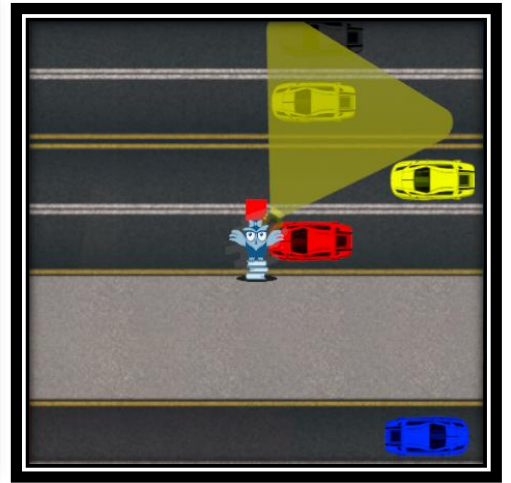
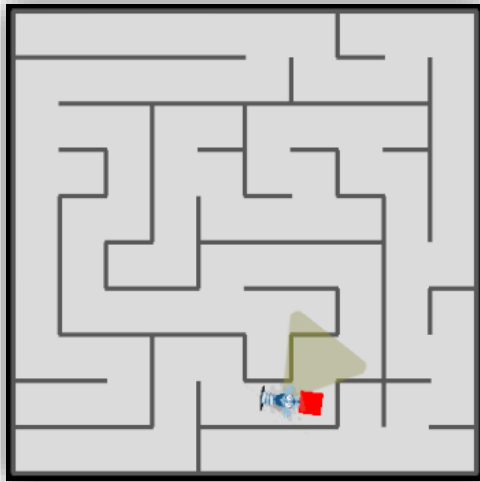
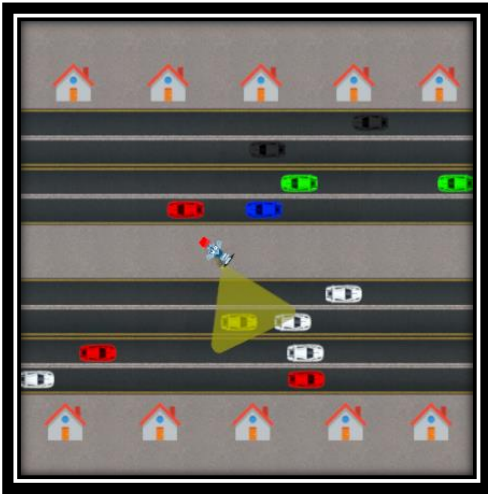
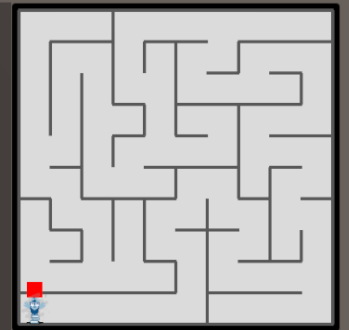
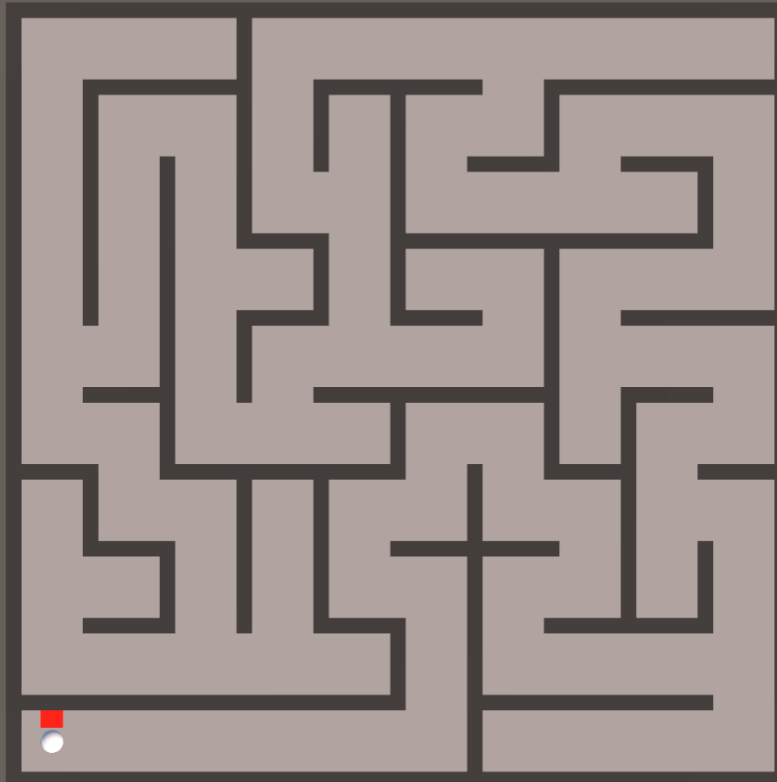


# CAMERA FREE MINIMAP



3rd Person Cam



## DESCRIPTION:

"**Camera Free Minimap**" is a free Unity asset designed to simplify the creation of dynamic and camera-independent minimaps. Say goodbye to the complexities of setting up a second camera or manually updating your minimap. With "Camera Free Minimap," you can effortlessly integrate your minimap images.

## KEY FEATURE:

**Single Camera Usage:** The Camera Free Minimap asset allows you to create a minimap without the need for a second camera. This feature is essential for improving performance in your Unity projects, as it eliminates the overhead associated with rendering a secondary camera view.

**Ease of Setup:** Setting up the Camera Free Minimap is straightforward and user-friendly. You can quickly integrate it into your project, making it accessible for developers of all skill levels.

**In-Depth Script Comments:** The included scripts are well-documented with detailed comments. This makes it easier for developers to understand and customize the minimap behavior according to their project requirements.

**Two Variants:** This asset provides two distinct minimap variants:

- **Follow Target Minimap:** You can create a dynamic minimap that follows a specific object that you specify. This is valuable for games where you want the minimap to focus on a moving character or object.
- **Static Minimap:** Alternatively, you can use the static minimap version for games that don't require dynamic minimap tracking. This mode offers a fixed overview of the game world.

## HOW DOES IT WORK?

Camera Free Minimap simplifies the process of creating a minimap for your Unity project. To understand how it operates, let's break it down into key steps:

**World Size Determination:** Camera Free Minimap requires knowledge of your game world's dimensions. This means it needs to know the minimum and maximum X and Z coordinates of your world.

**Utilizing the "World Map" Prefab:** The asset relies on a specific prefab called "World Map," which can be found in the prefab folders. This prefab plays a crucial role in generating the minimap.

**Establishing a Connection with the Minimap Image:** The "World Map" prefab needs a reference to your minimap image. The minimap image typically resides within the Canvas hierarchy. This connection is vital for the minimap generation process.

**Mapping the Minimap Image to "World Map":** Once linked, the "World Map" extracts the sprite from your minimap image. It attaches this sprite to itself using a Sprite Renderer component.

**Projection of the Minimap in the World:** As a result of this action, your minimap image becomes a visual representation projected into the game world.

**Alignment with the Game World:** To ensure the minimap matches your game's environment, you need to align the "World Map" with your world's structures and layout. This alignment ensures that the minimap reflects the in-game world correctly.

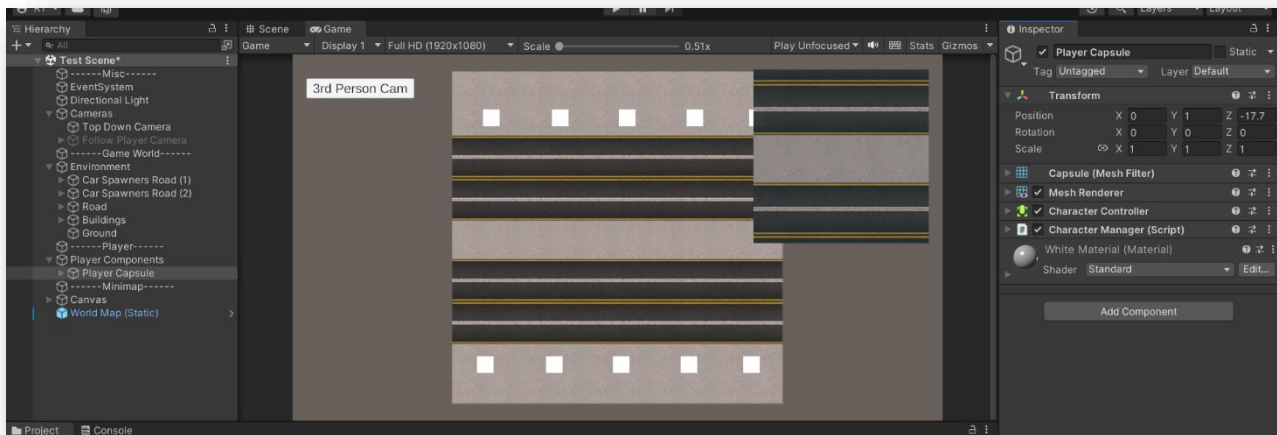
**Calculating World Dimensions:** The "World Map" now possesses the ability to calculate the size of your world along the X and Z axes. This information becomes essential for determining the position of various elements within the minimap.

# GETTING STARTED WITH CAMERA FREE MINIMAP

## 1-MINIMAP WORLD ELEMENT:

This component is used to display any game object on the minimap. Once you finish setting up "World Map" you will end up with a minimap like the one below, the minimap is empty and it has nothing.

**(The guide for setting the "World Map" will be discussed later)**

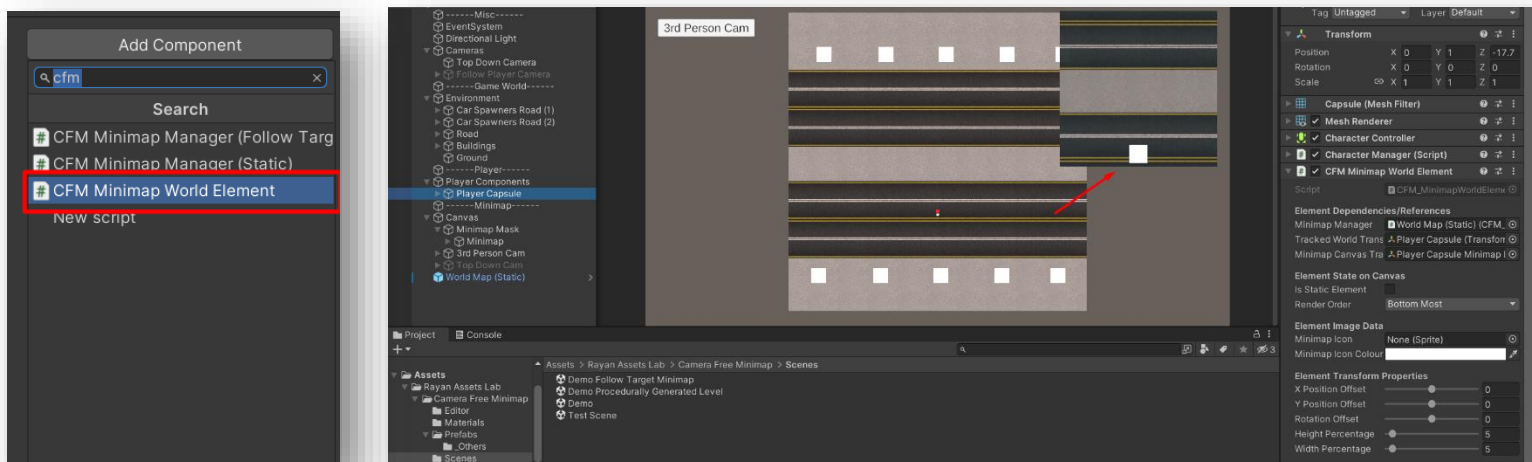


### STEP 1: ADD " MINIMAP WORLD ELEMENT " TO A GAME OBJECT:

To make an object appear on the minimap, attach the "Minimap World Element" component to it.

### STEP 2: VISUAL REPRESENTATION:

Once you've added the component, you'll see a white icon representing that game object on the minimap.



## MINIMAP WORLD ELEMENT SETTINGS:

**Minimap Manager:** Reference to the world map which contains minimap manager.

**Tracked World Transform:** This is the object you want to track on the minimap. By default, it's set to the object with the "Minimap World Element" component, but you can change it if needed.

**Minimap Canvas Transform:** This represents the icon you see on the minimap and is automatically configured.

**Is Static Element:** If enabled, this object is considered static and is updated OnEnable.

**Render Order:** This determines the layering order of minimap icons. Objects with a higher "Render Order" value will appear above others.

**Minimap Icon:** This is the visual representation of the object on the minimap.

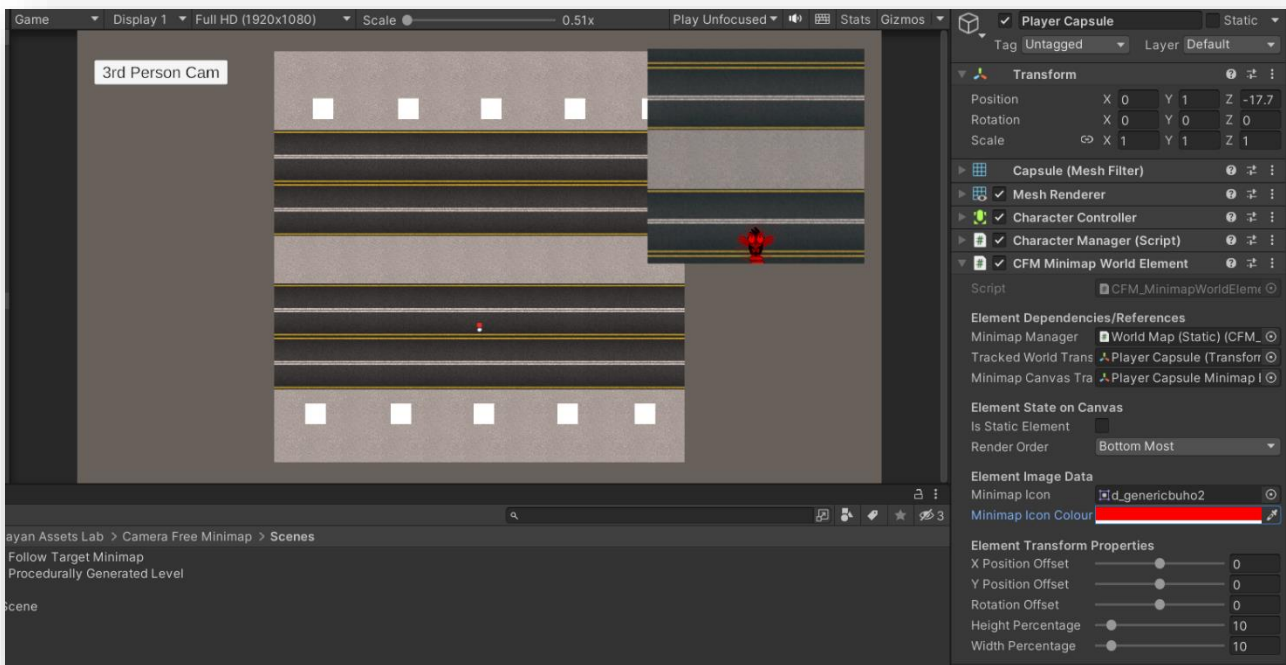
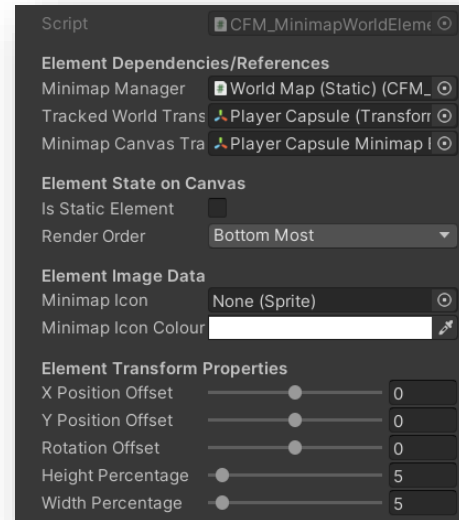
**Minimap icon Colour:** You can set the color of the icon here.

**X, Y Position Offset:** These are used to fine-tune the icon's position on the minimap.

**Rotation Offset:** You can adjust the rotation offset here.

**Height/Width:** These settings control the size of the icon on the minimap.

Once you finish setting up the element settings, you will end up with something like this:



## STEP 3: FINISHING THE SETUP:

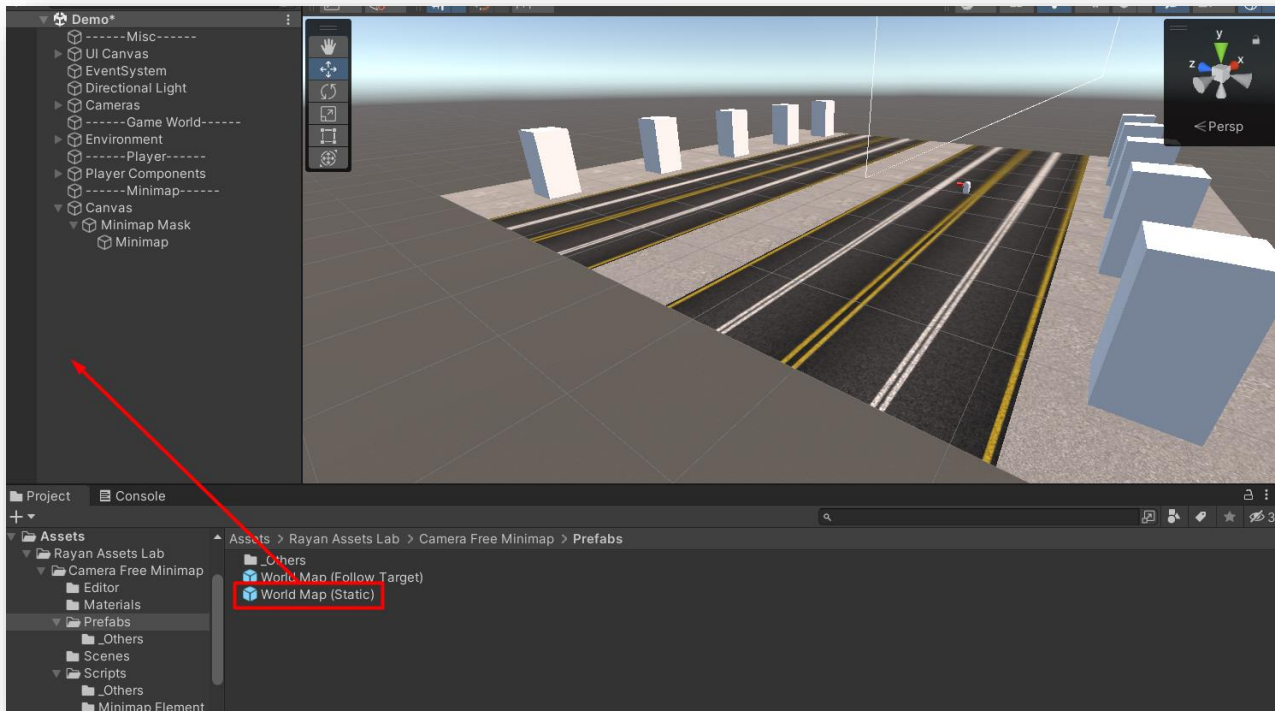
After configuring these settings, your object will appear on the minimap. Repeat these steps for any game object you want to display on the minimap.



## 2-STATIC MINIMAP:

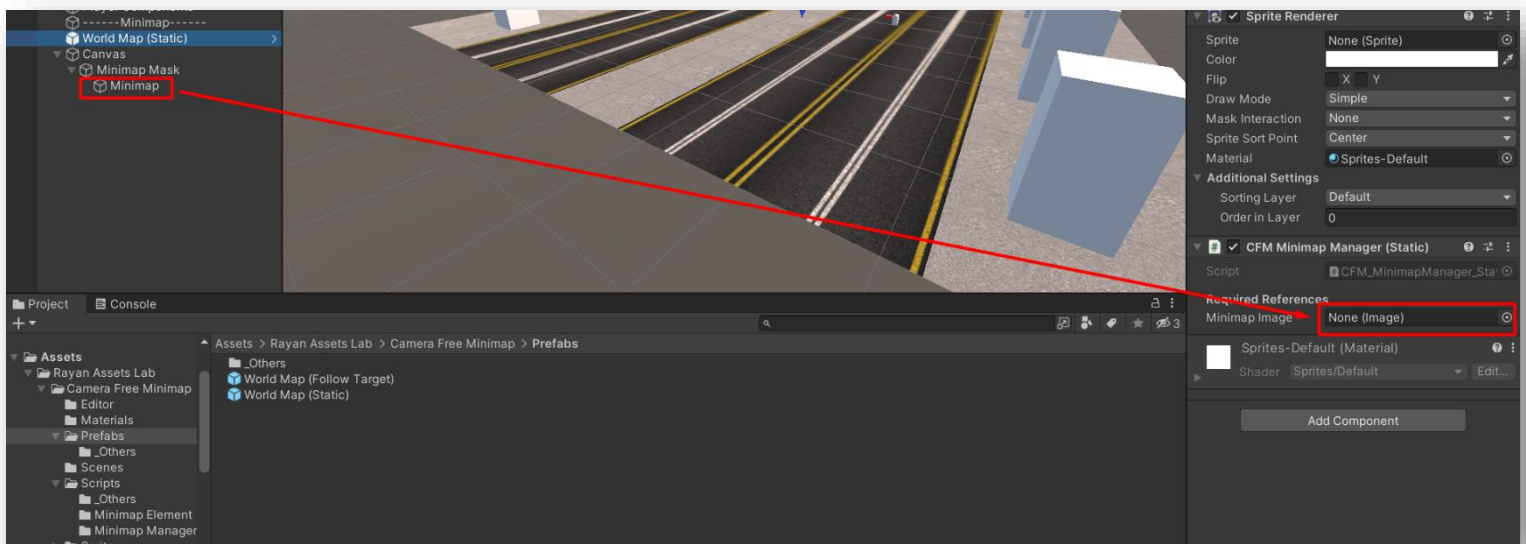
### STEP 1: ADD THE "WORLD MAP (STATIC)" PREFAB

Begin by including the "World Map" Prefab in your Unity hierarchy.



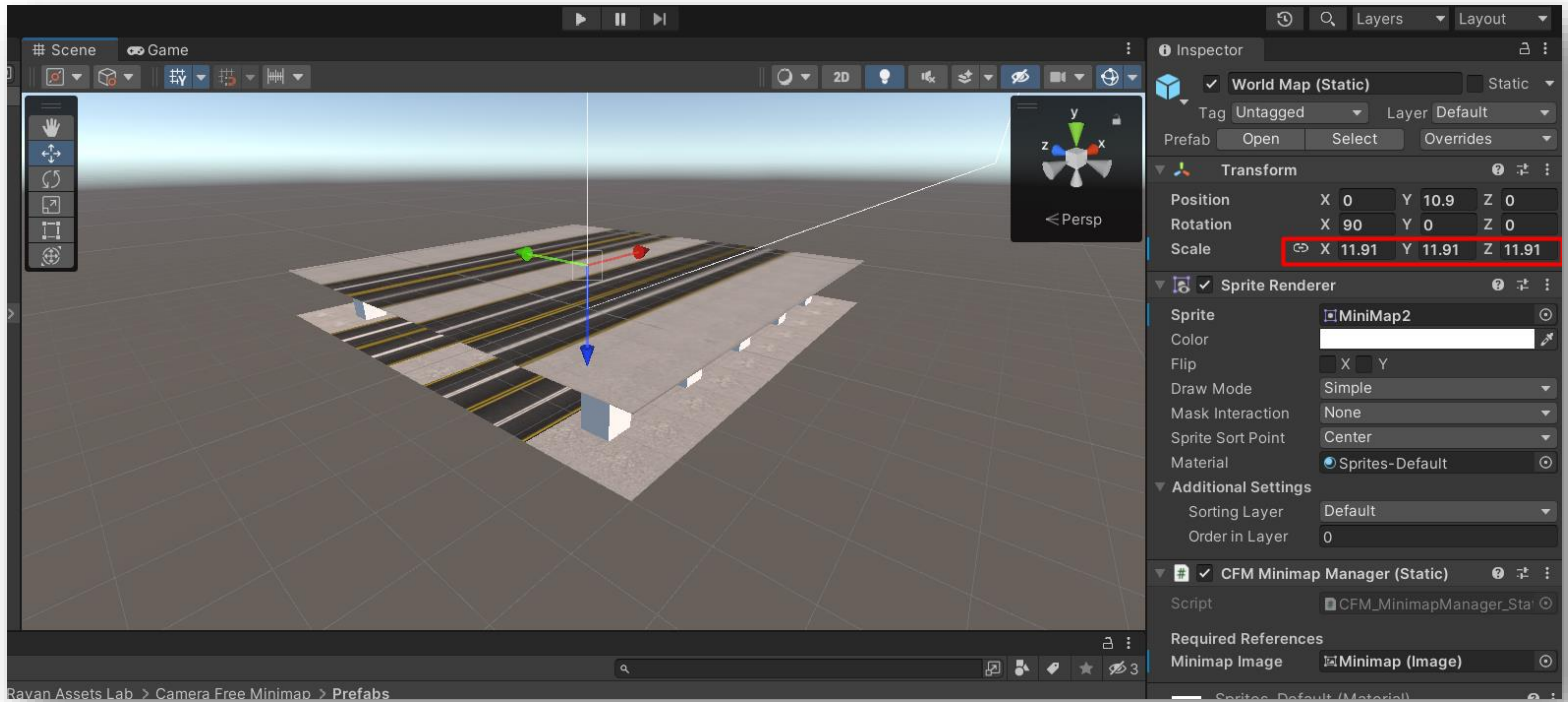
### STEP 2: ASSIGN THE MINIMAP REFERENCE

Select the "World Map" game object, and in its settings, provide the necessary minimap reference.



### STEP 3: ALIGN "WORLD MAP" WITH YOUR WORLD

To ensure a perfect match with your game world, adjust the scale of the "World Map" until it aligns seamlessly with your world environment, you can do that by changing its scale.



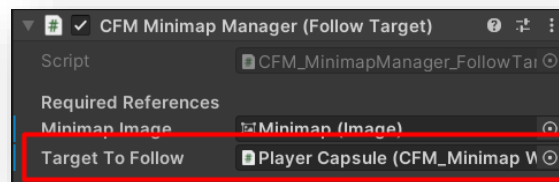
### 3-FOLLOW TARGET MINIMAP:

#### STEP 1: CONFIGURATION SIMILAR TO STATIC MINIMAP:

Begin the setup process just like you did for the static minimap, but this time, use the "World Map Follow Target" prefab instead of "World Map Static."

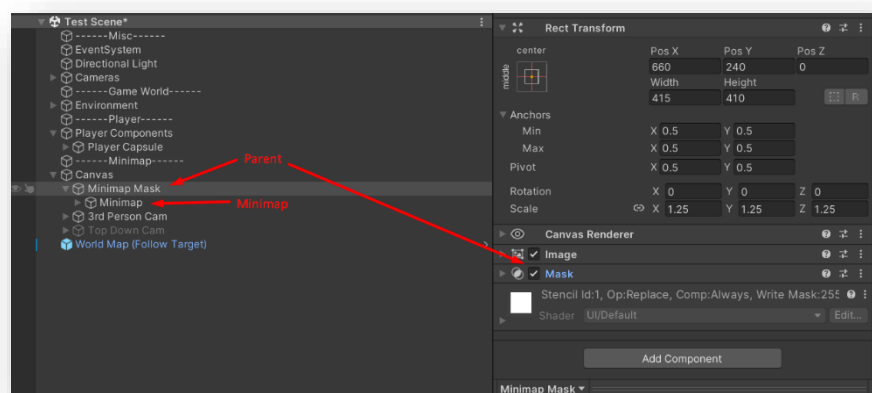
#### STEP 2: SELECT THE OBJECT TO FOLLOW:

Choose the game object you want your minimap to track. Assign this object with the "Minimap World Element" component to the Minimap Manager within "World Map (Follow Target)." Your minimap will then follow this object.

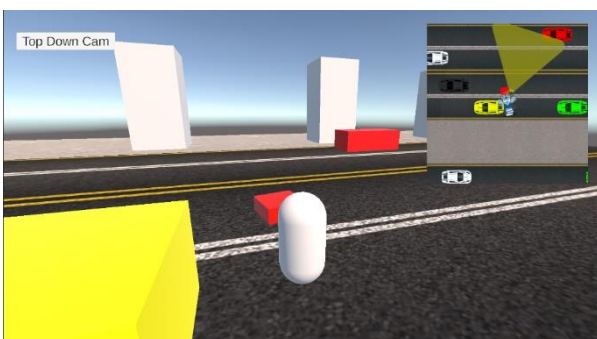


#### STEP 3: APPLY A MASK TO THE MINIMAP PARENT:

Ensure that your minimap has a parent object with a mask component. This parent serves a dual purpose. First, it helps calculate the center of your minimap. Second, it prevents the minimap from appearing detached or floating.



With Mask



Without Mask





I value your feedback! If you have any suggestions or encounter any issues, please don't hesitate to get in touch. I'm committed to enhancing this asset and adding new features based on your input.

**Feel free to reach out to me through these channels:**

- Discord: rayan\_1431
- Email: [RayanYoussef1993@gmail.com](mailto:RayanYoussef1993@gmail.com)

**Thank you for using Camera Free Minimap**