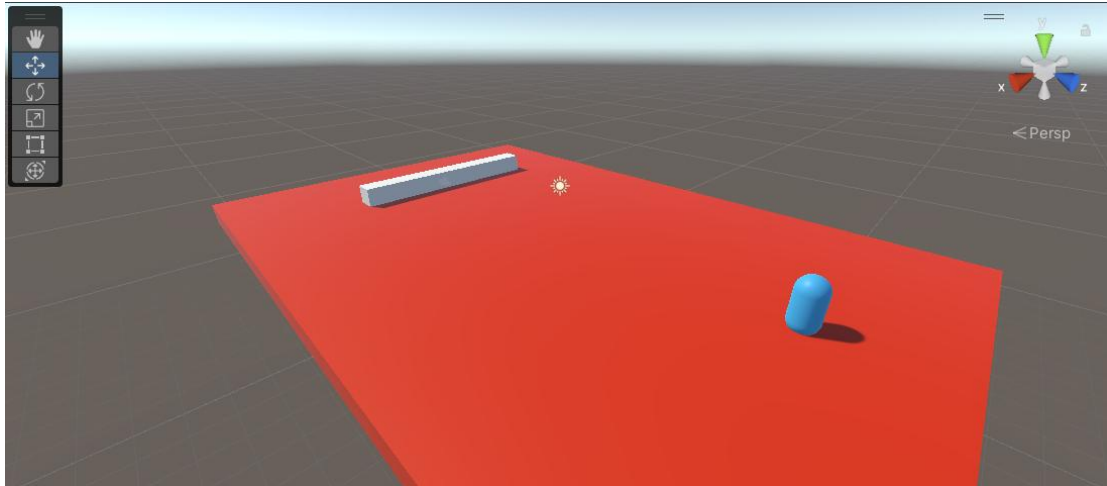


GAME PROGRAMMING LAB - 10

- by Meghna Sinha, 20BAI1133

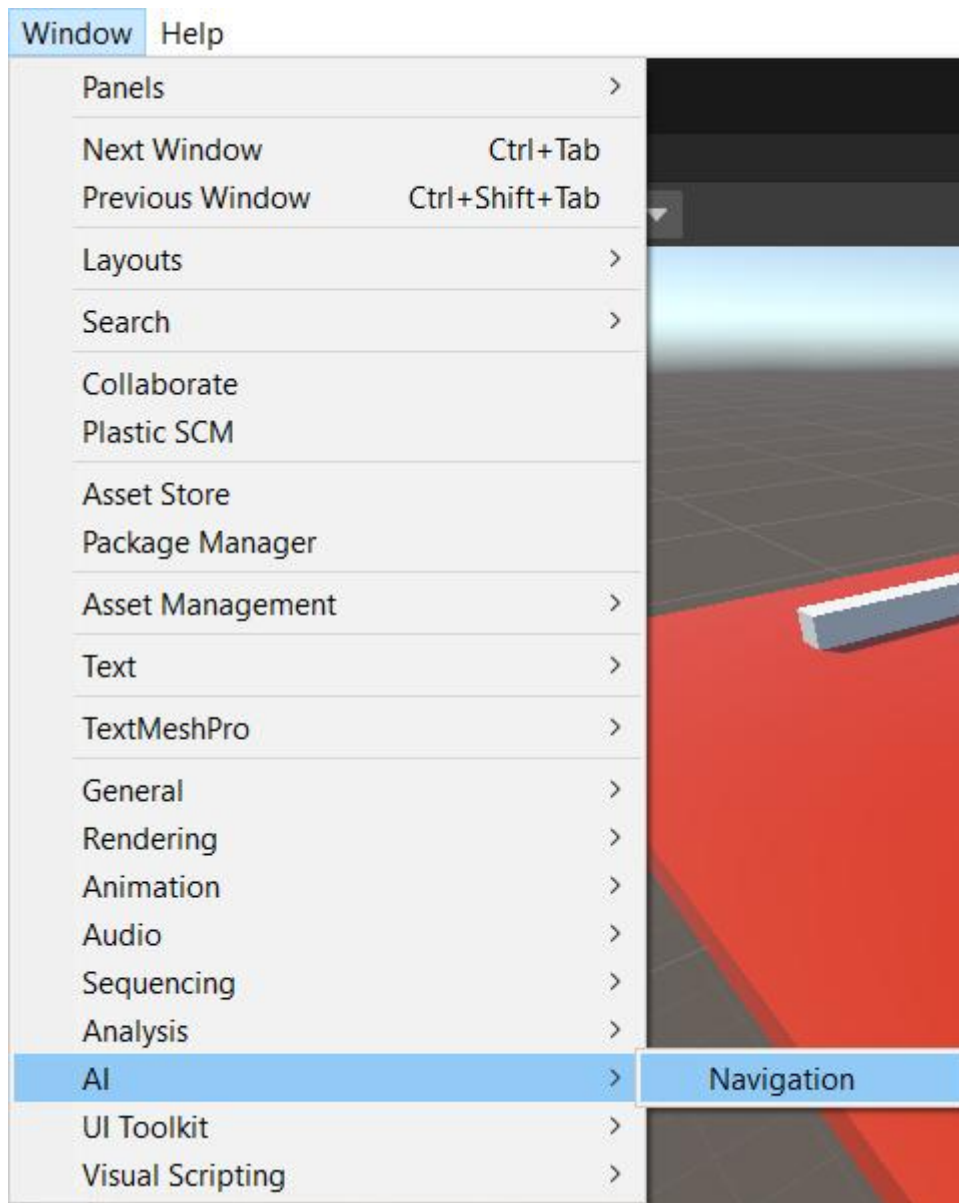
Create a 3D Project with a cube for floor, a cube for wall (obstacle) and a capsule for player. This is the initial setup.



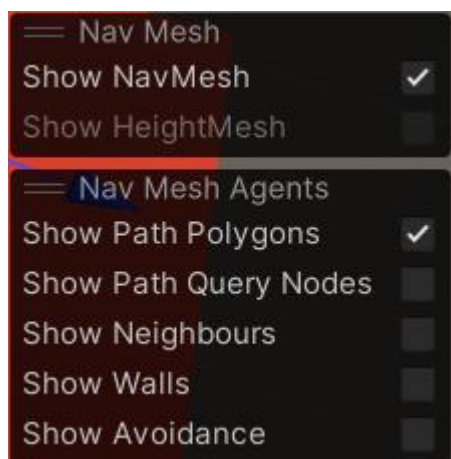
Add NavMeshAgent to the player component.



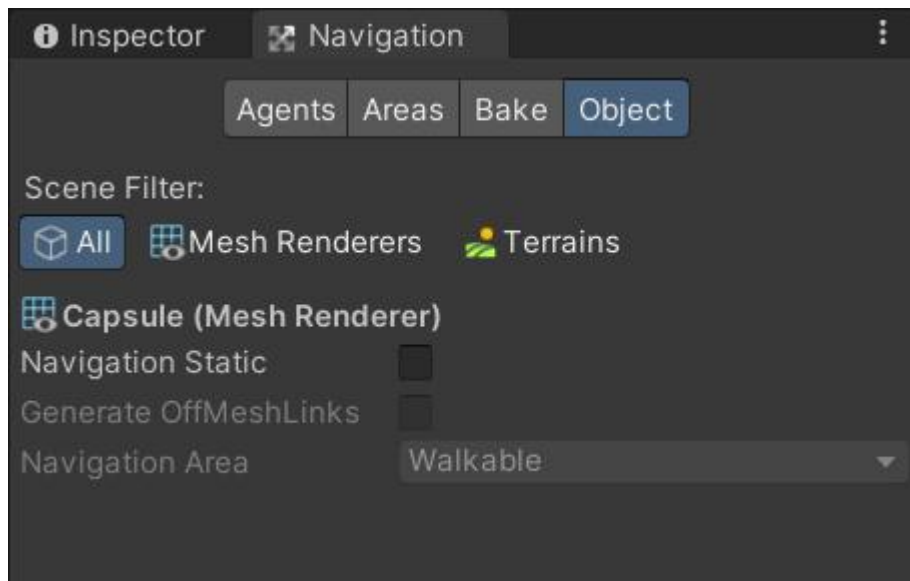
Now add Navigation component by going to Window-->AI-->Navigation



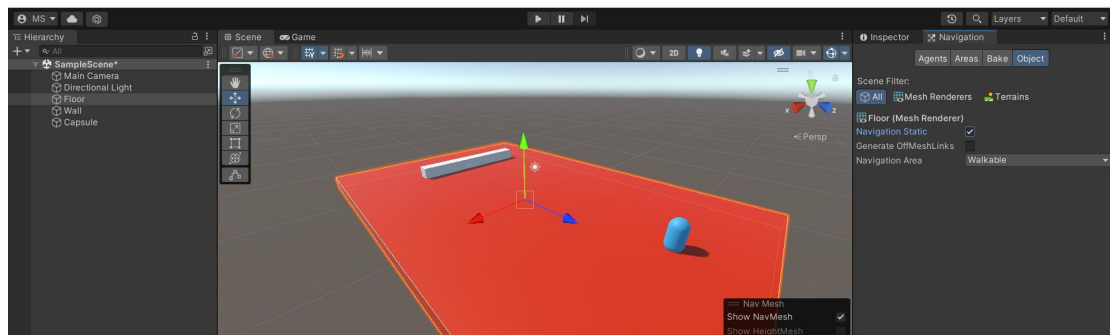
This is the menu which pops up



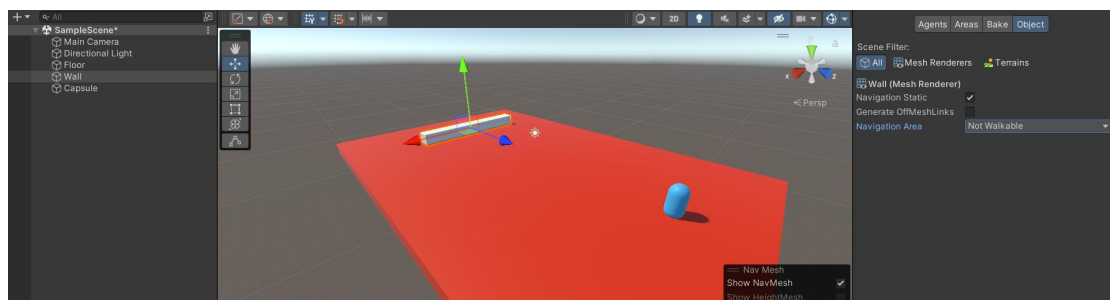
Go to Object in the Navigation Tab



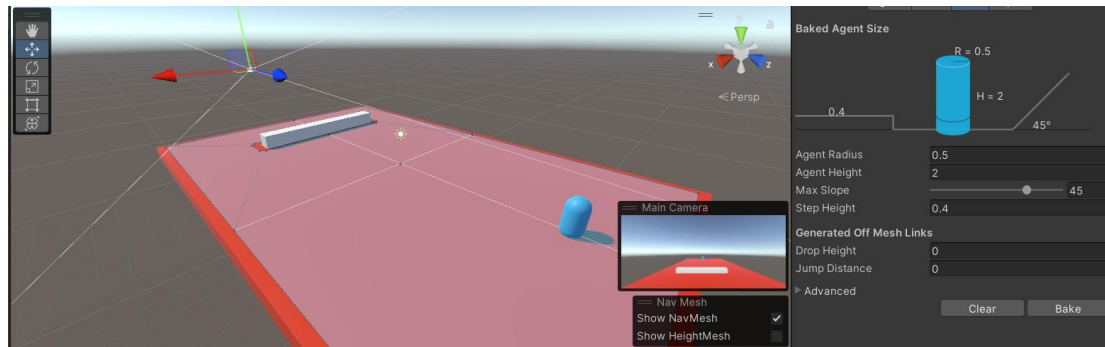
Make the floor navigation static and make it walkable.



Similarly make the wall navigation static and make it unwalkable.



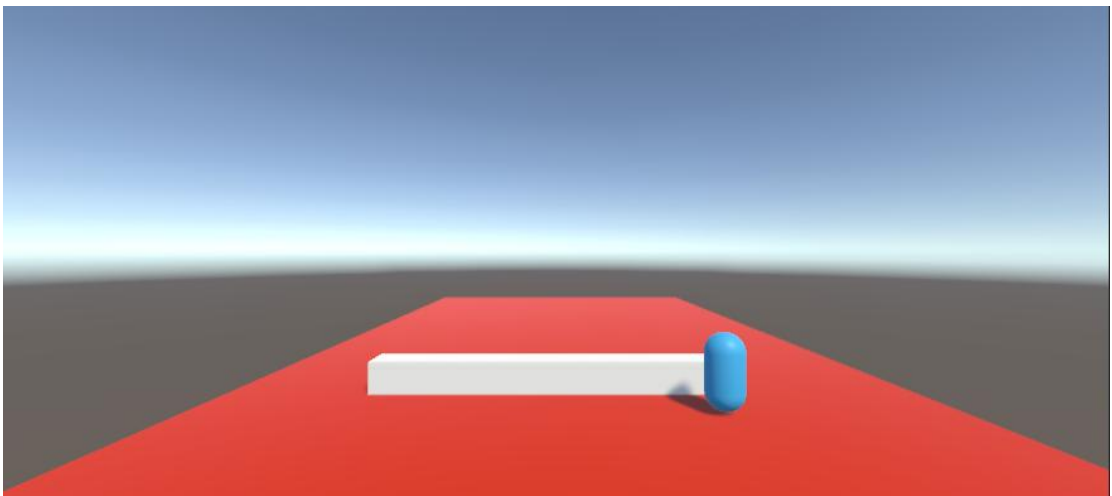
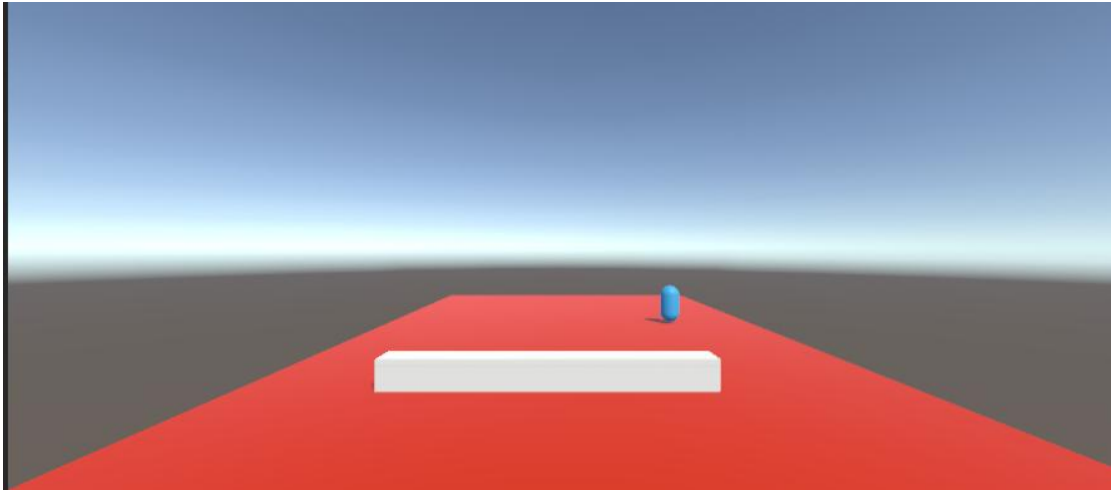
Now we bake it. The light color area shows us the mesh.



Finally add script for player movement.

```
PlayerController.cs X
C: > Users > Meghna > Semester VI > Game Programming J Comp > Lab10 > Assets > PlayerController.cs
1 using System.Collections;
2 using System.Collections.Generic;
3 using UnityEngine;
4 using UnityEngine.AI;
5
6 public class PlayerController : MonoBehaviour
7 {
8     public NavMeshAgent agent;
9     // Start is called before the first frame update
10    void Start()
11    {
12        //
13    }
14
15    // Update is called once per frame
16    void Update()
17    {
18        if (Input.GetMouseButtonDown(1))
19        {
20            Ray movePosition = Camera.main.ScreenPointToRay(Input.mousePosition);
21            if (Physics.Raycast(movePosition, out var hitInfo))
22            {
23                agent.SetDestination(hitInfo.point);
24            }
25        }
26    }
27 }
28
```

Run the game. Right click on the floor for the player to move. We can see that it goes arounds the wall when clicked near it.



Video Link :

<https://drive.google.com/file/d/17Oazq9vxi8S7JkIB7qF7smsMjJAaz9kI/view?usp=sharing>