



# Game Design and Development Workflows

## Introduction to



## Level Design with Blockouts

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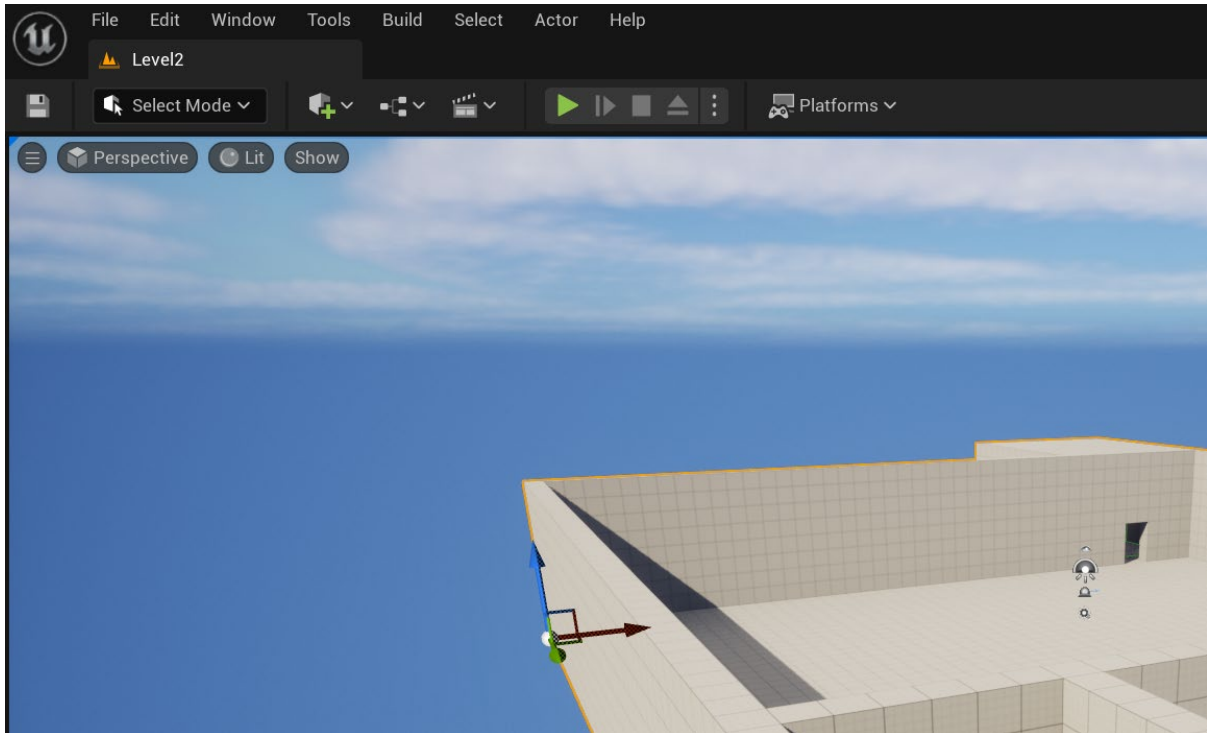
### SESSION 1 TASKS

**TASK:** Creating a maze using Blockouts

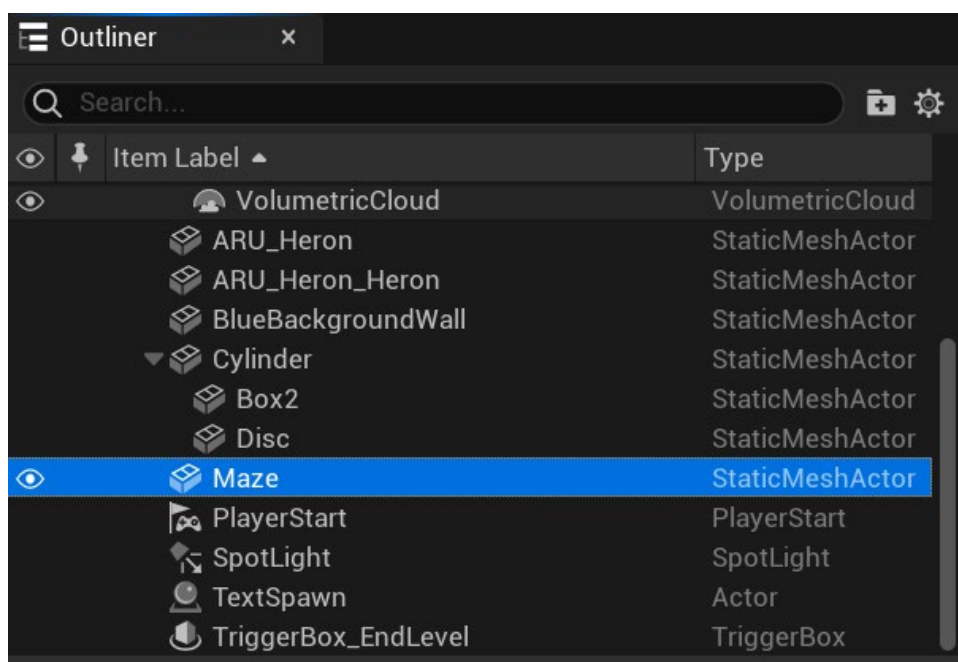
## **TASK ONE:**

Build a Maze to explore.

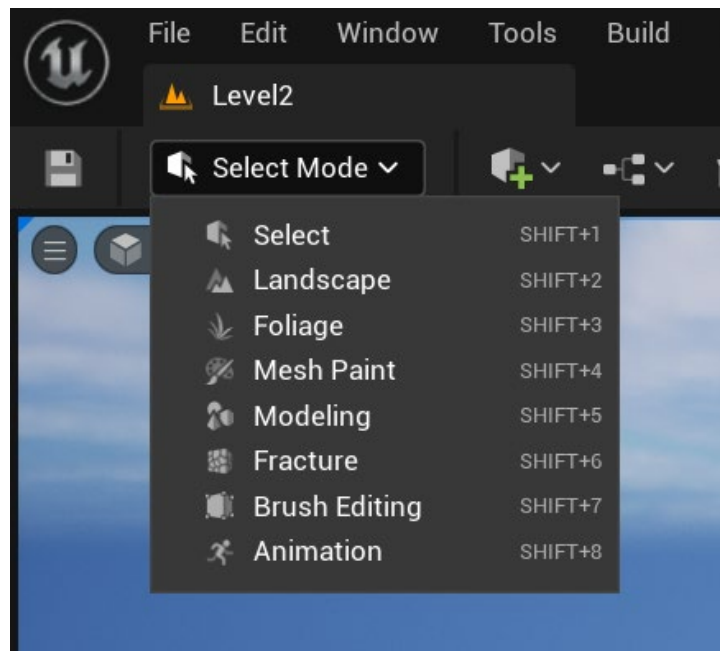
- 1) Explore the game template by clicking the green play button at the top of the Viewport and then running around the level.



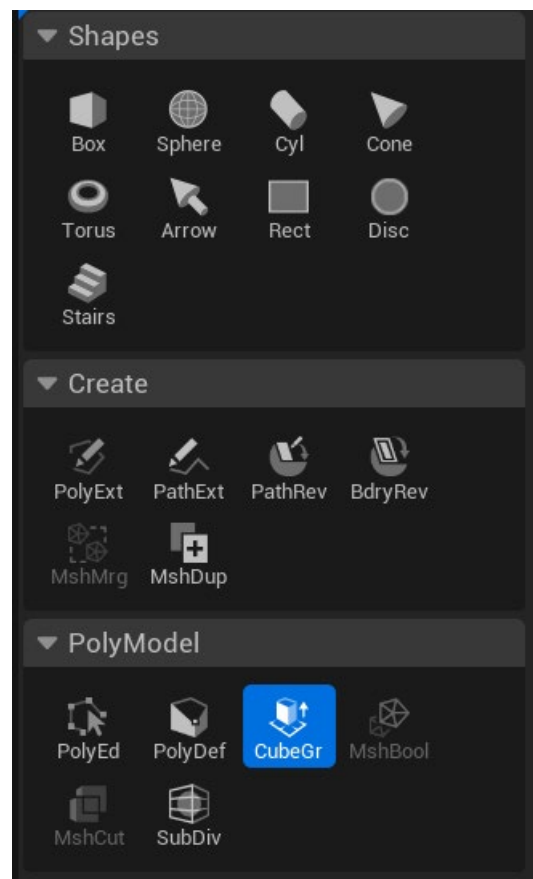
- 2) Click the Stop button or press Esc to go back to the editor, then in your outliner, click on Maze, which selects the main level object.



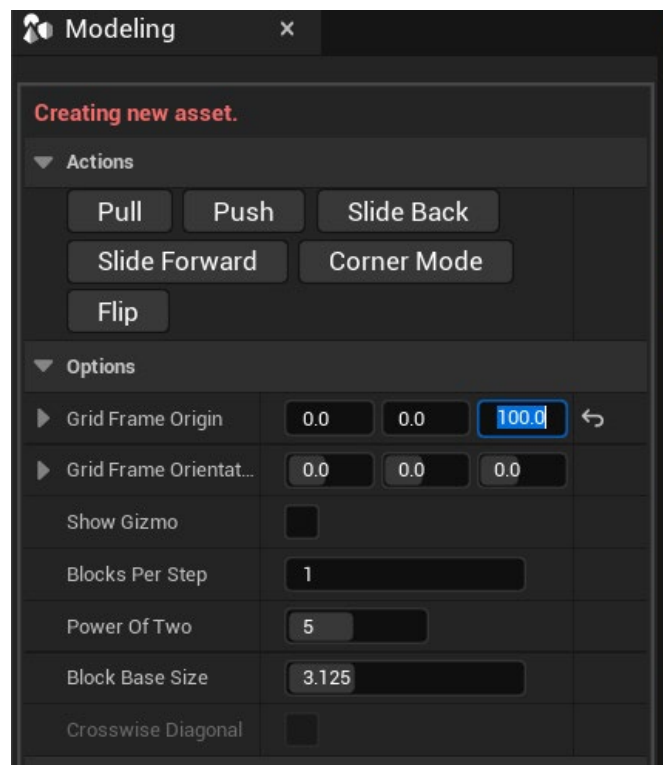
- 3) Click icon the Select Mode drop down at the top of the screen and choose Modeling.



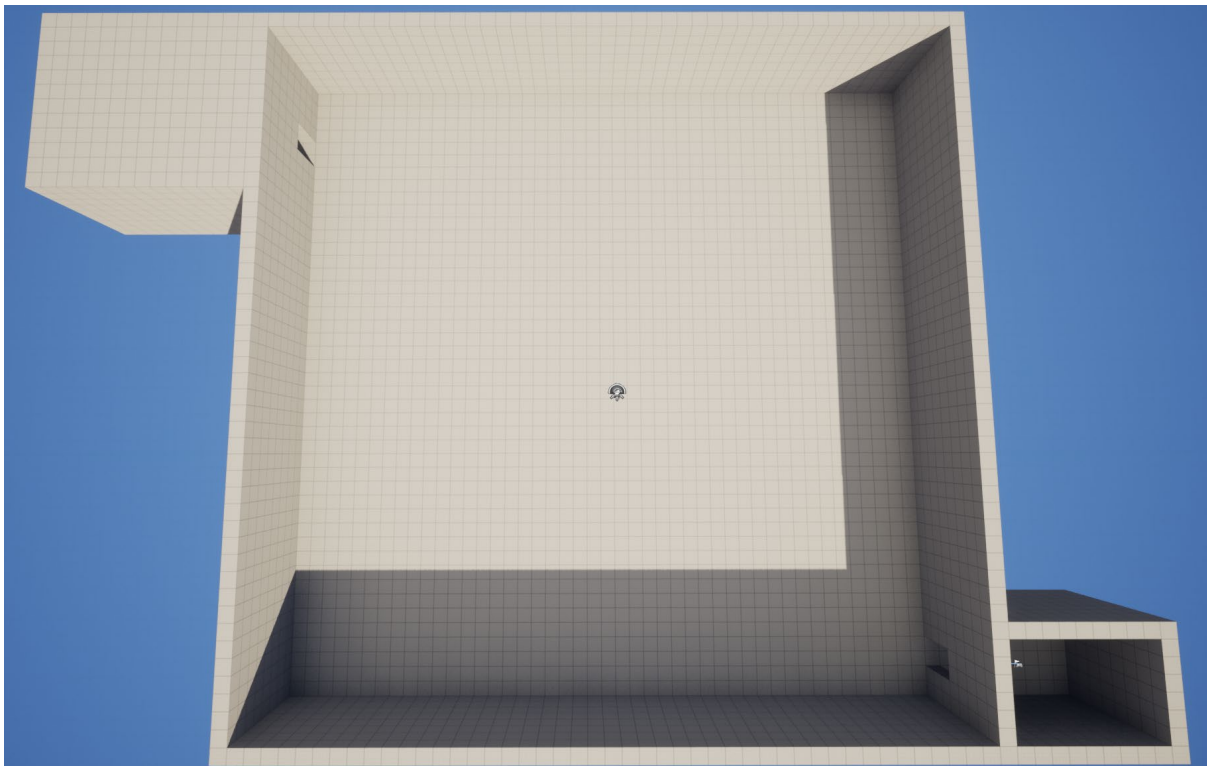
- 4) From the Modelling tools, select the Cube Grid (cubeGr) tool from the PolyModel panel



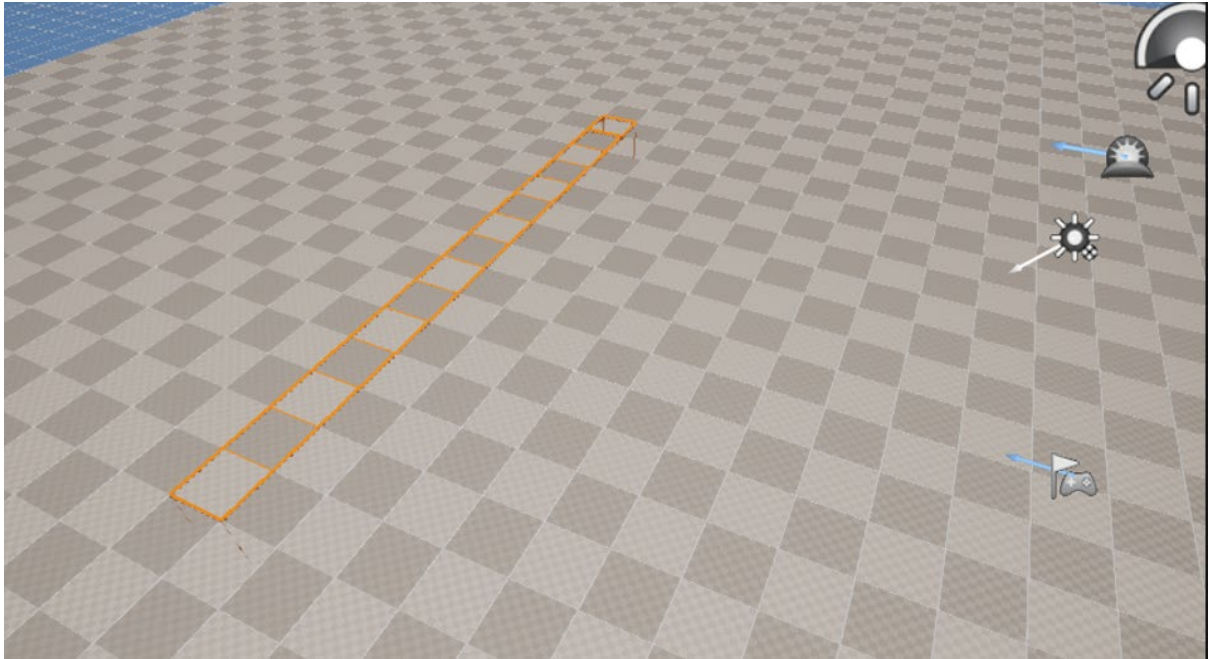
5) Ensure the **Grid Frame Origin** is set to 0, 0, 100



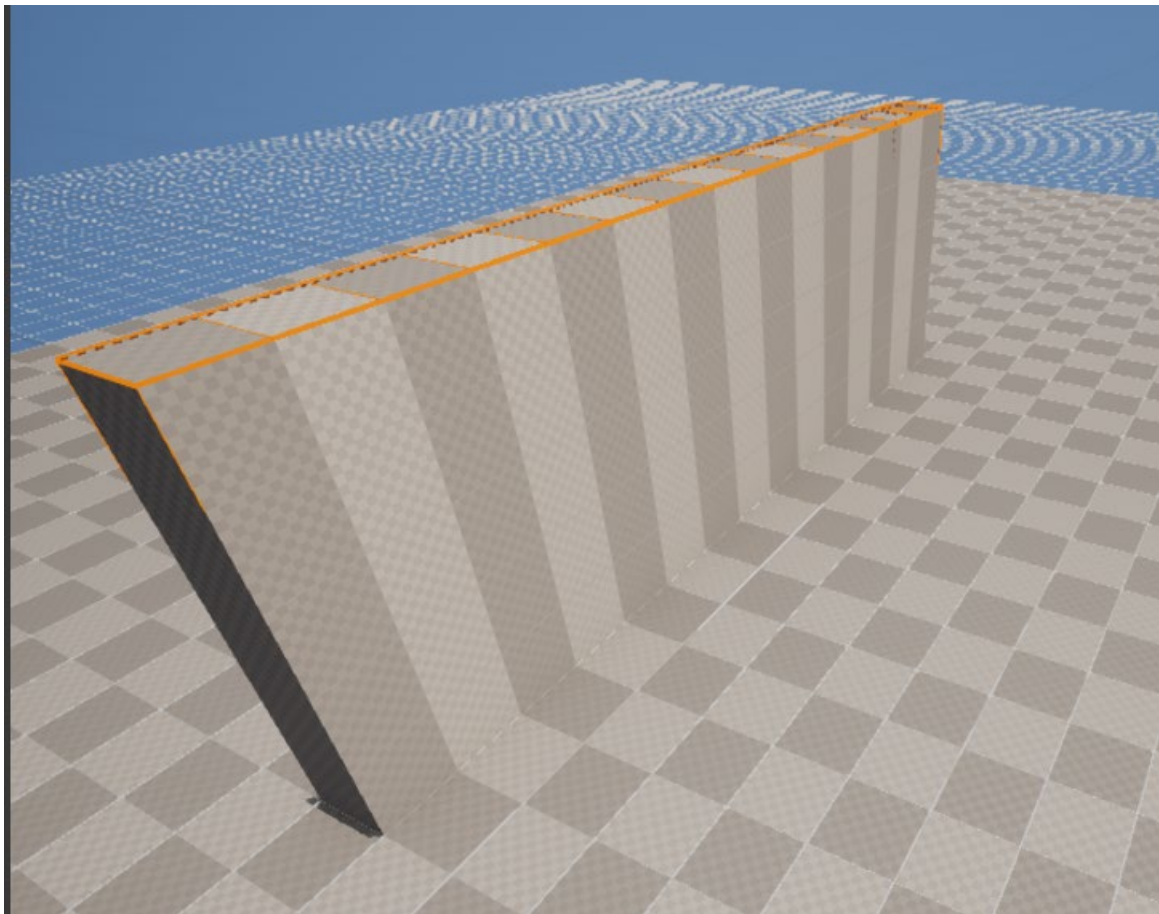
6) Now, zoom all the way out by holding the **Right Mouse button** and using **W A S** and **D** to fly around.



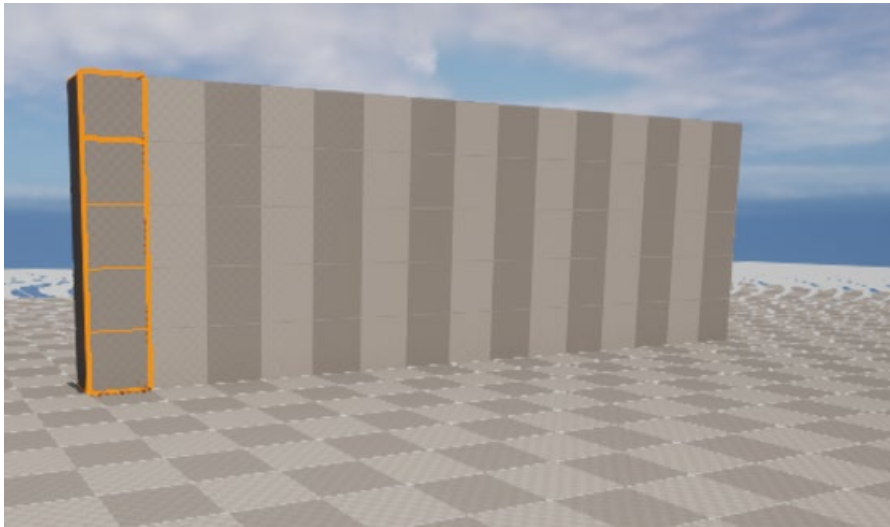
- 7) You can now draw a line by selecting and dragging on the surface of the grid. Draw a line somewhere between 10 to 15 meters long.



- 8) Press **E** six times to **Extrude or Pull** a wall 6 meters high



9) Next, select the inside edge of the wall.

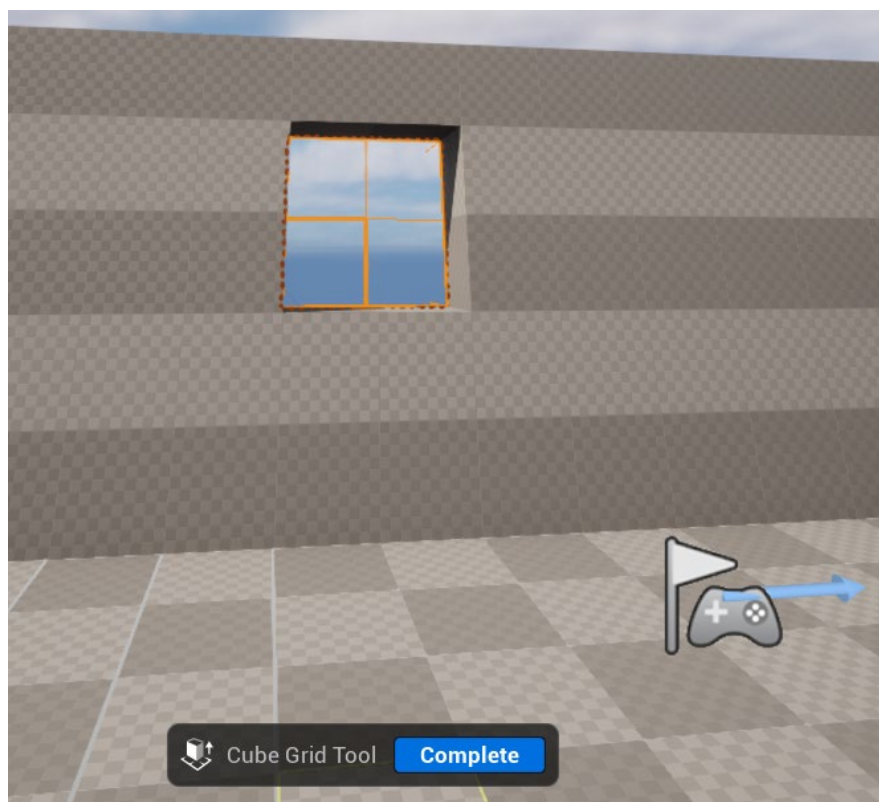
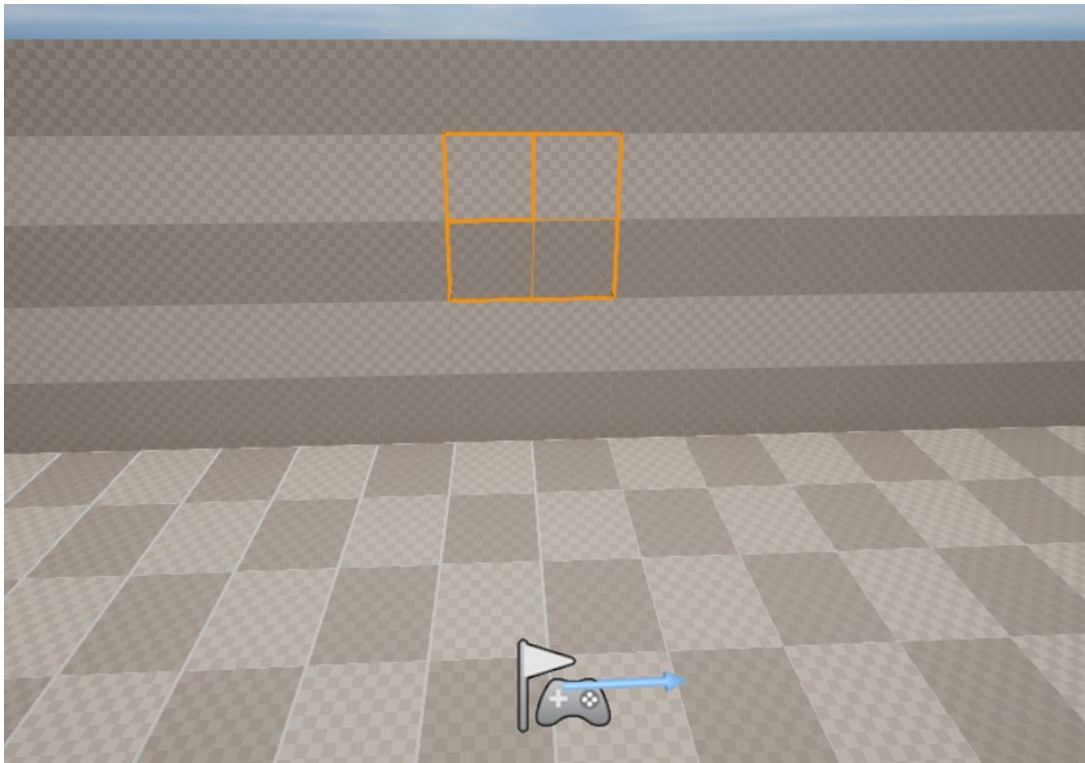


10) Now, press **E** 20 times to make a long edge.

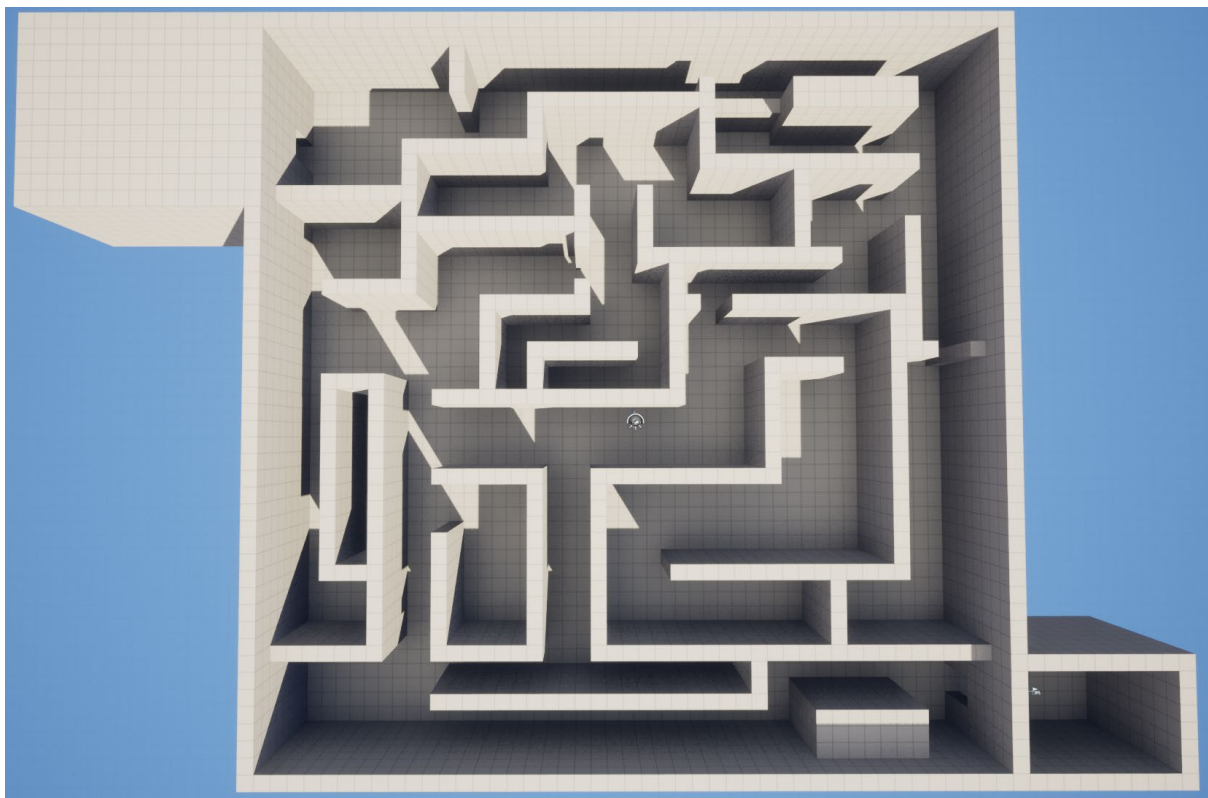
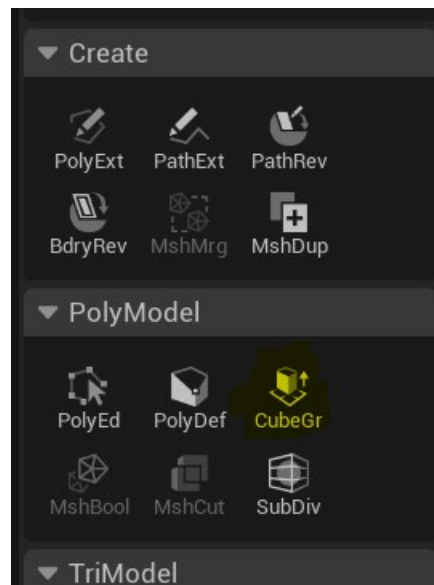




- 11) Around halfway along the wall, select a **2x2 square** and press **Q** to **Subtract or Push** this portion, creating a window. Then click **Complete**



- 12) Now, selecting the CubeGr tool again, build a maze using the techniques learnt so far.



- 13) Playtest your maze. Can you find the Heron?



## Useful Shortcuts and tools

**E** = Extrude or 'Pull'

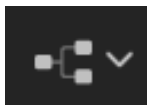
**Q** = Subtract or 'Push'

**Z** = Corner Mode (Making ramps)

Select an object (i.e. PlayerStart) and press **Shift+End** to snap it to the floor.



- Quickly ass to project



- Blueprints



- Position Grid Snap Value

## Unreal Scale

Distance	Distance in default Unreal Units
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1 centimeter	1 unreal unit
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1 meter	100 unreal units
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1 kilometer	100,000 unreal units
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1 inch	2.54 unreal units
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1 yard	91.44 unreal units
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1 mile	160,934 unreal units
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