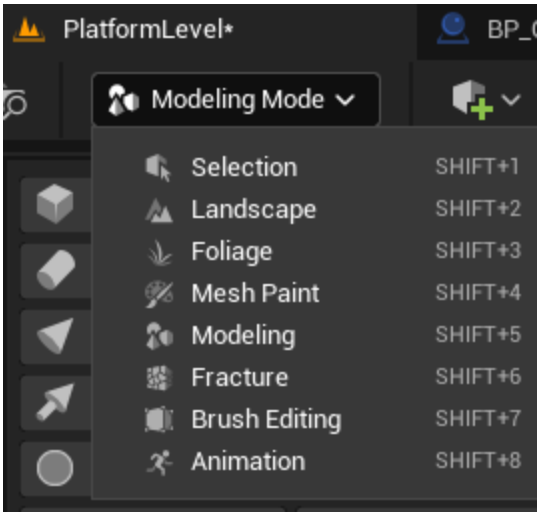


▼ Mouse Navigation

- Mouse navigation
  - LMB and drag traveling along x and y axis
  - LMB and middle mouse move up and down
  - RMB
- WASD navigation
  - keep RMB clicked whole time
  - Q + E up and down
  - Z + C zoom in and out
  - F key to focus on specific object
- Maya navigation
  - ALT + LMB orbit the camera around a single point (an object)
  - ALT + RMB + DRAG dolly or zoom from single object
  - ALT + MMB + DRAG pans the camera
- Camera speed slider top right of view port so you can zoom in faster/slower

▼ Modeling Notes

- Change selection mode to modeling mode
- Any object you create gets auto generated to your content browser in a generated folder, unless you specify otherwise



Create Tab

- We can create objects by using primitive shapes
- Example:
  - Select cube
  - In order to edit the cube you first have to place it in the level by just clicking it down somewhere
  - We are going to keep the output type to static mesh
  - We can change width, depth and height
  - We can also change our pivot position
  - After you're finished hit accept to save all changes to the static mesh

Create tab→ CubeGrid

- For very fast prototyping
- Create a grid of cubes by dragging out how big you want the area to be

- Pull action gives our grid an actual mesh
- We can also do corner back and select two vertices and hit Q or E depending on which way we want our ramp to be
- To make them not all one object, unselect the cubegrid you made in the outliner, and create new cube grid

Xform Tab→ Transform

- Can change scale, rotation, and location

Xform→Edit pivot

- Can change pivot to base, top, or center

Model→Polygroup Edit

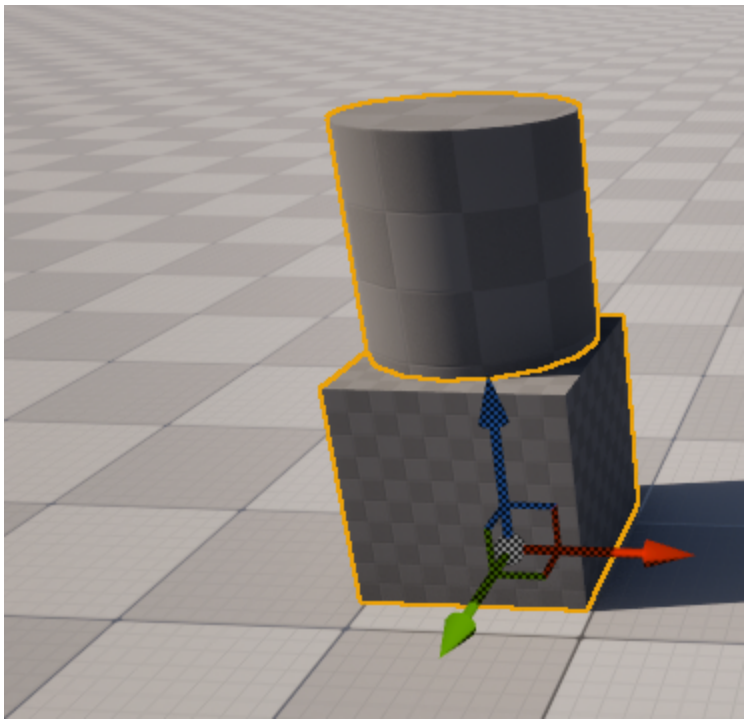
- To extrude, inset, bevel objects etc.

**Snapping might be on while you're modeling, it snaps the object every x amount on the grid. to turn it off or turn it on upper right corner of the level

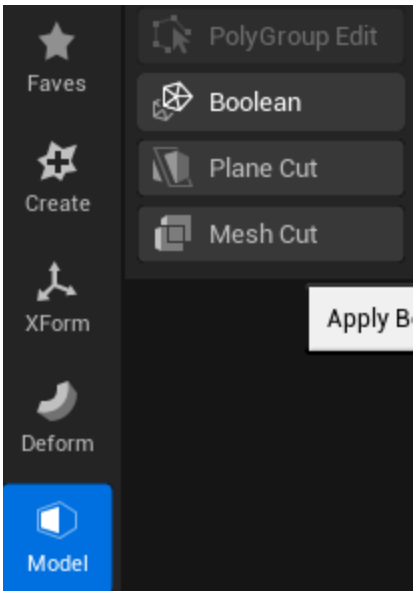
**Surface snapping (next to it) might also be on, controls how objects snap to surfaces/each other

Combing Objects/Difference between Objects

- In order to perform a Boolean operation
- Must have two objects selected to be able to use the option (shift)



- Model Tab→ Boolean



- Types of operations:
  - You can do the difference between the first object you selected vs the last and vise versa
  - Intersection: where both objects overlap

    - Union: merging the objects together
- Under Output Object you can create a new object after the boolean operation OR you can overwrite first or last input object

▼ Perspective

- Change perspective when building blockouts
    - Top down wireframe