# AGENTS OF STEER

Agents of steer is an AI system for unity that uses a combination of steering behaviours and some special logic to get the effect you want for all your wheel and non wheel based vehicles currently I only provide a couple of cars with preconfigured settings, I will add more vehicle in the future updates, we also now provide the new RaceManager system which helps you setup races with leader-boards in no time.

Thank you

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Get Started

Scene – First we need to customize a scene for the race, we need a modeled path and its layer should be set to "Ignore Raycast" like showed in the picture below because we don't want the car to detect floor as an obstacle.
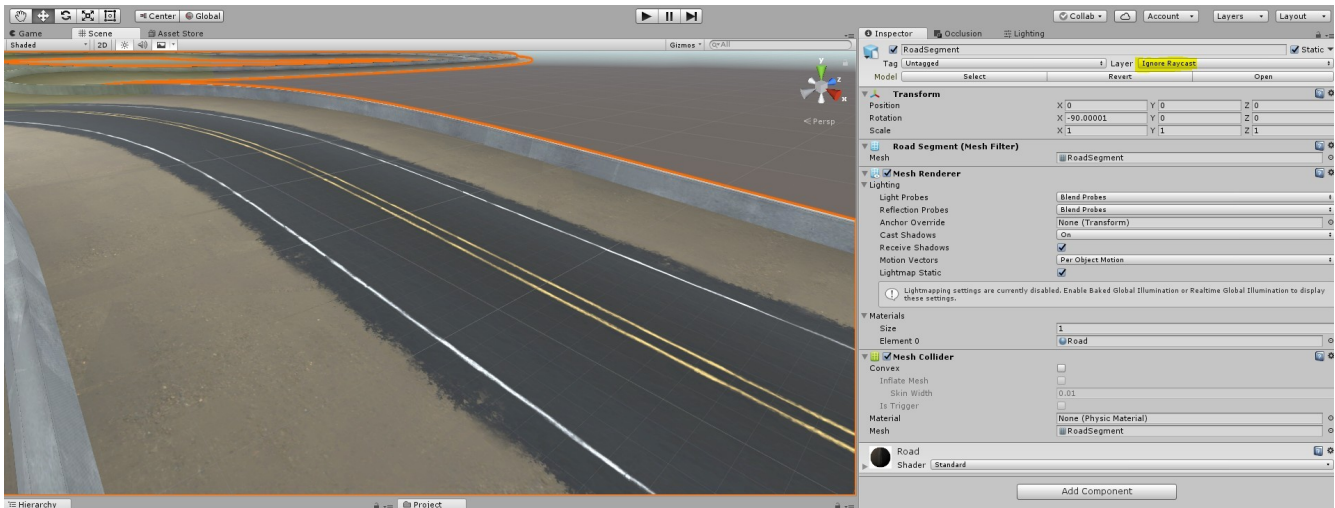

Creating walls – Walls use containment logic hence they are required to have a special layer, change its layer to special one and then add that layer on whatIsAWall variable on agentController component attached to the AI cars (we will do this later).
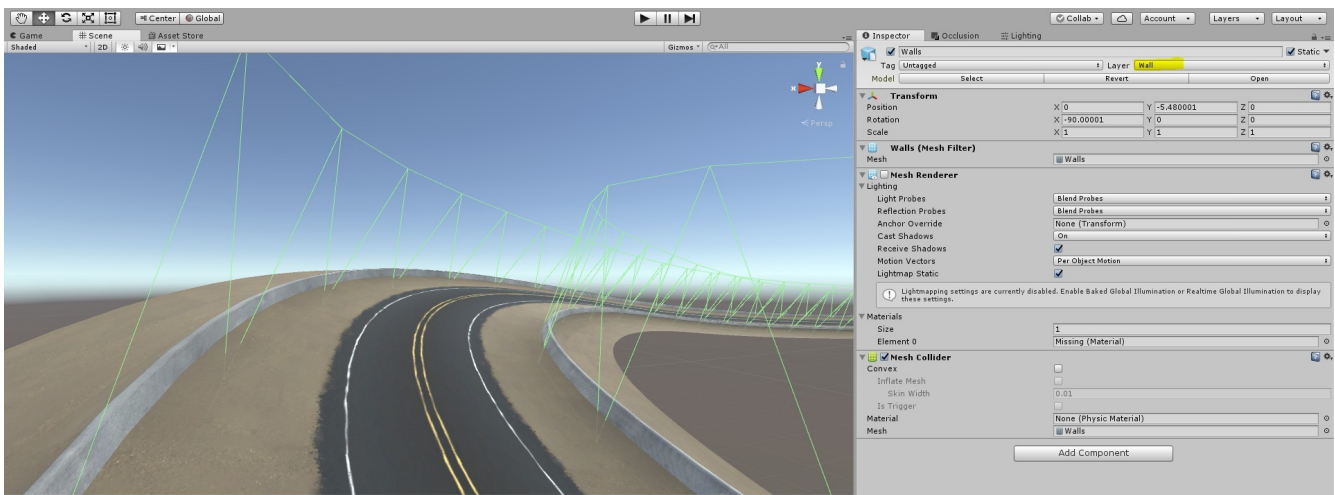
Creating the path – Now we need to define the path, for this, create an empty game object and add the AgentPathCreator component to it now the childs of the this object will create the path (you need at-least 4 child objects to create a smooth path), lay all the childs on the road the way you want.
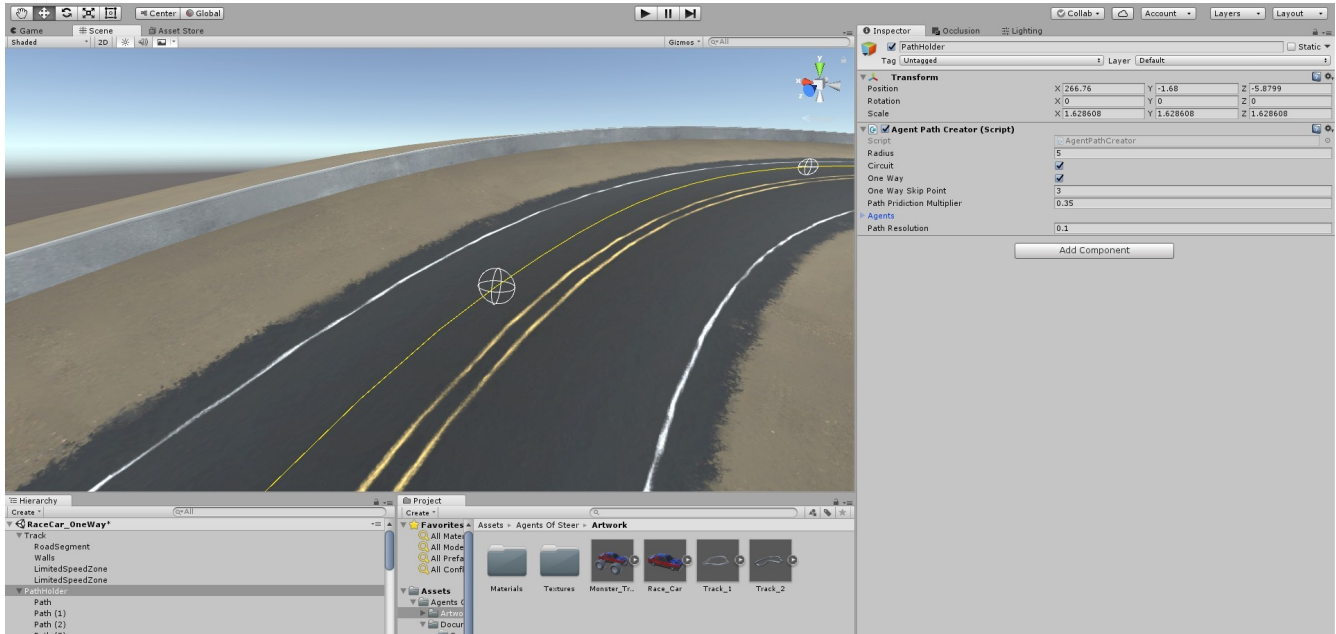
Adding Cars – Go to Agents Of Steer → Prefabs → Vehicles → Choose one and drag it in the scene make sure you add this car on the AgentPathCreators → Agents variable.
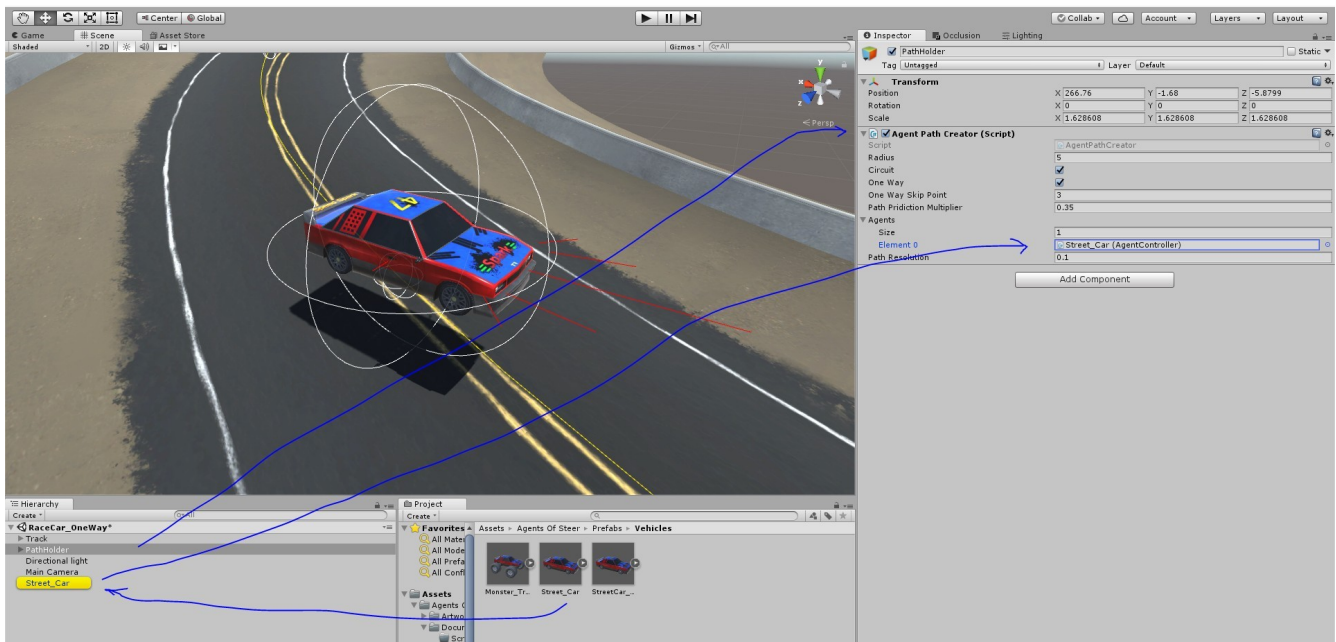
Play the editor , now you cars should just work fine , if your path have some dangerous curves where your car loses control , consider using limited speed zones just attach this script "LimitedSpeedZones" to a collider which is triggered and set it's layer to "ignore raycast" , this will help you set the maximum speed for certain part of the map , cars passing this area will not exceed this speed.
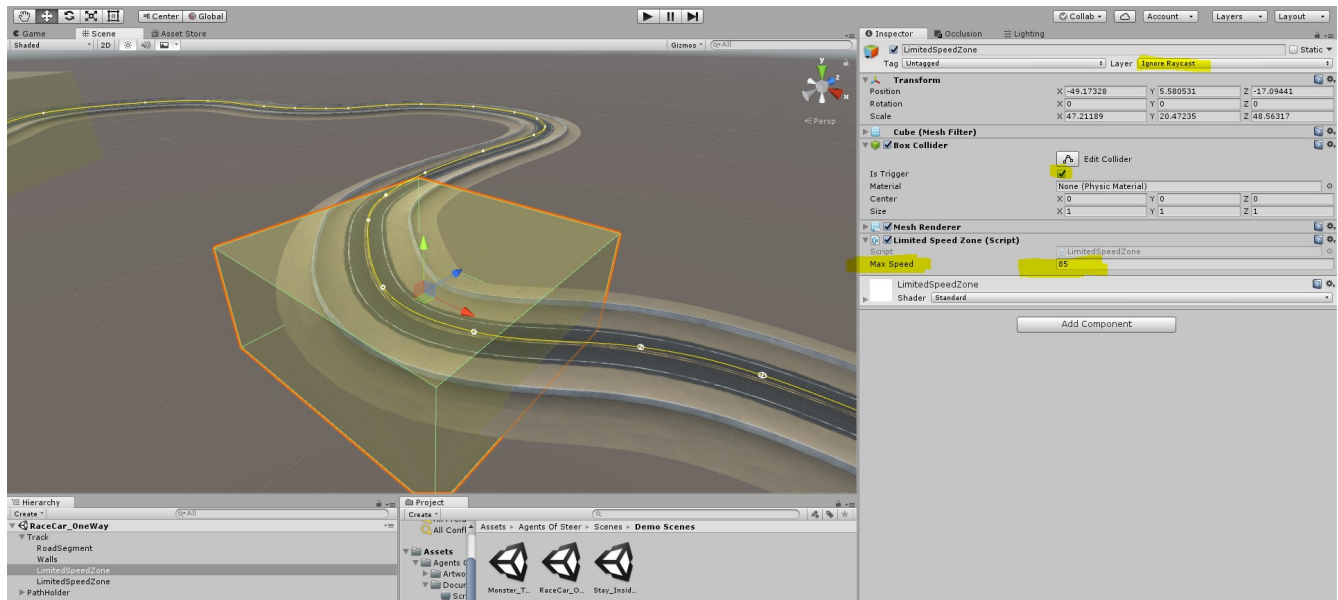
You will need to tweek these setting for every map. And test them out a couple of time before you get the behavior that woks for you.

Tips :)

1 – Please create your own car controller as the controller provided here is for the testing purpose only you can control any car by turning isControlledByPlayer on the AICarDriver this gives you the control of the AI car , make sure to add an AgentController to your player's car with an ample desiredSeprationDistance.

2 – To understand what every and each variable means and does please take a look at the script documentation provided in this package or because the scripts are very well commented you can open them and take a look at the comments.

3 – The AI car driver is very customizable you can add add as many wheels as unity allows as the AICarDrivers allows them as-well, so experiment with it and you can share them with me on Socialmedia.

4 – Any object that has a collider will be detected as an obstacle and the car will try to avoid it.

5 – Open the demo scenes to see how everything works

Get Started – With the Race Manger

1.4 and above

The main component of the race manager is "AgentRaceManager" found in Assets/Agents of Steer/Scripts . Just add it to an object that you think appropriate, it's recommended that you should add it where the "AgentPathCreator" as the Initiation call comes it.
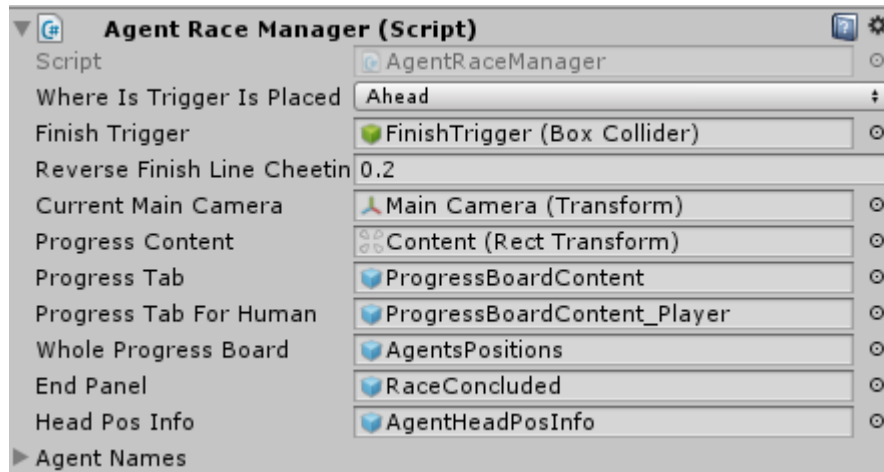
This component does a lot, but if you don't want to use a feature such as progress tabs or end panels , just don't assign them to the place holders.

First variable "Where Is Trigger is Placed" set it to "Ahead" if you are using a circuit and finish trigger is placed ahead of the spawning cars.

That's all for the "AgentRaceManager" component.

Experiment with the included scenes.

Now the "AgentRaceStarter" component

Make sure the "CartTypes" are assigned none of them are empty

These will be the types of cars that can be spawned in game

And for "SpawnPoints" these are the gameobject where the cars will be spawned – Sample prefabs in Assets/Agents Of Steer/Prefabs

"PlayerSpawnPoint" is where the Player's car will be spawned.
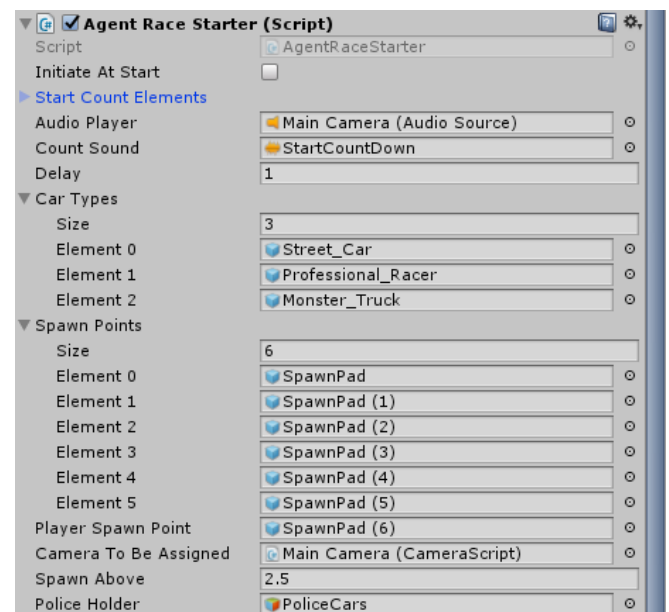
If you are starting a race from a menu by taking variables like I am in the menu scene, the you have to use the "AgentRaceStarterInitiater" and call the AssignVars() function, take a look at the "MenuController" to understand it better.

Thank You

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