

AS Waypoint System

1. Introduction

The waypoint system is design to be efficient in runtime and editor design.
The main components of the AS Waypoint system are Loops.

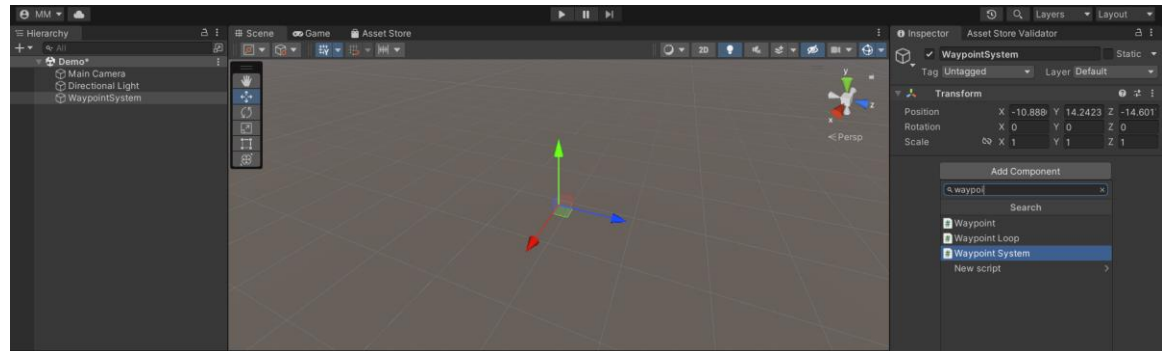
The system is design in hierarchical manner, Loops are independent list of waypoints that can be closed loop or opened.

The loops can be connected through branches, and navigates through the map using those branches.

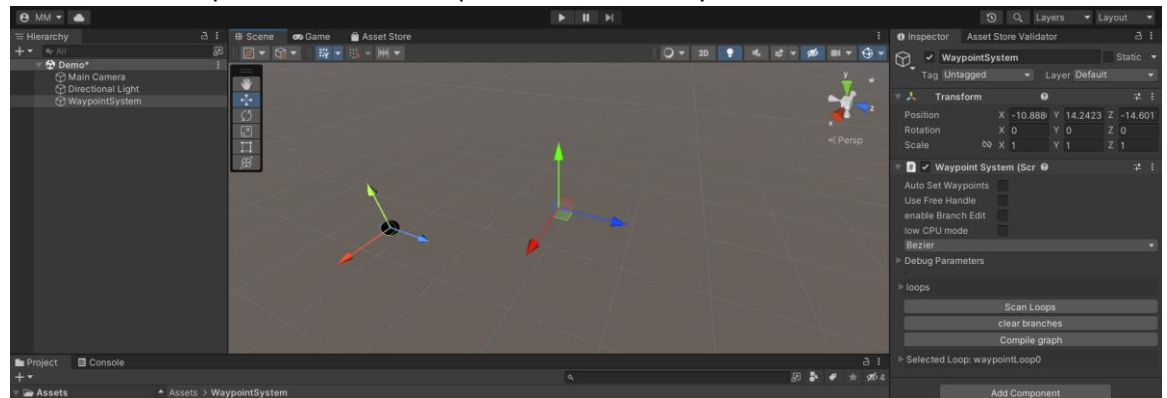
This design can make the path finding algorithm extremely quick.

2. How to use it

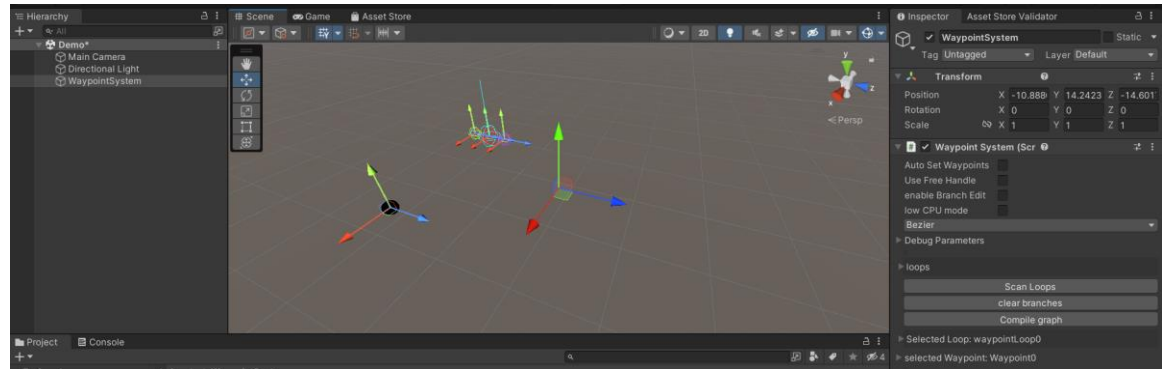
- 1- Start by adding the waypoint system to a gameobject.



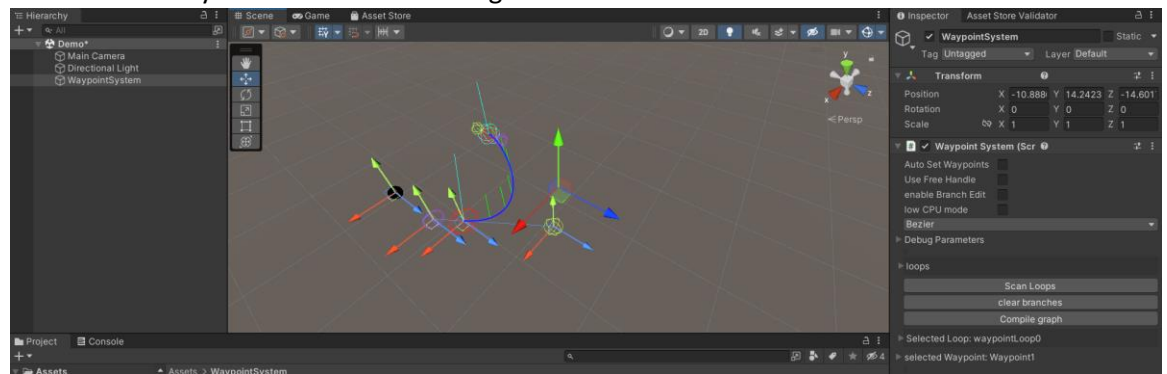
- 2- Click **shift + right click** at any point in screen to add a **Loop**
if there is an object in front of the camera the loop will stick to the surface
if not the loop will be created at specific distance away from the camera



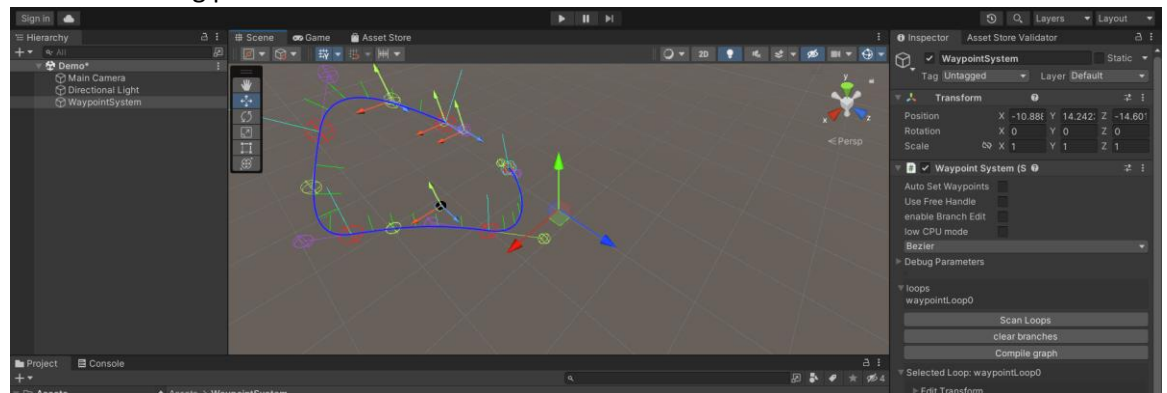
- 3- By default the created **Loop** is selected when selecting a loop press **shift + left click** to create a waypoint



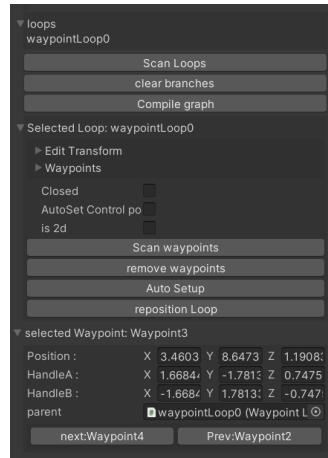
- 4- By default the created waypoint is selected, you can see the default colors green for **HandleA** (previous handle) and blue for **HandleB** (next handle).
- 5- A normal direction can be seen vertical to the view Adding another waypoint by **shift + left click** you will see the following.



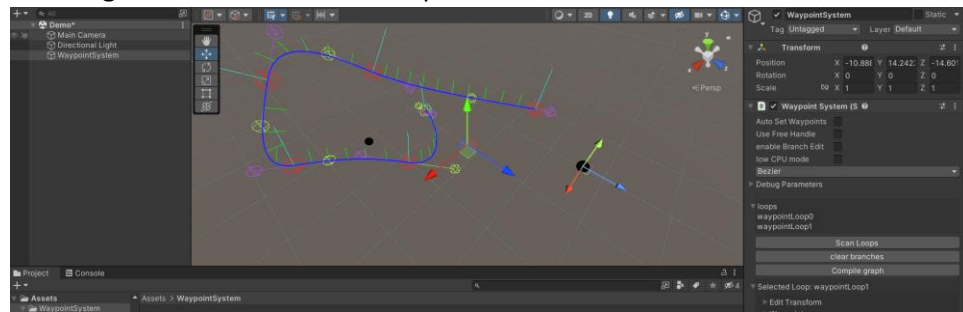
- 6- Another waypoint has been created connected by Bezier curve.
- 7- Continue adding points



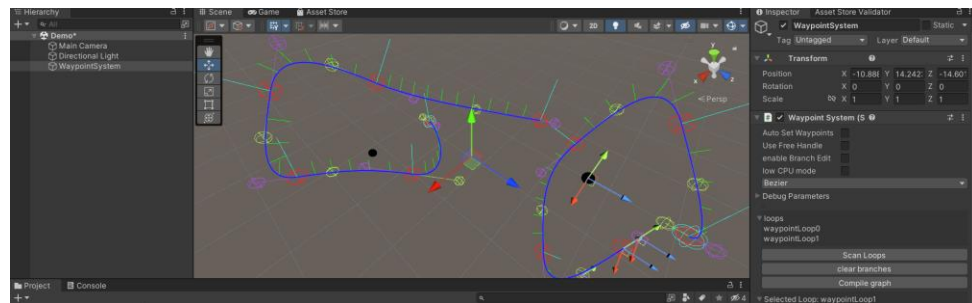
- 8- By default the last added waypoint is selected, you can change selection by pressing **ctrl + left click** near the wanted waypoint by selecting the waypoint you can open the edit part in inspector



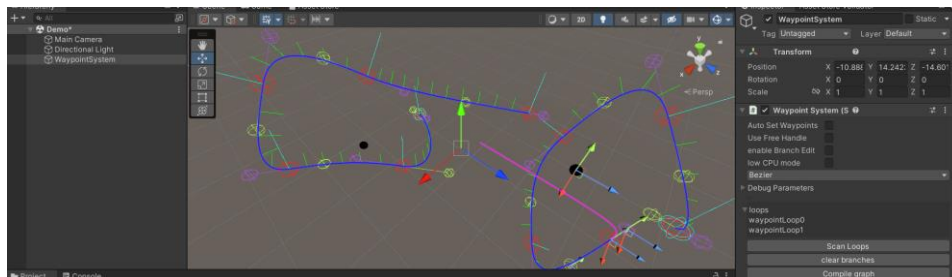
- 9- To add another loop you can first deselect the selected loop by pressing **ctrl + right click** then add new Loop as before



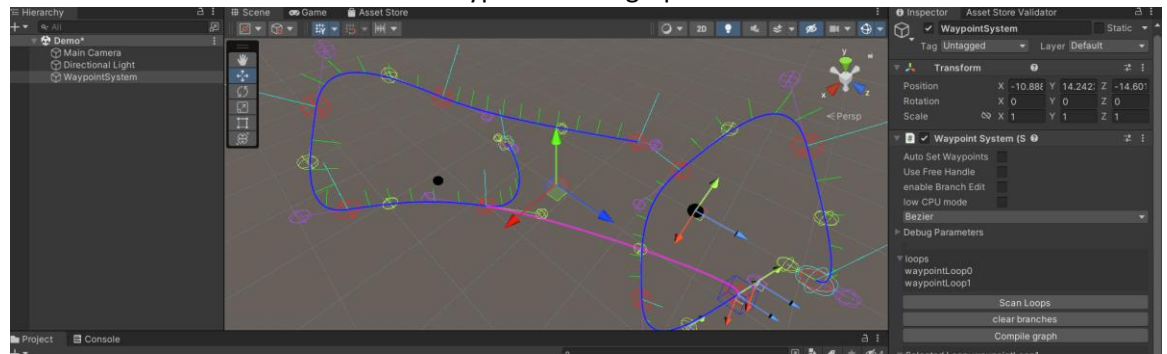
- 10- Continue as before



- 11- Now we have two separate loops to connect them you can press **ctrl+shift** to begin adding a branch but make sure to select the start waypoint before pressing This will happen,



12- Point the mouse to the destination waypoint in the graph and left click



A branch is added to the system

you can follow the example **pathFollower** to follow the steps to evaluate the path