



BATTLE TANK

STARTER KIT

Basic Manual

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Create Tank for Player

1. Prepare the model

First please check a local forward direction of tank, it must pointed to the front correct like this image.



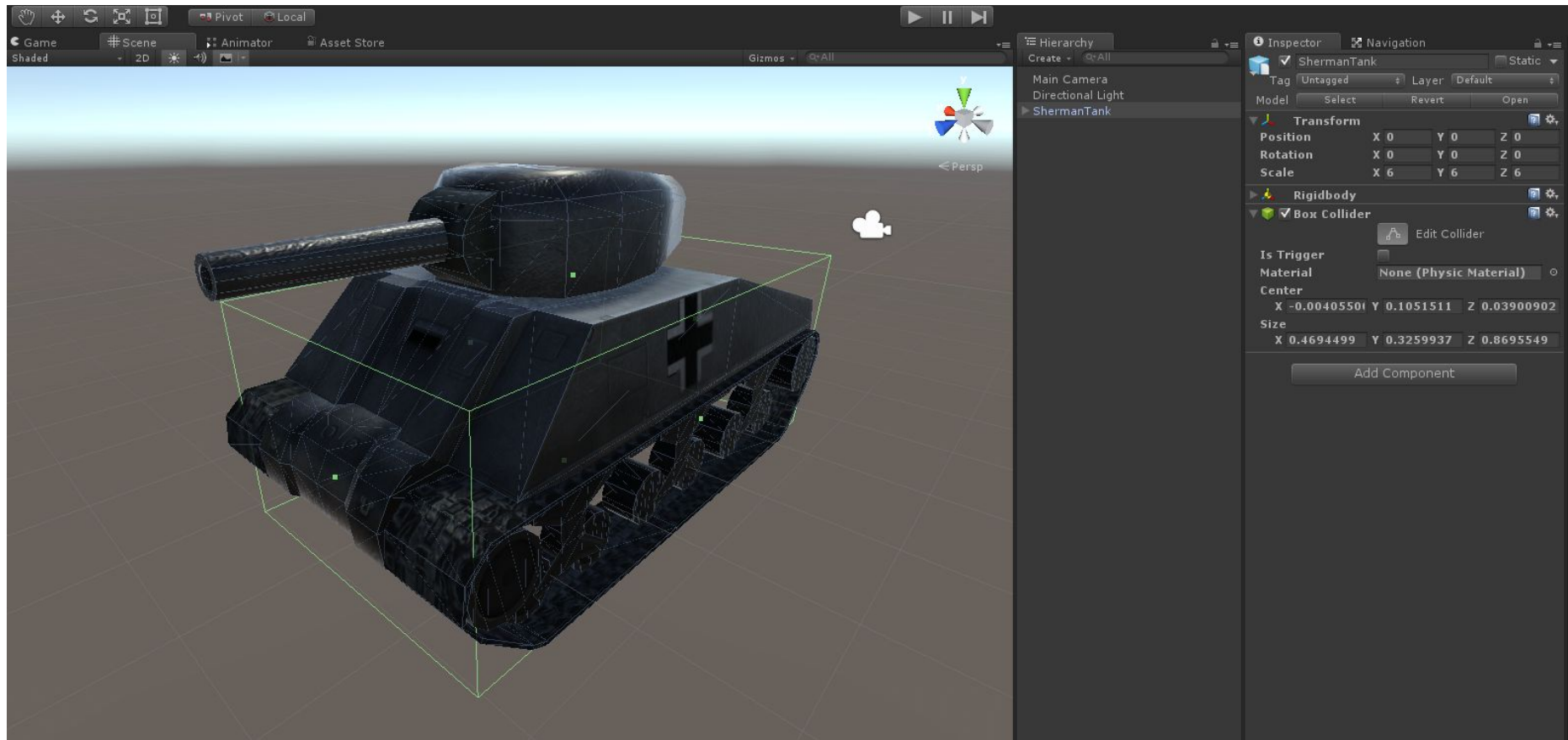
You can see the local forward direction by click this button to Local and the select the object.

If the forward is wrong direction because some 3d model editor are difference standard. you can fix it by

1. create new **Empty object**
2. set position and rotation to zero
3. place the tank child inside it
4. set tank position to zero
5. rotation the tank until right direction.

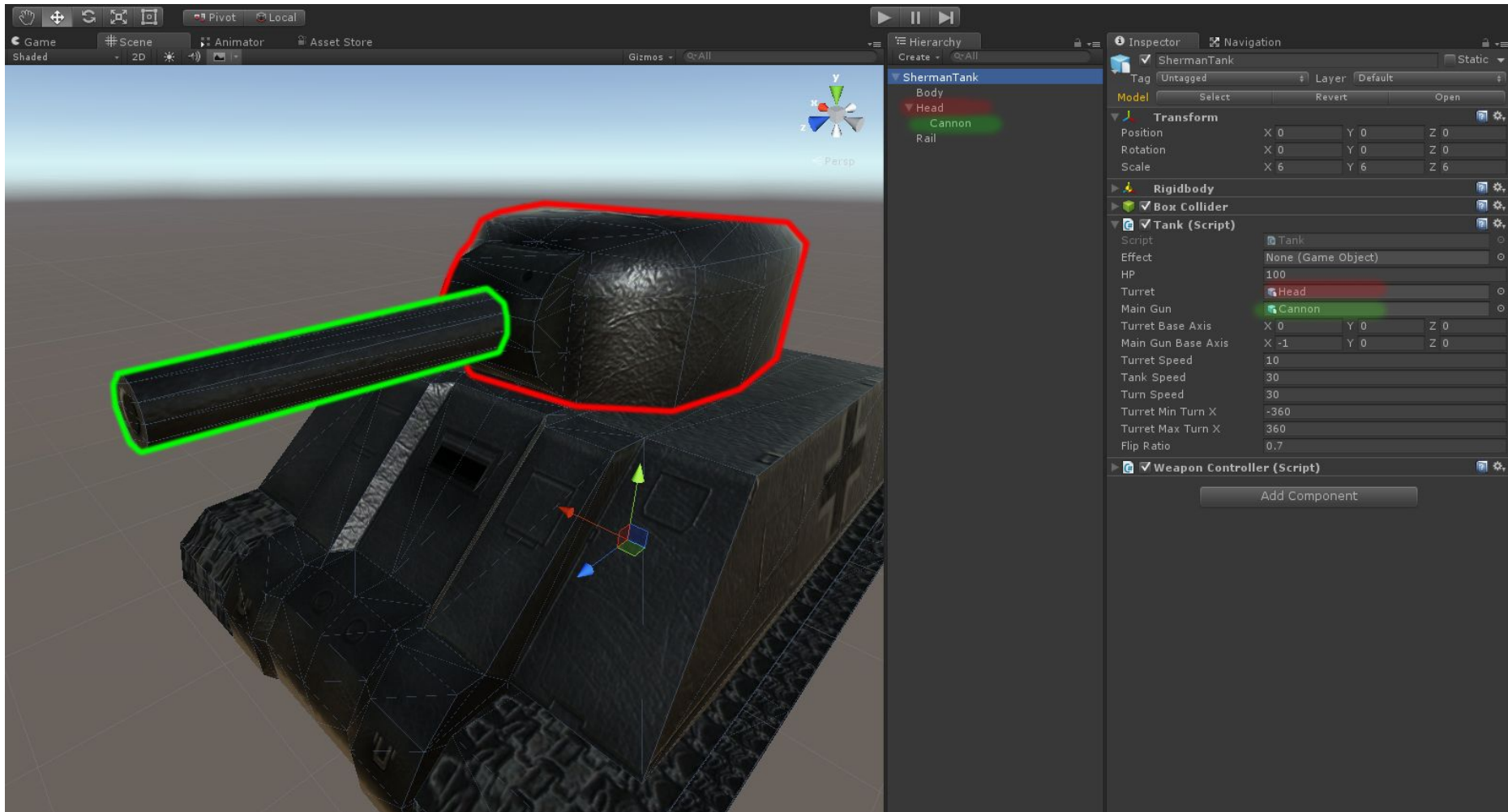
2. Add component to the model

1. After Import your tank to Unity and the model is ready
2. go to **Windows > BattleTank > Tank > Create Player Tank** you will see some component has been added.
3. First adjust a size of **Box Collider** to fit the tank perfectly.



3. Take a look at Tank component

You can setup HP of your tank here and you also have to set **Turret** and **Main** gun to make it can move and aim by add **Cannon** object to **Main gun** parameter , add **Turret** object to **Turret** parameter.

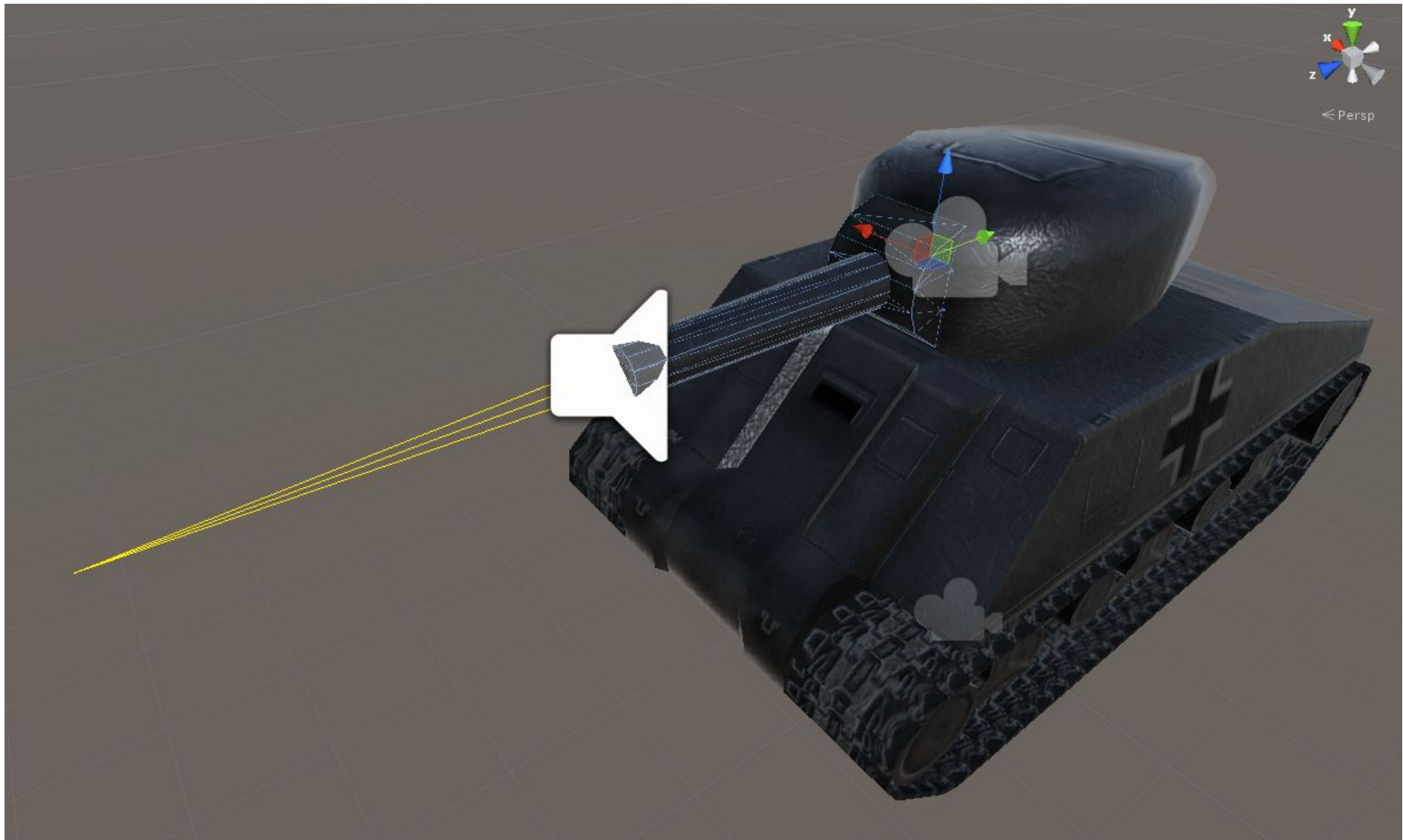


Importance!! Cannon object must child under Turret object like this image so it can rotate along the Turret object.

4. Weapon setup

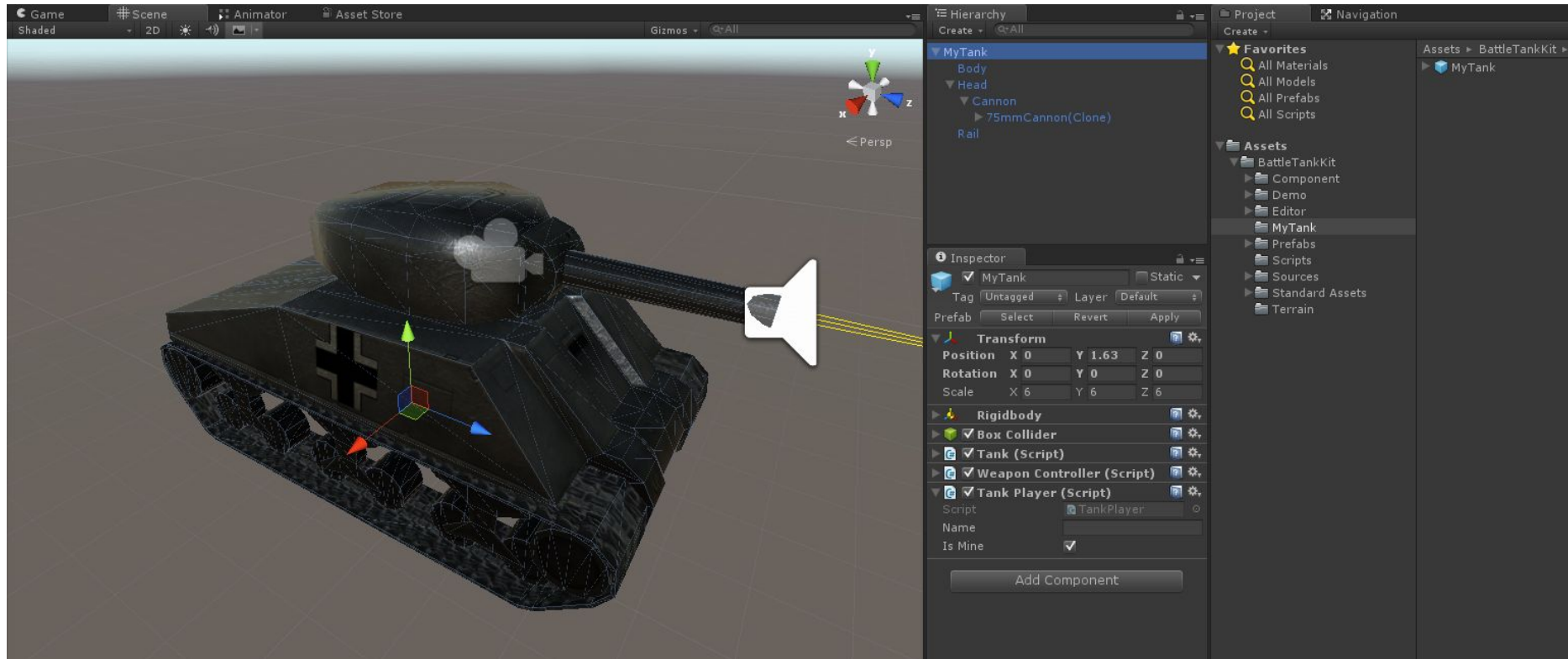
Select **Main gun** object and go to **Windows > Battle Tank > Weapons > Attach 75mm Cannon**

The weapon system object will be created and child under **Main gun**. so you have to rotate it until the yellow arrow is pointed correctly.



5. Save the tank

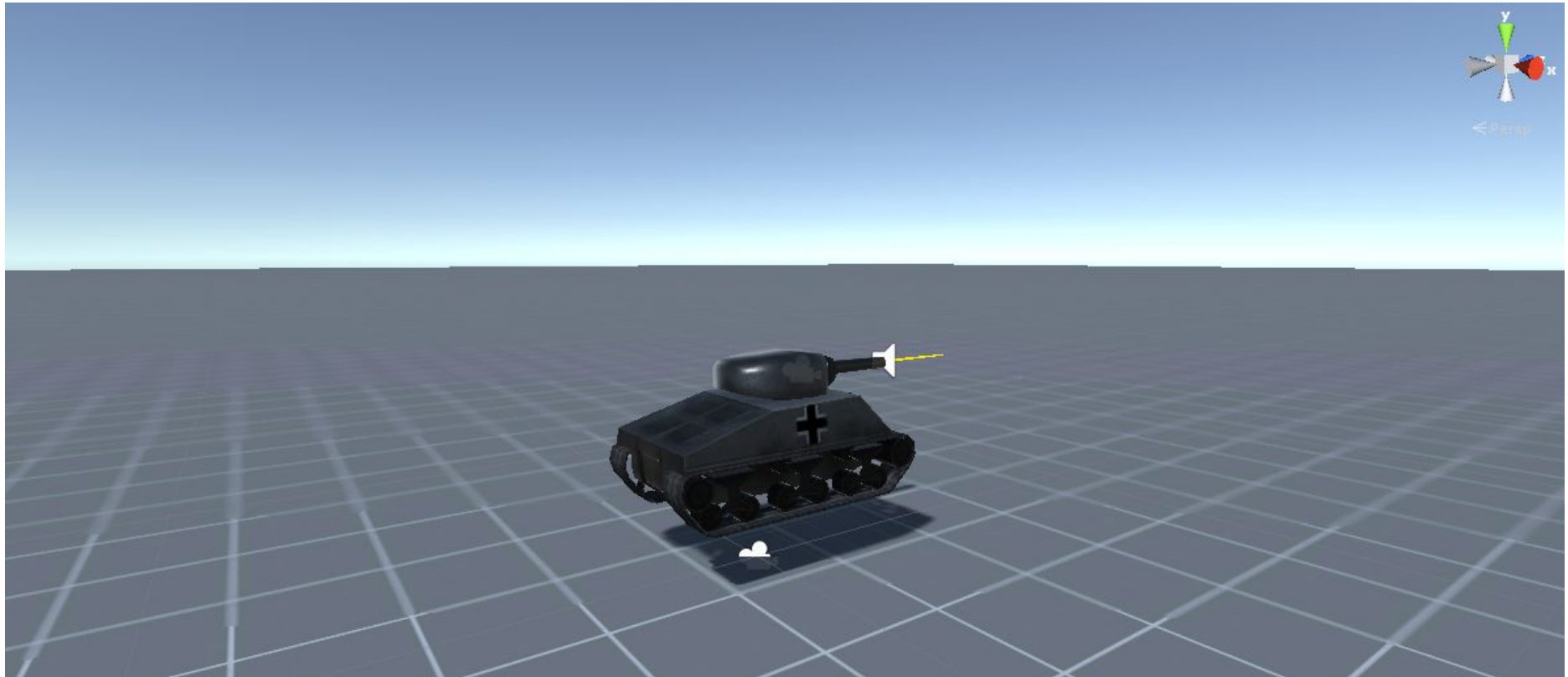
Next step you should name it and set a **Tag** as “**Player**” and save it as prefab. For this sample i named as **MyTank** and drag to **MyTank** folder **Assets/BattleTankKit/MyTank/** so you can easily use it in other scene by drag from this folder.



If everything is correct we will use this Tank prefab in the next step.

Game setup

Note For the first tank game example you have to create a simple environment includes floor or obstacles for driving and firing test. so we just using plane with scale 100 and setup some texture or whatever on it. and place a **Tank prefab** right there.

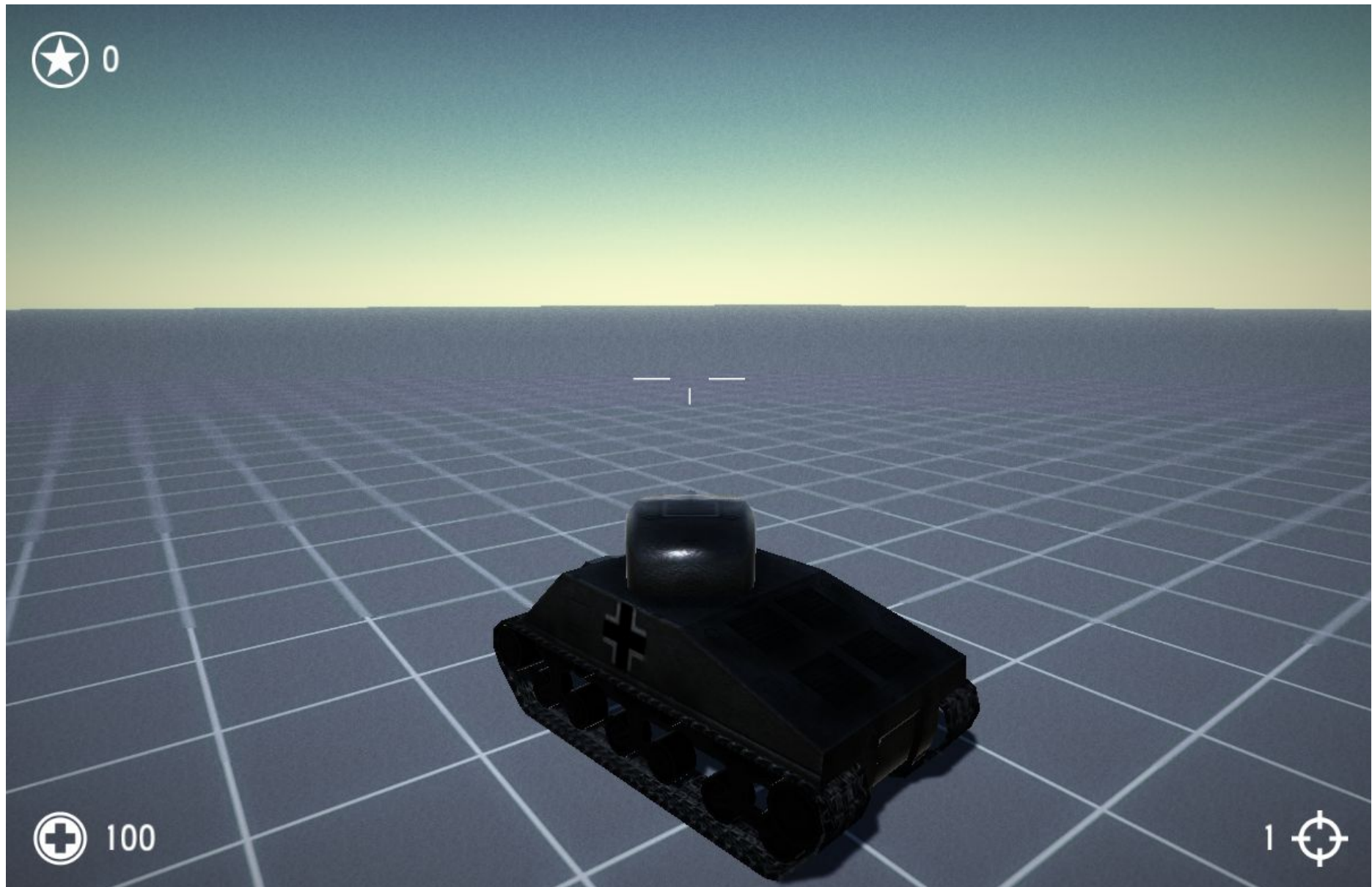


Go to **Windows > Battle Tank > Game > Game Setup**

all the game objects are created to the scene includes **GameManager** for collecting score and game function **TankCamera** for controller and **TankHUD** for in game mainmenu and HUD

Play Test!

if everything is correct the result should look like this. so you can move the tank with W A S D and firing with Mouse 1



Create Tank AI

The tank AI instruction is similar to [Player tank](#), so you can repeat all the steps like creating player tank but a little bit difference. that's we just using **Tank AI** component instead of **Tank Player** component

1. go to **Windows > BattleTank > Tank > Create AI Tank** you will see some component has been added.
2. First adjust a size of **Box Collider** to fit the tank perfectly.
3. You will see a similar components like player tank
4. If this AI is Friendly tank the **Tag** must set to "**Player**" if this AI is Enemy the **Tag** must set to "**Enemy**"
5. Please take a look at **TankAI** component

Take a look at Tank AI component

you will see many parameters here and basically they are good by default let's check **Target Tag** parameter

this parameter is an array for the Tags of target objects and you can add it multiple tag to make more variety.

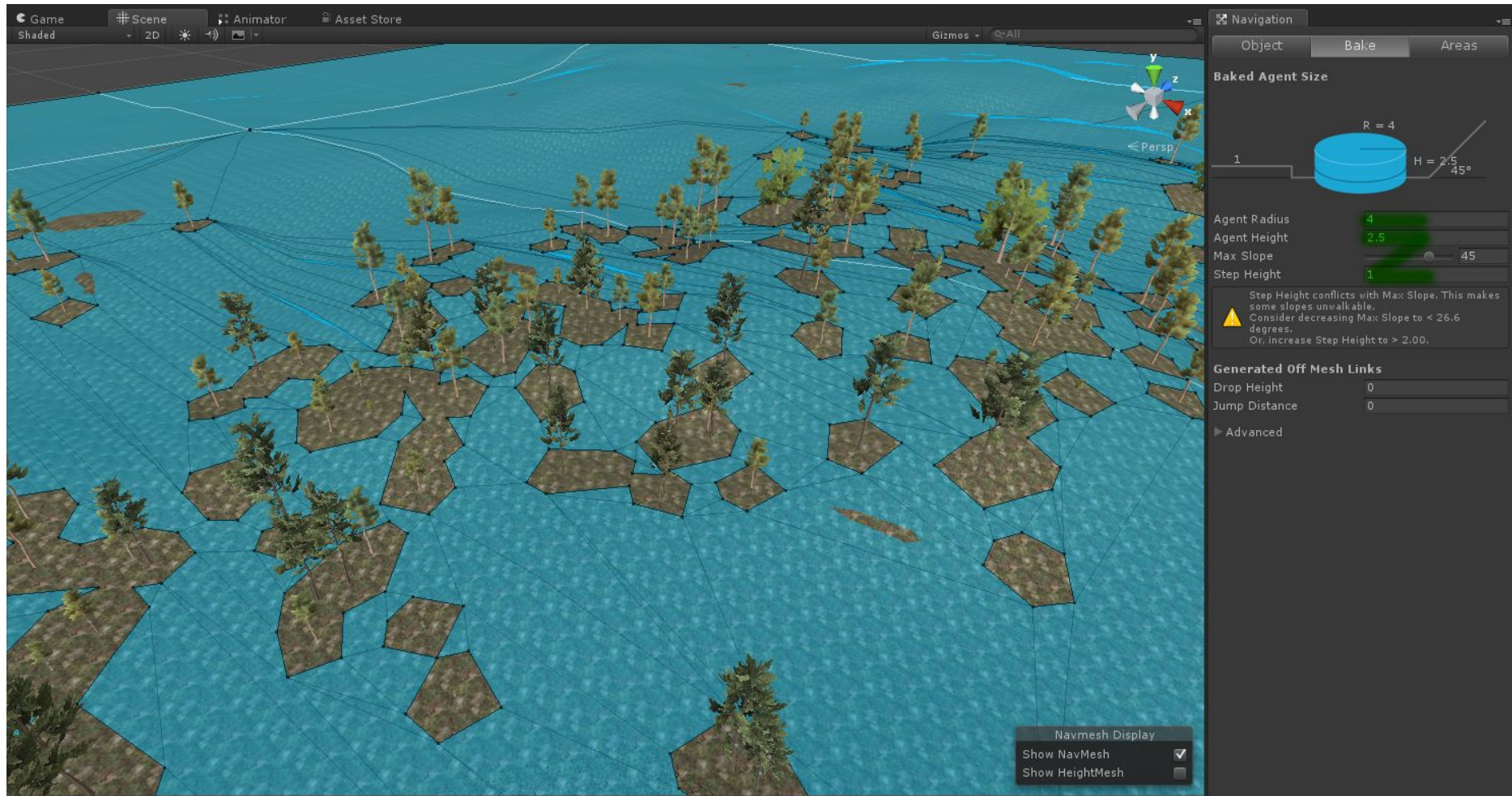
if you create AI for Friendly you must set it to "**Enemy**"

if you create AI for Enemy you must set it to "**Player**"



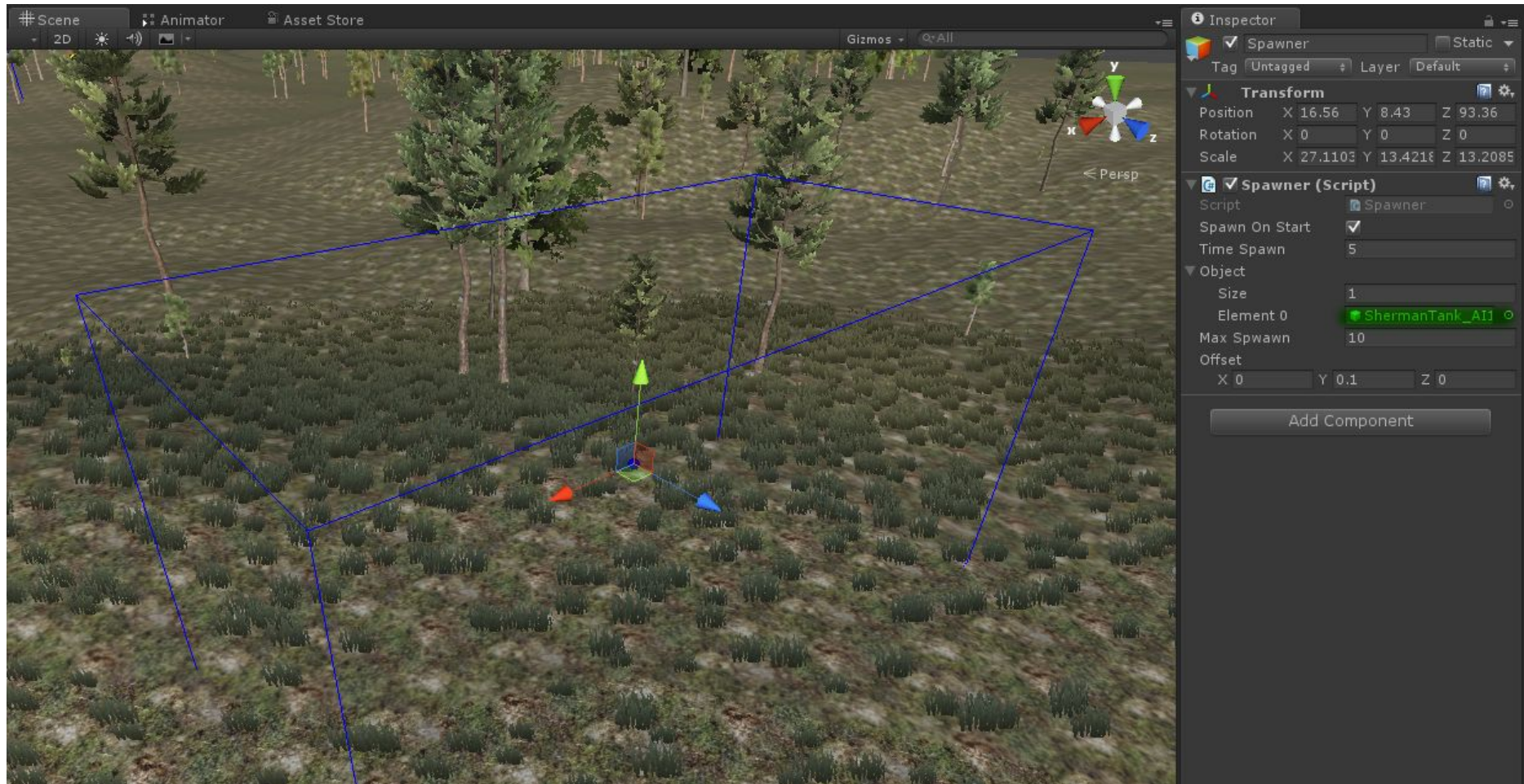
How to setup navigation path for AI

AI in this kit are using Unity Navmesh agent , so If you have your scene or level already. Please setup nav path first by go to **Window > Navigation** and setup a follow parameters **Agent Radust = 4 Agent Height = 2.5 Step Height = 1** and click **Bake** button. waiting for a while depending on obstacle details. after this process done you will see a blue grid like this



Add a spawner AI

Please go to **Windows > BattleTank > Game > Create Spawner**. The Spawner object will spawn at position zero then move it to desire position. you can add any game object to **Object** parameter if you want to spawn randomly in larger area you have to extend a scale of the spaner.



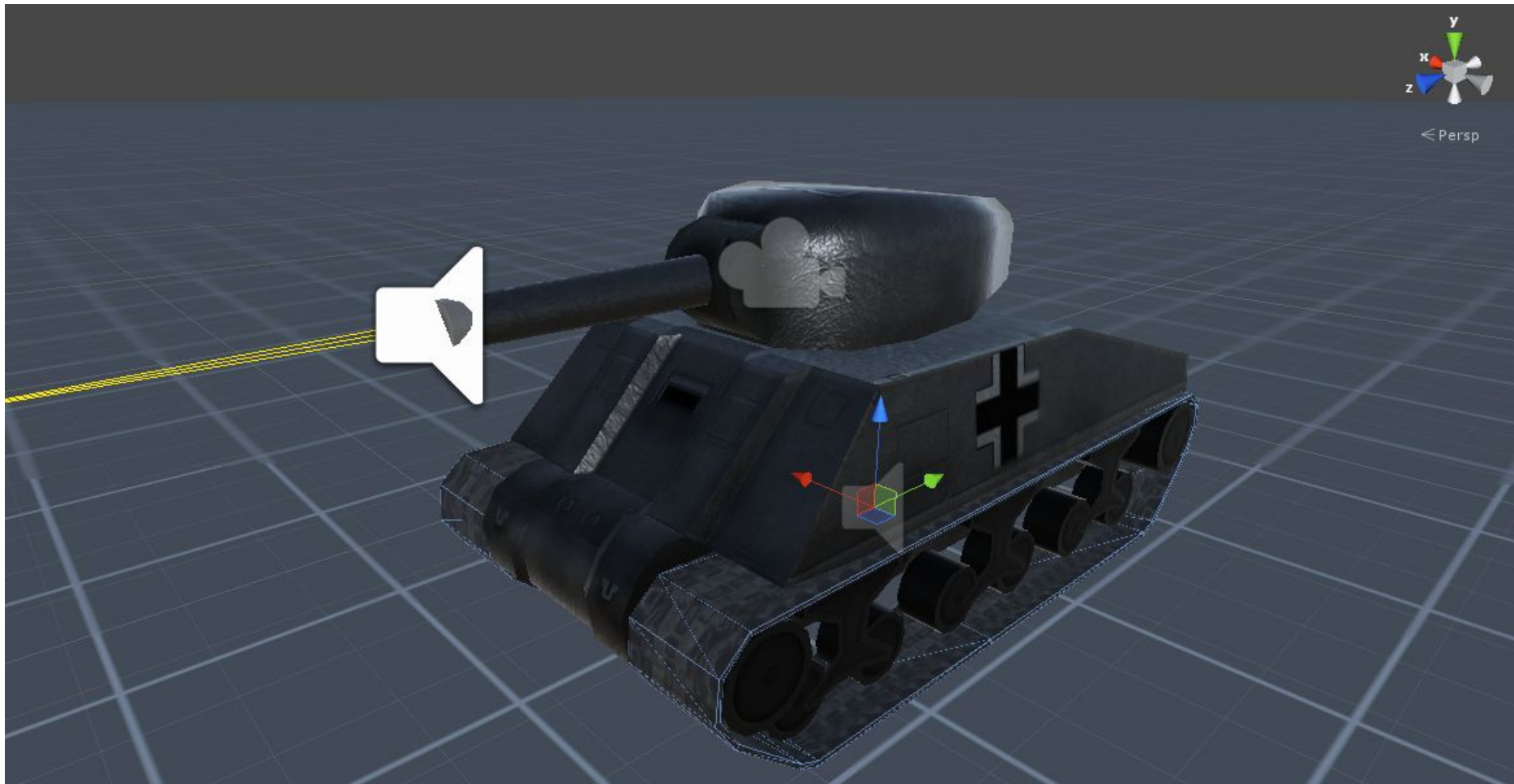
Optional Effects

Track Animation

This effect works with mesh texture coordinate by move UV position to create an animation like sprite animation.

Select track part and add Tank Track Animation component by go to **Windows > BattleTank > Effects > Track Animation**

importance! track mesh must separated from the tank body.



Decay Effect

This effect will active when the tank got too much damaged. you can see smoke or fire showing on the tank or anyobject when it HP is lower than specified number.



1. Add **FX_Decay** from **BattleTankKit/Prefabs/Effect/** to the scene and child it under your Tank like this image

2. Select Tank object

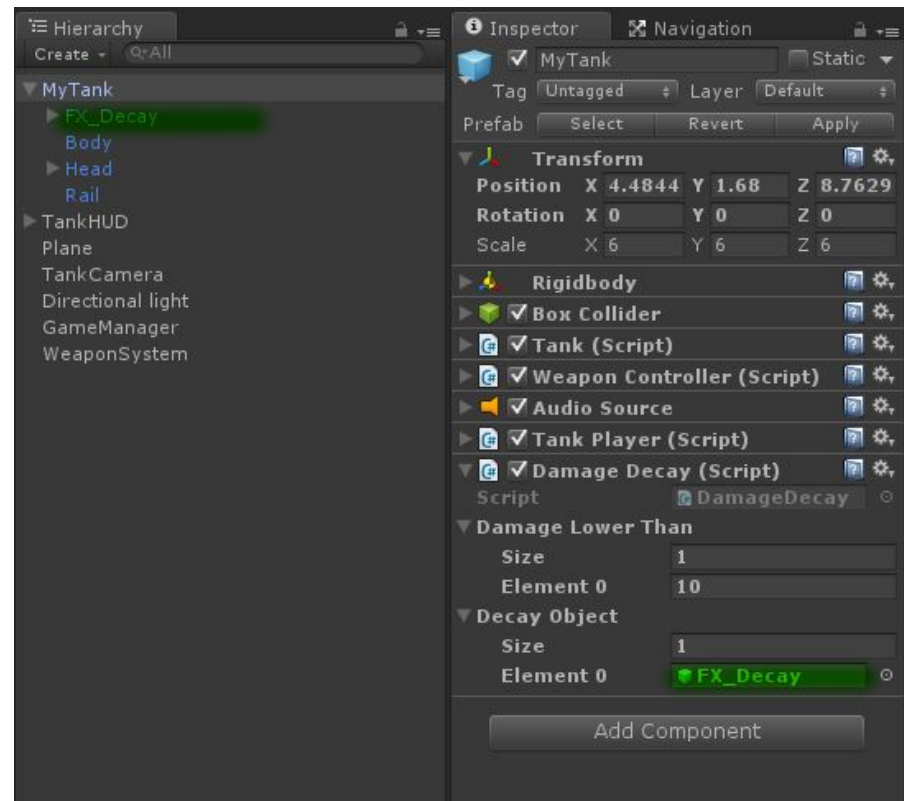
go to **Windows > BattleTank > Effects > Decay Effect**

you will see **Damage Decay** component added to the tank

3. Add **FX_Decay** to **Decay Object** parameter

4. set **Damage Lower Than** parameter to 50% of full HP

FYI you can have multiple decay steps by extend both array but carefully both array must have the same size.



Mobile Controller.

Battle tank using CNController plugin you can find more information here <https://www.assetstore.unity3d.com/en/#!/content/15233> to integrate into the project You can enable mobile controller by follow this steps.

1. place MobileControllerGUI.prefab into the scene you can found it in **Prefabs/Game/MobileControllerGUI.prefab**
2. Enable Use Mobile Controller parameter on Tank Camera Object
3. you can add optional button on Mobile Controller GUI canvas and call function inside Tank Controller by assign Tank Camera object into your new Button

Thank you

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if you have any question

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