PacMan3D

Unity Case Study

Made using Unity Engine

Overview :

PacMan3D is a prototype of the classic arcade PacMan game . Instead of Enemies to run-away from here you got to make sure that you keep yourself away from the traps laid . We collect biscuits in order to increase our score .

Gameplay Mechanics :

We basically use WASD movement mechanics . Since the Player GameObject is always in motion towards the direction its looking at , we simply change directions using WASD keys.

W- To look front .

S - To look back .

A - To look left .

D - To look right .

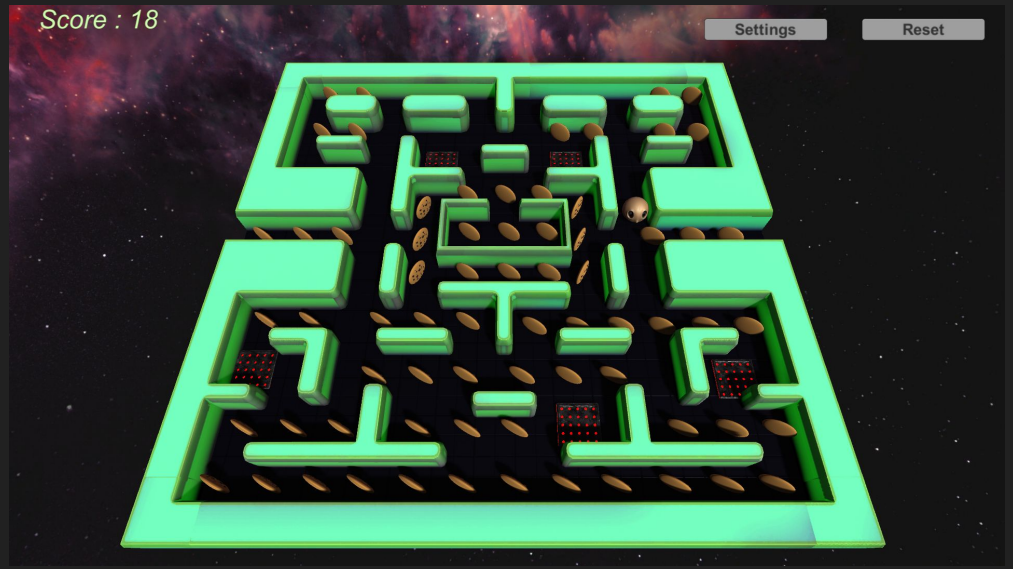
And while we do all this we need to make sure we dont collide with the traps laid while moving because we will die if we get caught in any of them .

Screenshots :

#1 Main Menu

You press the play button to start playing the game . You press the Quit button to quit the game application .

#2 Gameplay



The game has started and you need to collect the biscuits to increase your score and avoid all the traps laid .

To reset the game you can press the “Reset ” button .

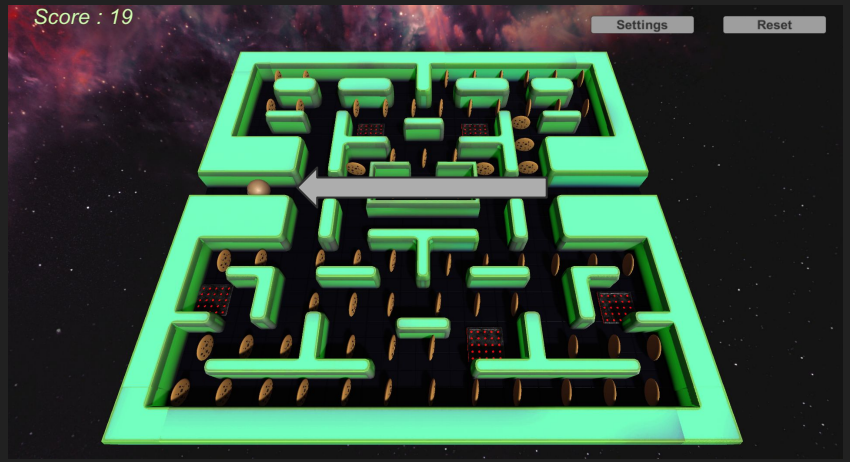
#3 Settings UI

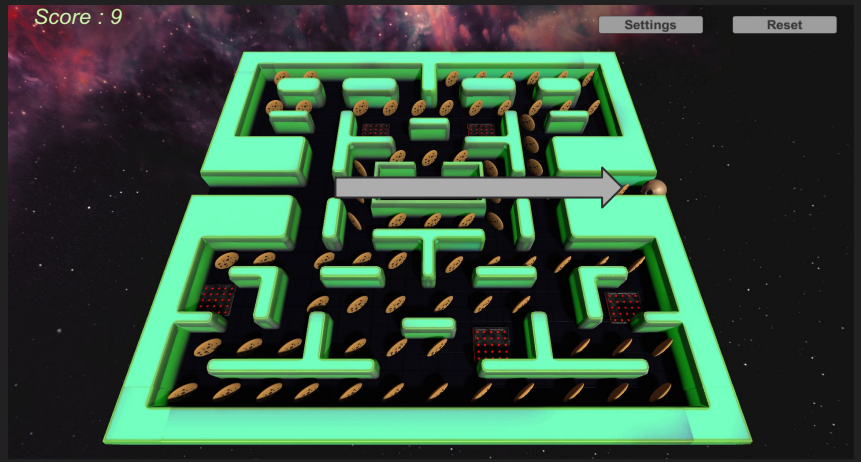
A panels pops up when we click on the settings button . Where we can press the “GO BACK TO MAIN MENU “ button to go back to the main menu screen or the “Quit” button to quit the game or “Close Settings” button to close the settings .

#4 After Death UI

If we collide with any of the traps laid we will die and this screen will be displayed . And then after 5 seconds the game will be reset .

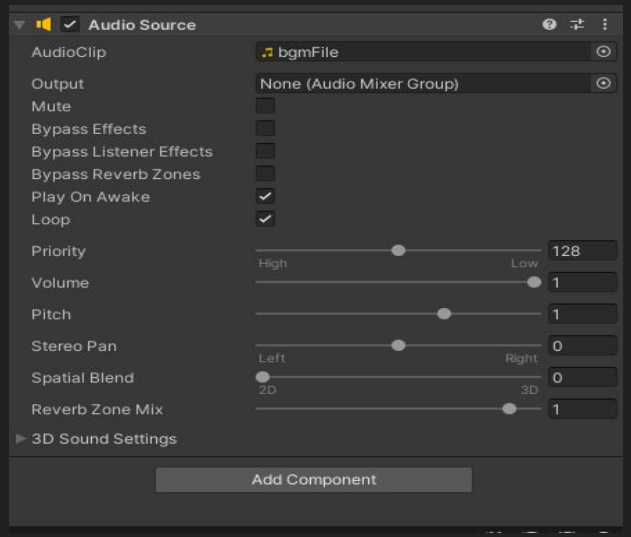
#5 Teleporting In Maze





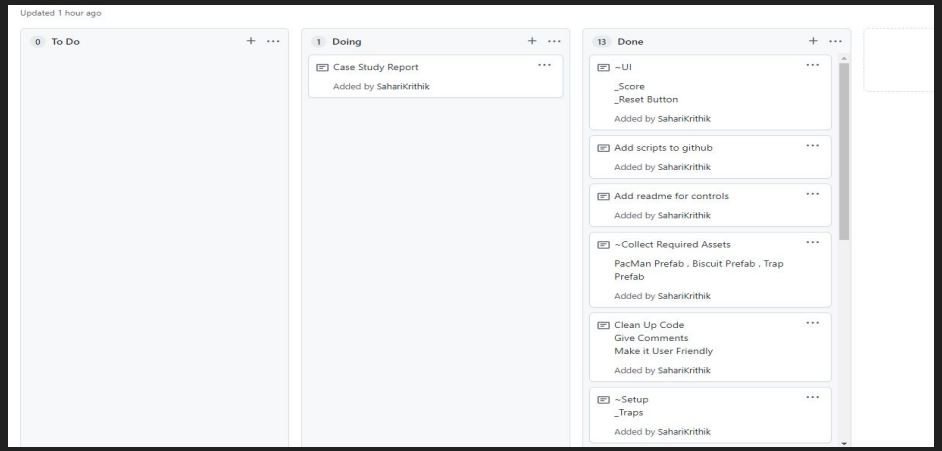
If we go towards left we teleport to the right side as shown in the screenshots and it also happens vice versa .

#6 Background Music



There is also a background music that plays which keeps us thrilled while we are playing the game .

#7 Git-Hub



Used the project-boards that github provides to keep track of the tasks .

Challenges faced during making of this project :

~In GameObjects :

As we can see the Player GameObject used is spherical in shape , hence when giving it a movement through scripting , we can notice it rotating as it moves . Had to fix it . The Player GameObject had to be given the right scale and the right size for the box collider .

~In Level Map [Maze] :

An invisible floor and ceiling had to be given in order to not let the Player GameObject to fly away as it moves through the maze .

~In Scripts :

Very few variable names / function names will be quite longer in order to make it user-friendly .

~ In GitHub :

Committing and pushing takes quite a long time and throws up unwanted errors which had to be fixed .

In the open wide space a neon green maze has been placed . This sci-fi theme has been given as a result of modernization . As it will also attract the current generation who are really into flashy games .

All the assets [Player GameObject , Biscuit , Maze] have been imported from assetstore.unity.com . Made this as a Git Project and used GitHub as the version control medium , which also helped with me keeping track of tasks that I assigned myself .