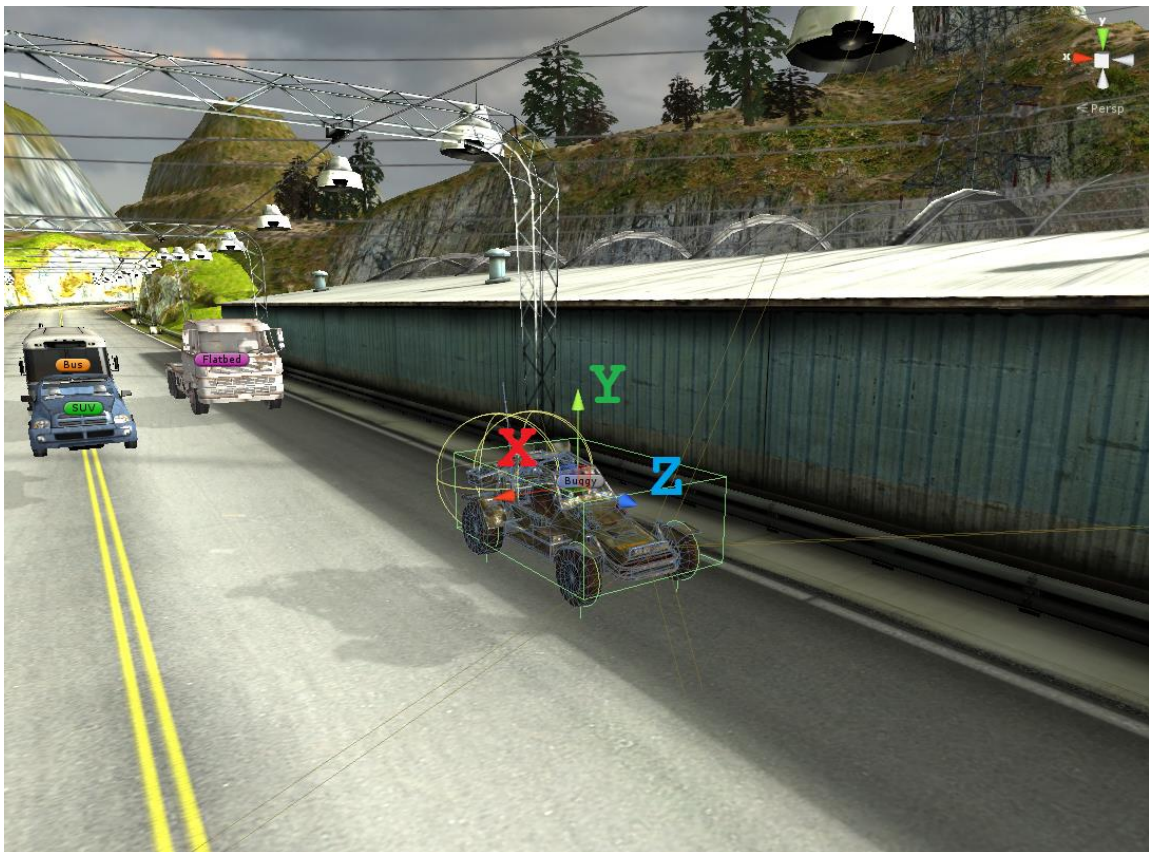# SMART AI CAR 2.6

First to Do!

Some users couldnt create just 2 new layers, or just they didn't read this documentation. <u>So, you don't need to create layers no longer</u>. I could include current Project Settings to the package. But this would overwrite your current Project Settings, and you will loose everything about your current settings. That's why I didn't include it. That's why you have to create 2 new layers. But as I said, you don't need to create them.

Just don't parent your cars to another gameobject. Your car must be at root of your hierarchy;
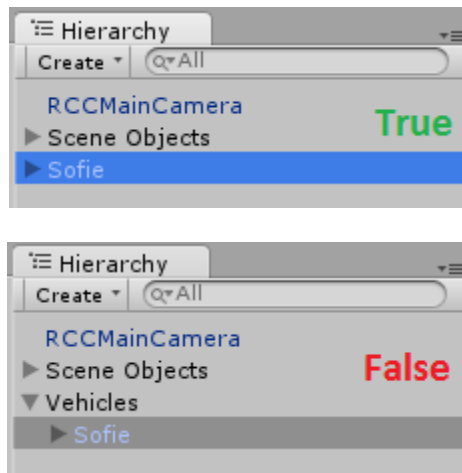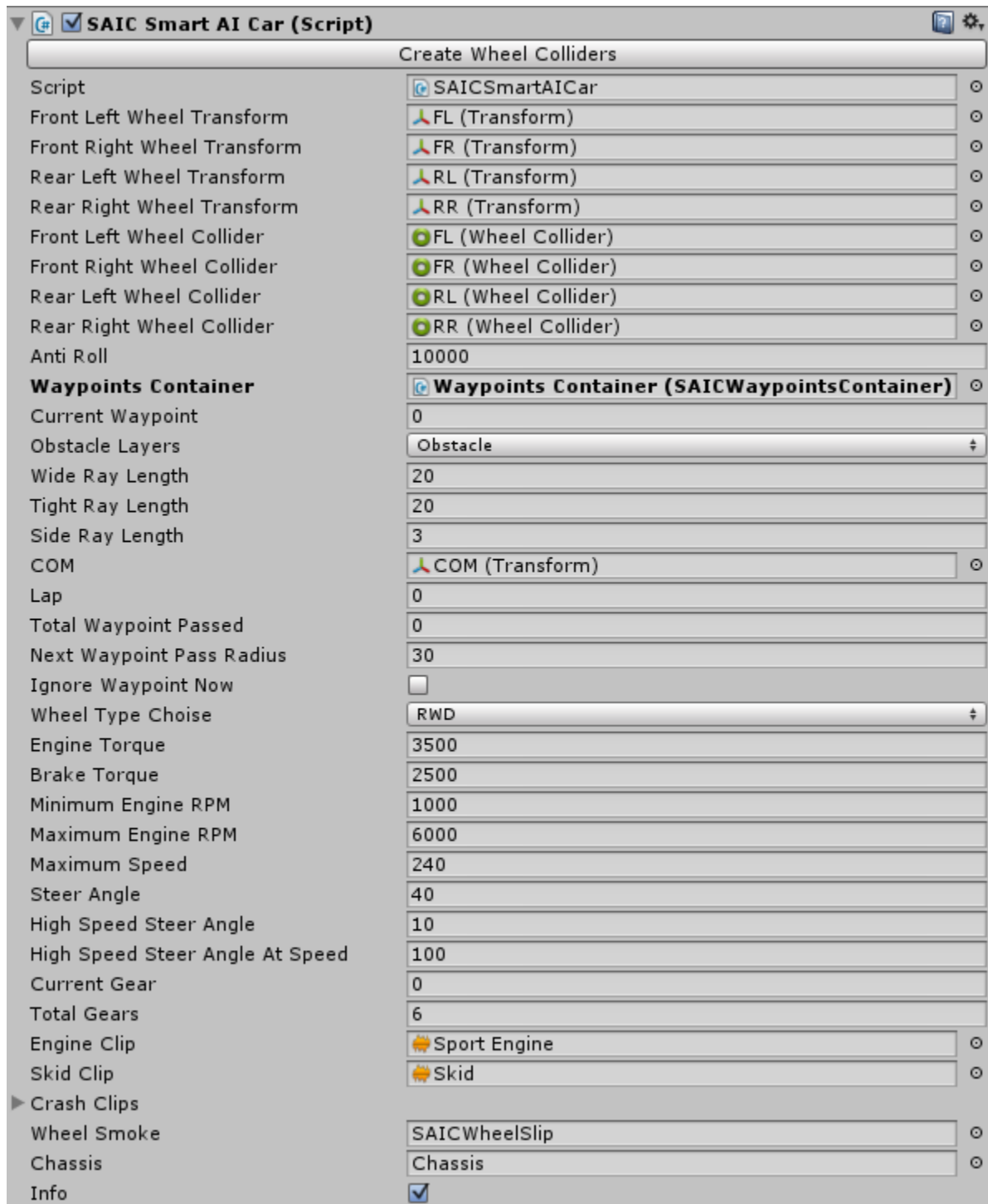

IMPORTANT

Your main gameobject scale must be 1, 1, 1. Otherwise, wheelcolliders will be placed at wrong positions. Be careful about your wheel transforms and colliders x, y, z coords. Z should be facing at forward, X should be right, and Y should be up. Otherwise, transforms and colliders will not act as should be. If your model coords are at wrong direction, just create an empty game object at center of the wheel, set the coords as just like i said, and parent wheel gameobject to that empty new gameobject. But if you want to do more professional and clean work, just edit pivot positions in 3ds max or any other design software. And be sure that all of your wheel colliders scale is set to 1, 1, 1.

How to Setup A Scene With AI Cars

This is the main Smart AI Car script attached to your AI vehicle;

▼ Ⓖ ☑ **SAIC Smart AI Car (Script)**	🔲 ⚙
Create Wheel Colliders	
Script	Ⓖ SAICSmartAICar
Front Left Wheel Transform	⊥ FL (Transform)
Front Right Wheel Transform	⊥ FR (Transform)
Rear Left Wheel Transform	⊥ RL (Transform)
Rear Right Wheel Transform	⊥ RR (Transform)
Front Left Wheel Collider	⊙ FL (Wheel Collider)
Front Right Wheel Collider	⊙ FR (Wheel Collider)
Rear Left Wheel Collider	⊙ RL (Wheel Collider)
Rear Right Wheel Collider	⊙ RR (Wheel Collider)
Anti Roll	10000
Waypoints Container	Ⓖ **Waypoints Container (SAICWaypointsContainer)**
Current Waypoint	0
Obstacle Layers	Obstacle
Wide Ray Length	20
Tight Ray Length	20
Side Ray Length	3
COM	⊥ COM (Transform)
Lap	0
Total Waypoint Passed	0
Next Waypoint Pass Radius	30
Ignore Waypoint Now	☐
Wheel Type Choise	RWD
Engine Torque	3500
Brake Torque	2500
Minimum Engine RPM	1000
Maximum Engine RPM	6000
Maximum Speed	240
Steer Angle	40
High Speed Steer Angle	10
High Speed Steer Angle At Speed	100
Current Gear	0
Total Gears	6
Engine Clip	🔊 Sport Engine
Skid Clip	🔊 Skid
▶ Crash Clips	
Wheel Smoke	SAICWheelSlip
Chassis	Chassis
Info	☑

Just select all of your wheel transforms, then click "Create Wheel Colliders"button for creating proper wheelcolliders. You can leave all other settings as default.
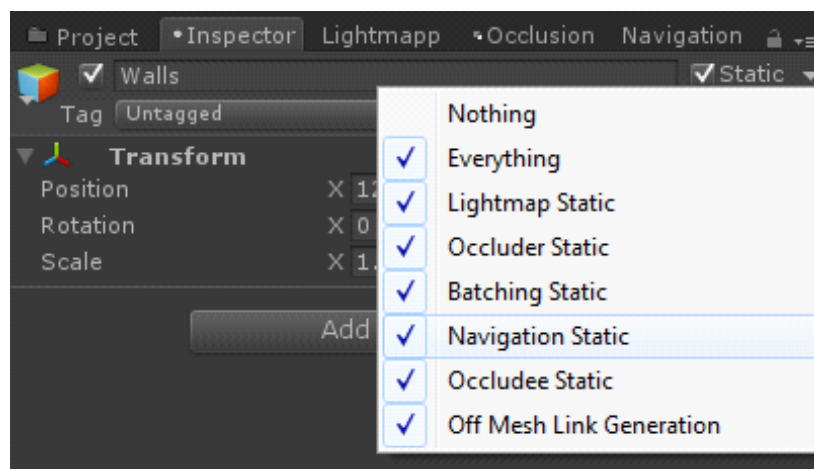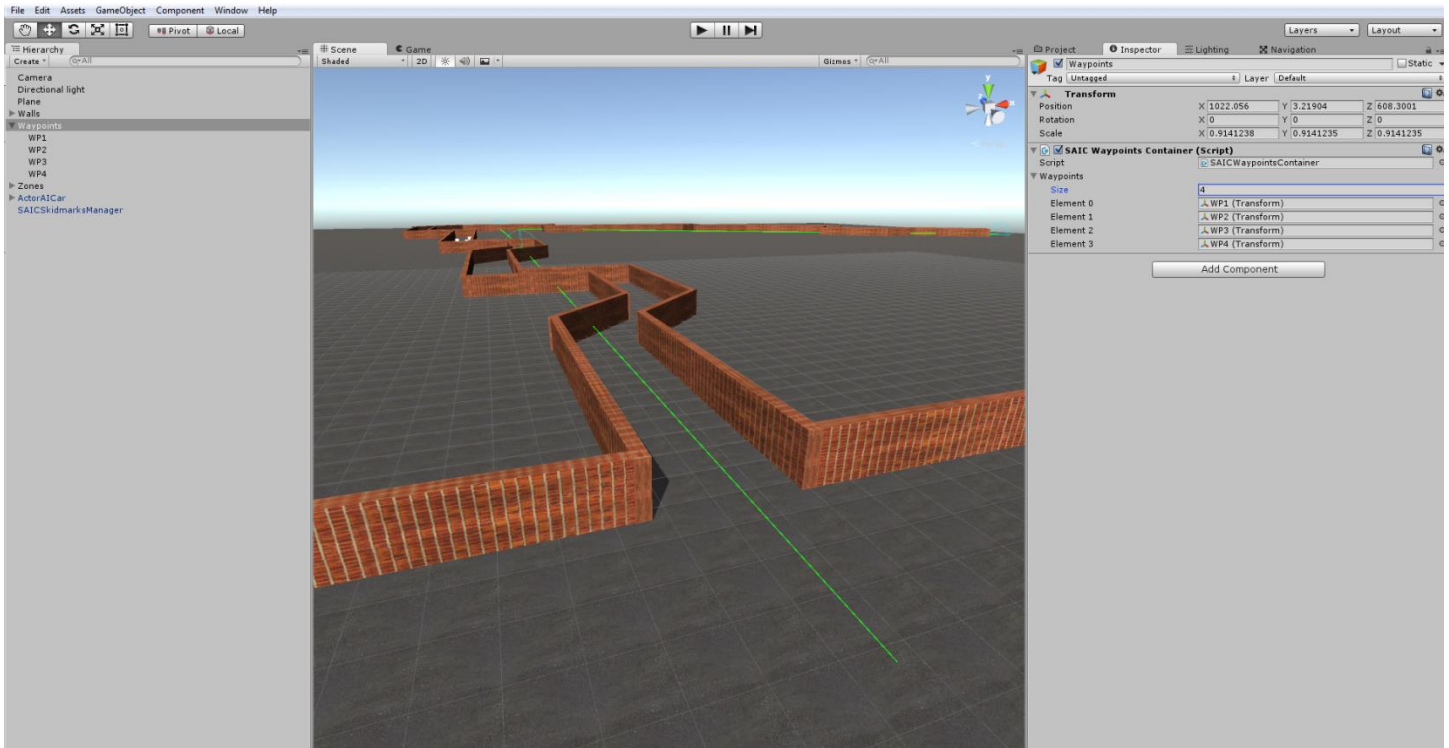
Creating Waypoints and Brake Zones

Just add container to your scene. Shift + Left Mouse Button will create your waypoints or brake zones on your road.
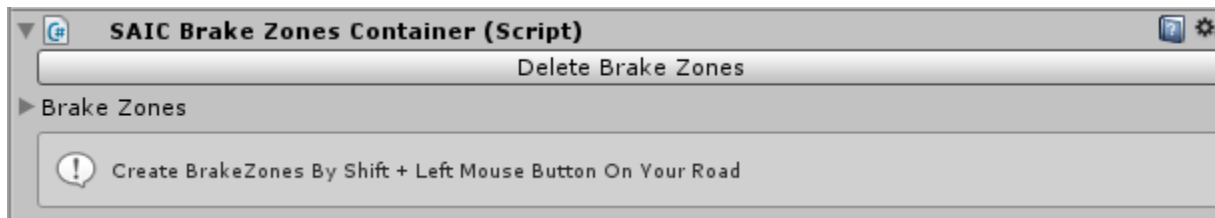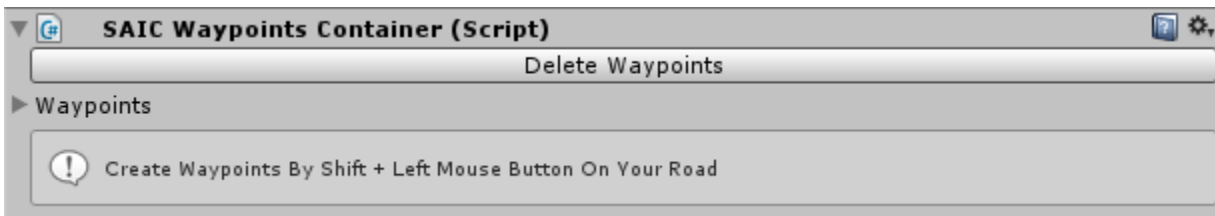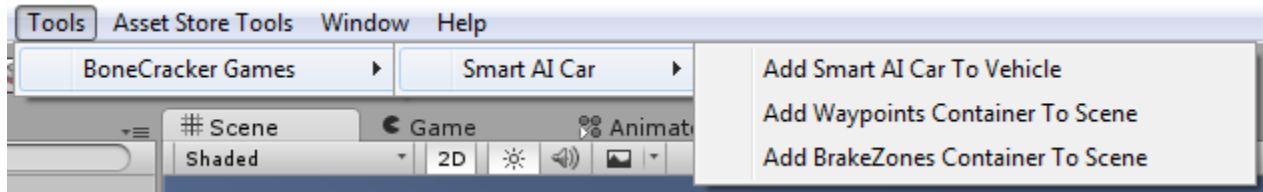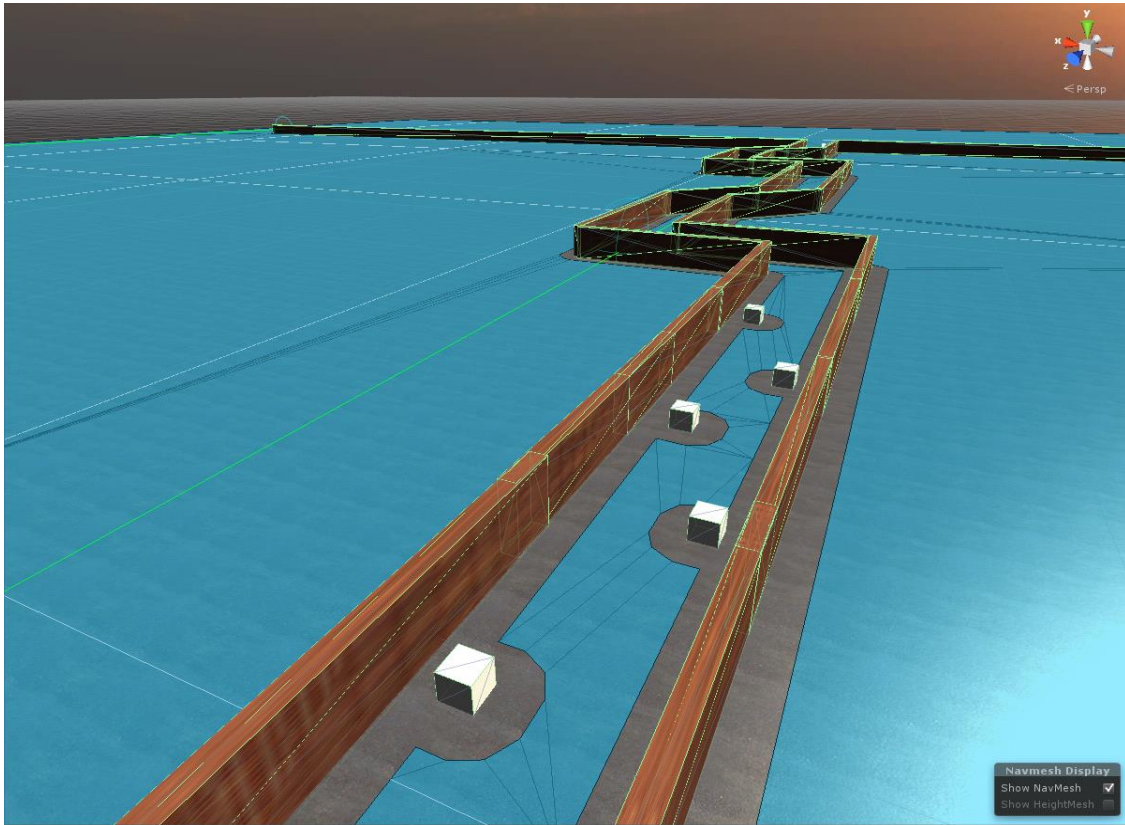
Baking Navigation Mesh

Then you must bake your navigation mesh. Open navigation panel from Window → Navigation. Make sure all your obstacles (except movable objects) must be static objects.

After all of your static objects marked as static, click the "Bake" button on your navigation panel.

And you must get a result like this;

AI Vehicle Setup

Add "SAICSmartAICar" script to root of your car. If you are getting trouble while creating a car, you can watch my tutorials on Youtube, it's pretty easy. As i said, be careful about your wheel transforms and colliders x, y, z coords. Z should be facing at forward, X should be right, and Y should be up. Select all of your wheel transforms in script, and click "Create Wheel Colliders". Check your wheel colliders size and radius. Should match to corresponding wheel size. All other settings are clearly understandable i think. Set your engine torque, brake torque, maximum minimum bla bla bla...

AI Brake Zones

You can set target speed for each individual brake zones. AI car will try to adapt it's speed to target speed when in this brake zone.
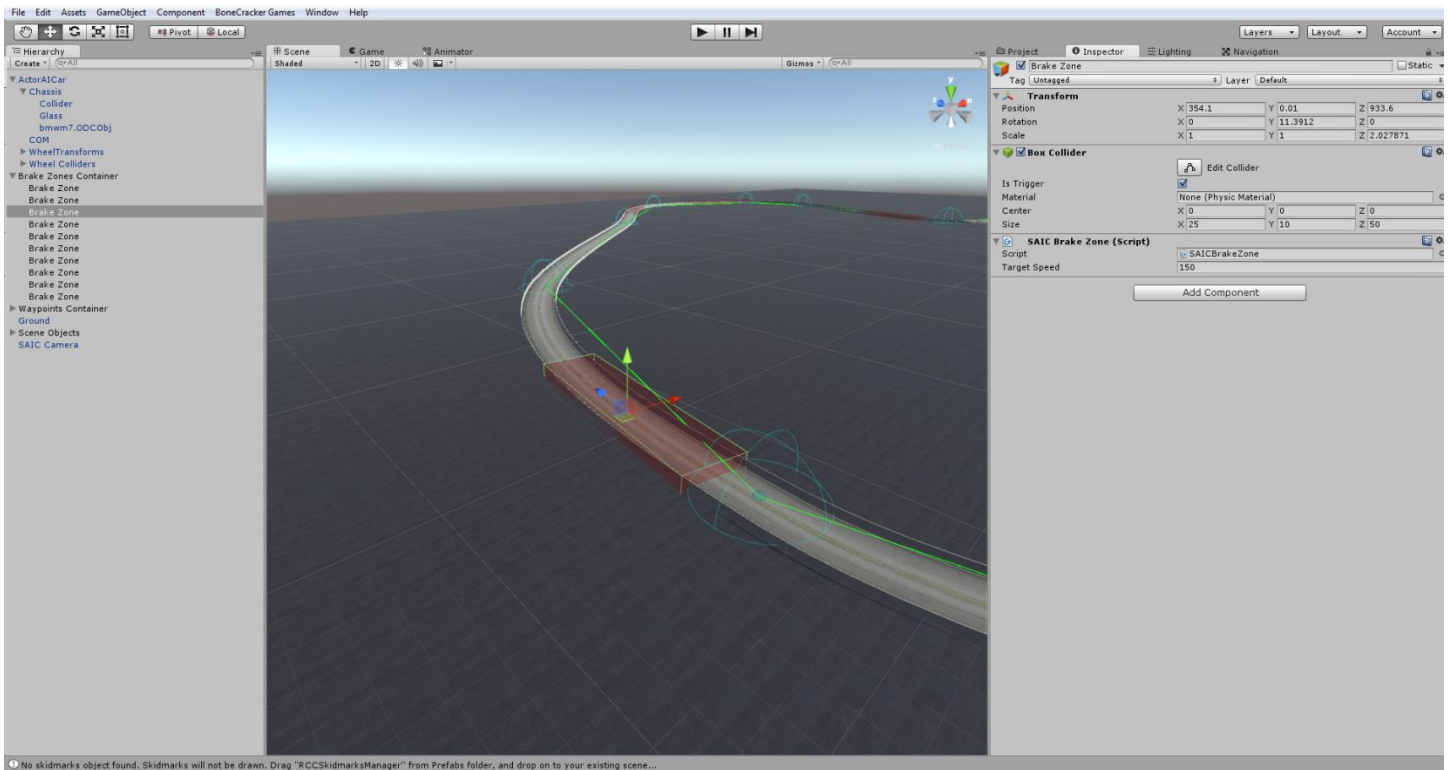
If you have any questions about my assets, please contact me on;

BoneCrackerGames@Gmail.com