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# UNITY GAME TEMPLATE ZIGZAG TAXI

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USER GUIDE

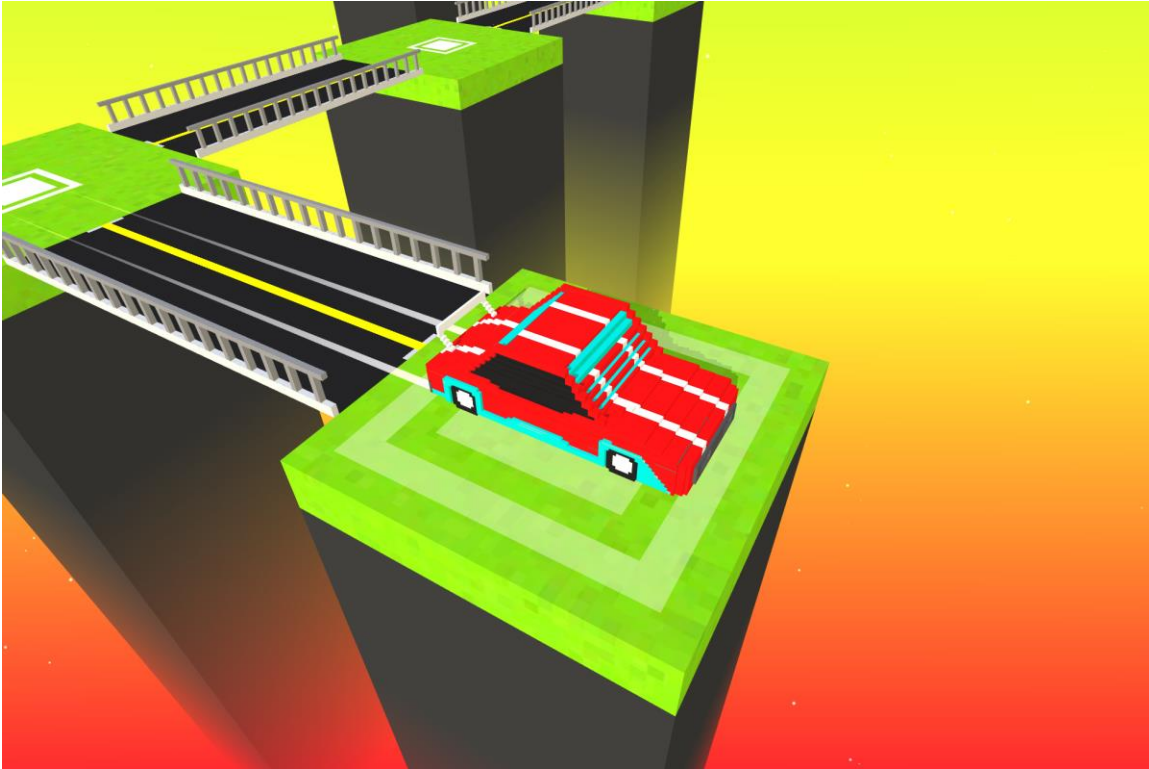


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## I. TEMPLATE INTRODUCTION



**Zigzag Taxi** is an exciting endless level-base game in which you touch on Build button to build a bridge, touch on Place button to place the bridge. The goal is to connect two platforms using the bridge you build so the player as a car can go through all the platforms and reach the finish platform to complete the level. There're also many coins items on the way for the player to collect and unlock new cars. The game is ready to release straight out of the box, and it can also be easily customized to make it even more engaging to your players. Supports for PC/Mac, iOS, Android, etc...!

This template is made with Unity C# and optimized for mobile devices. This template provides you a full-featured, ready-for-release game source code that you can customize and build your own game in no time!

Highlight features:

- ❖ Addictive one-touch gameplay
- ❖ Smooth control, eye-catching graphics
- ❖ 100++ levels (more level will be added soon)

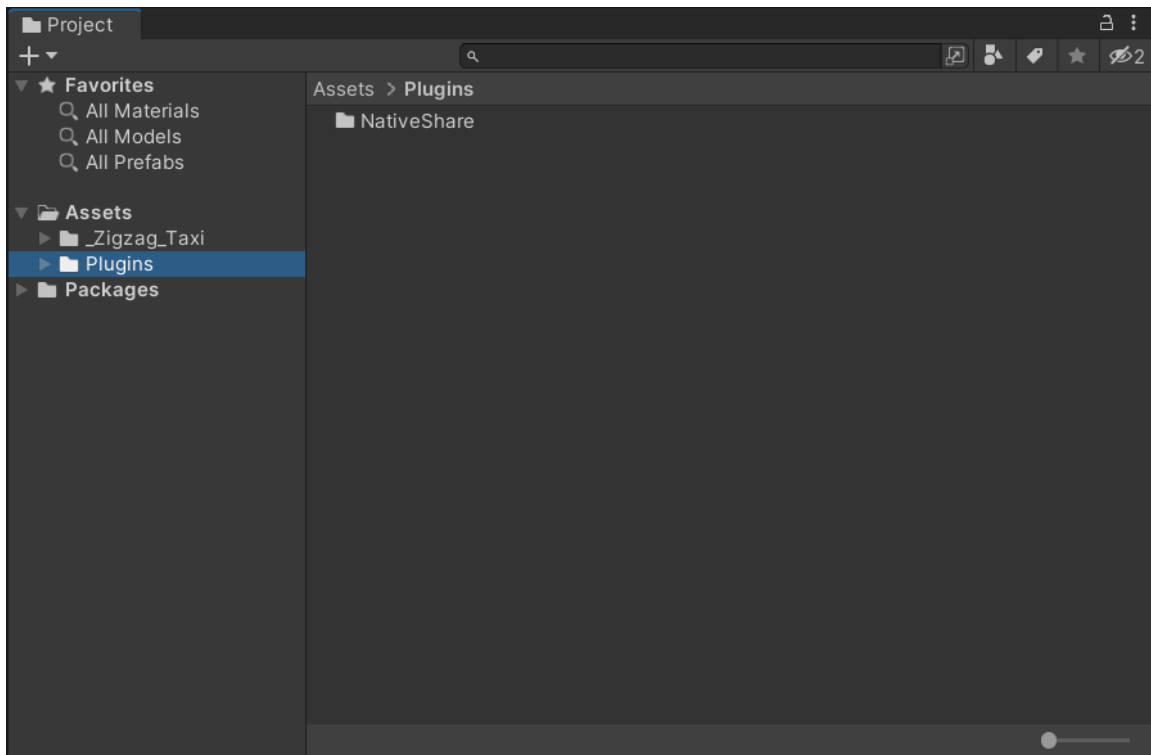
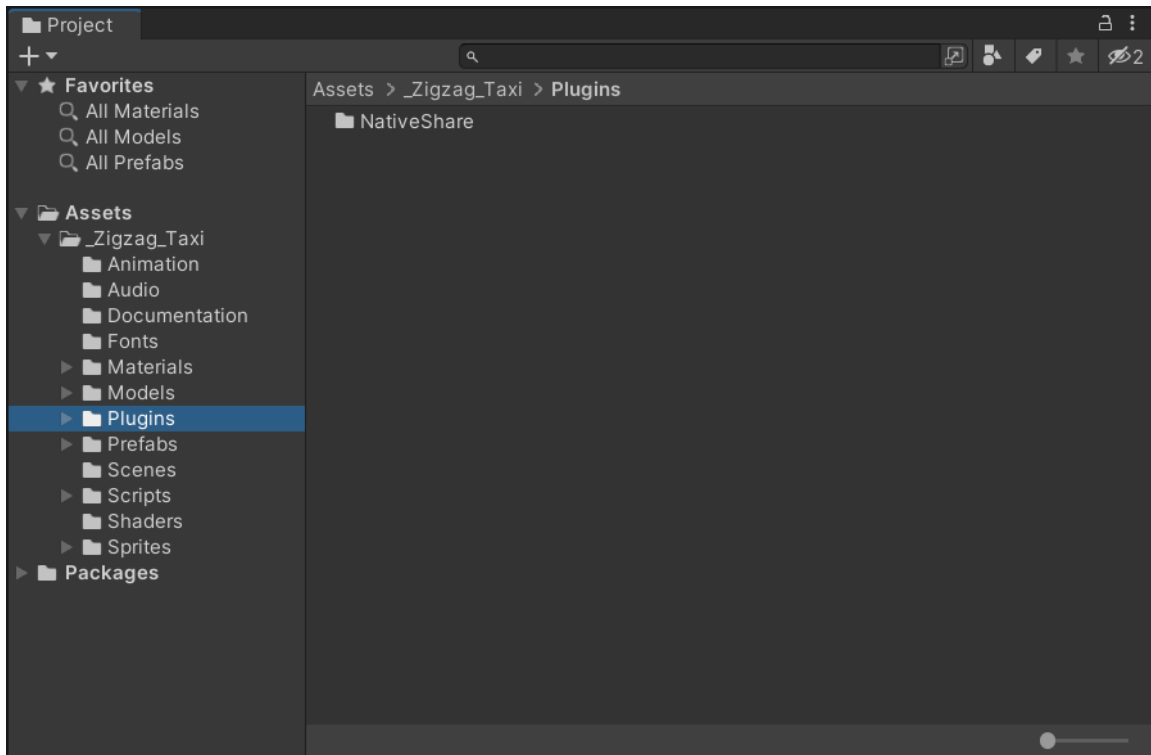
- ❖ Very easy to add new levels with detailed instruction
- ❖ 20++ characters ready to unlock
- ❖ Easy to add new characters with detailed instruction
- ❖ Leaderboard system using Dreamlo
- ❖ Notification system for Android/iOS
- ❖ Daily reward system for better retention
- ❖ Multiple ad networks: Admob and Unity Ads ready to use (banner, interstitial and rewarded ad).
- ❖ Native share Android/iOS
- ❖ Commented C# code with detailed documentation
- ❖ Optimized for mobile
- ❖ Free-to-use assets (fonts, sounds, music, models, etc.)
- ❖ Ready to publish out-of-the-box

## II. TEMPLATE SETUP

This template was designed for mobile (Android, iOS, Windows Phone...) so after imported the package to unity, you need to switch to Android or iOS,

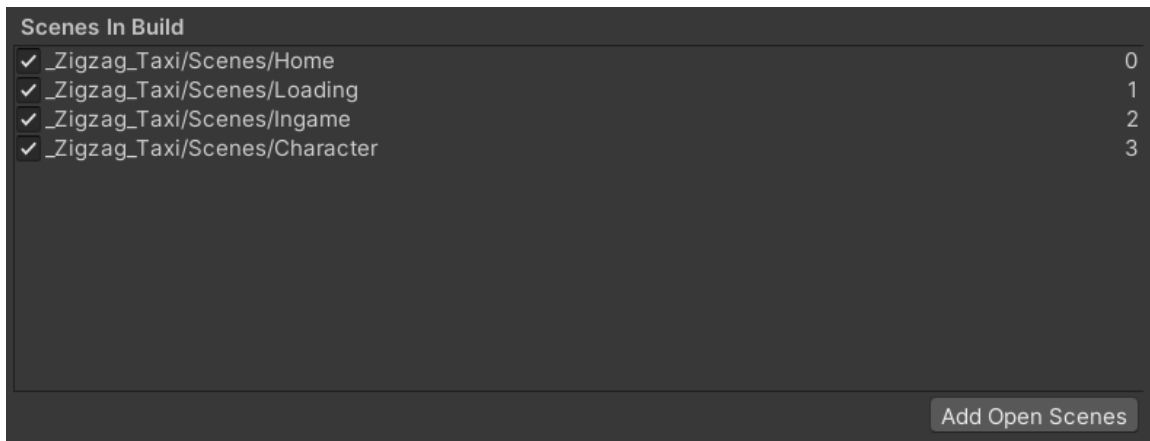
or Window Phone.

After that, go to Assets/\_Zigzag\_Taxi and move the folder Plugins out of \_Zigzag\_Taxi folder.



The template contains 4 scenes: Home, Loading, Character and Ingame

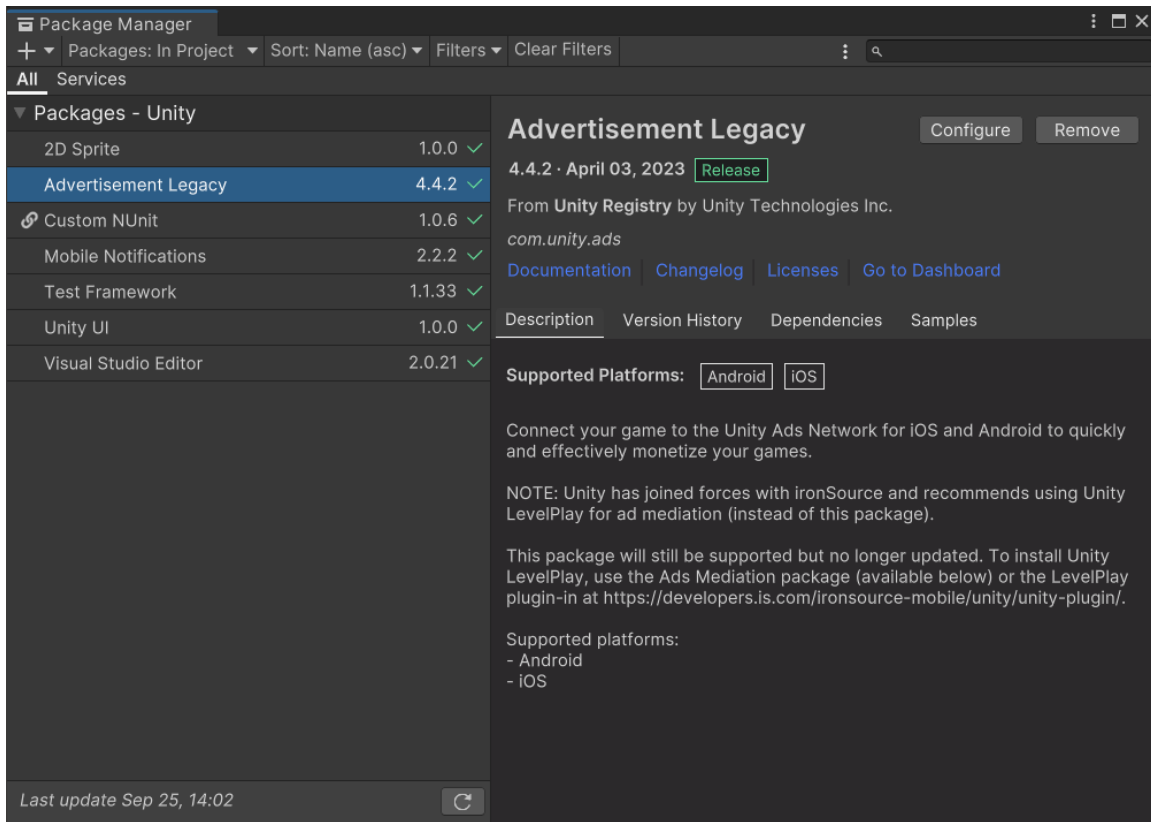
under the path Assets/\_Zigzag\_Taxi/Scenes. **You need to start from Home scene first. Do not start from Loading, Character or Ingame scene.**



### III. REQUIREMENT PACKAGES

When you open this template, at first you will see some errors in the Console window, that's because this template requires some packages to run. You have to install these packages below to have this template run smoothly. Please follow these instructions:

- Open Package Manager by going to Window/Package Manager. If you don't see Package Manager button, then you have to re-install your Unity completely because it's the problem that Unity Technologies still not able to fix.

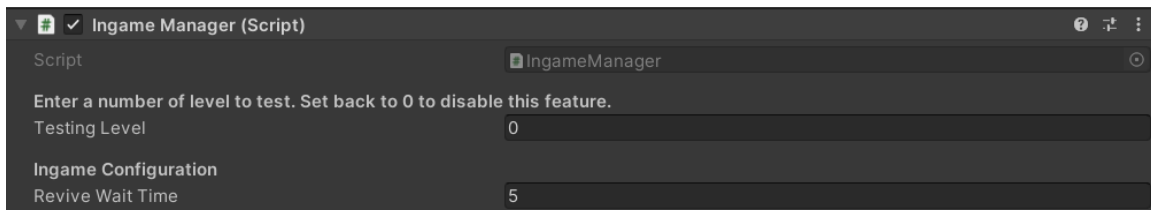


- These are packages you must need to install:
  - Advertisement version 4.4.2 or higher.
  - Mobile Notification version 2.2.2 or higher
  - 2D Sprite version 1.0.0 or higher
  - Unity UI 1.0.0 or higher

## IV. GAMEPLAY CUSTOMIZATION

### 1. Ingame Manager

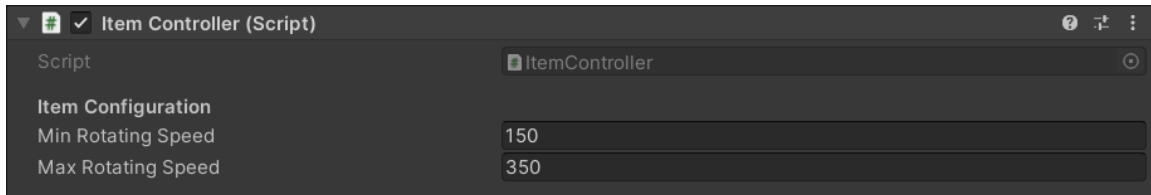
Most of important gameplay parameters can be configured within the IngameManager component which is attached to a game object also named IngameManager in the hierarchy. You can find IngameManager object in Ingame scene.



- ❖ *Testing Level*: the level you need to test before building the game. If you set it to 0, the script will not load the testing level.
- ❖ *Revive Wait Time*: the delay time for revive feature last.

## 2. Item Controller

Most of important parameters of item can be configured within the ItemController component. You can find all items under the path Assets/\_Zigzag\_Taxi/Prefabs/Items.

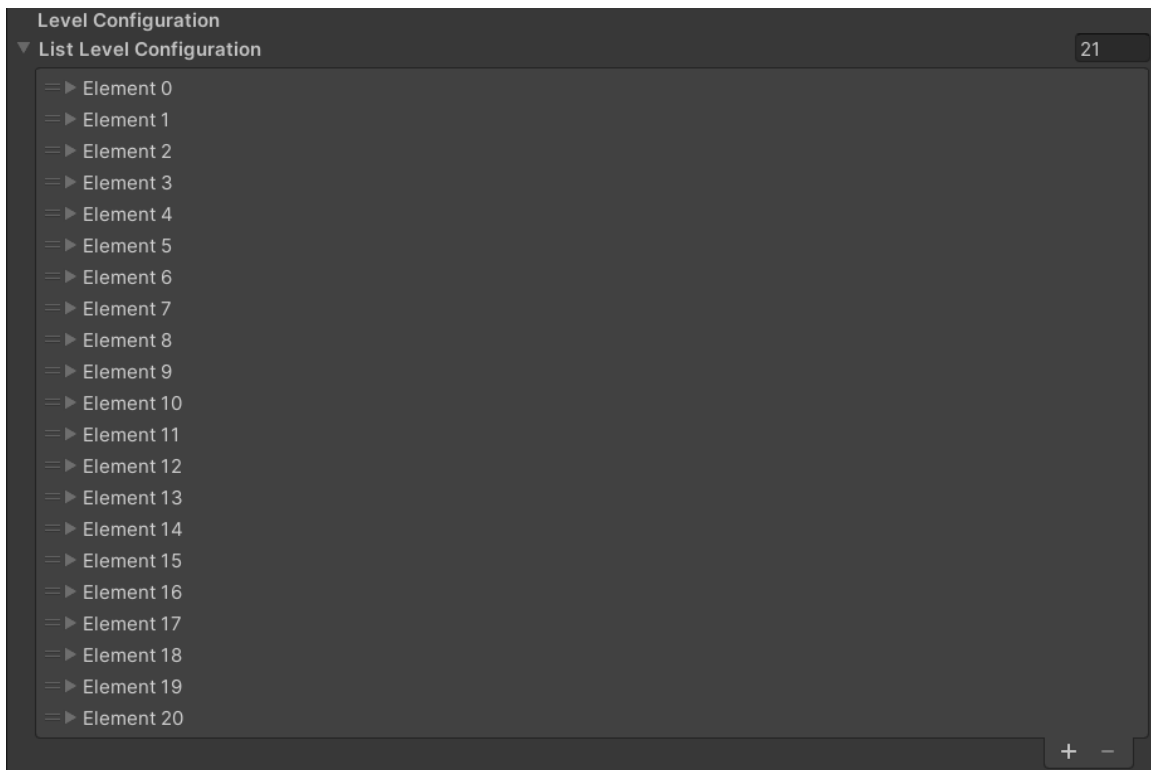


- ❖ *Min Rotating Speed & Max Rotating Speed*: minimum and maximum rotating speed of the item.

## V. LEVEL CUSTOMIZATION

This is a level-base game template and the goal of the game is you have to complete a level and start a new level, try collects coins to unlock new characters. All the parameters of the level were show on the inspector for you to adjust and modify. They are stored in IngameManager script and you can adjust all the levels in the inspector of IngameManager object which you can find it in Ingame scene.





As you can see, there's a list of 21 configuration parameters of levels, these parameters are already designed and ready to use. If you want to add new configs, just resize the list and hit Enter. Now I will show you the parameters of each level.

Element 20

**Level Number Configuration**

Min Level: 100

Max Level: 105

**Background Configuration**

Background Top Color: [Red color bar]

Background Bottom Color: [Blue color bar]

Background Music Clip: background\_1

**Player Parameters Configuration**

Min Player Movement Speed: 6

Max Player Movement Speed: 12

**Time To Complete Level Configuration**

Min Time To Complete Level: 130

Max Time To Complete Level: 150

**Bridge Building Speed Configuration**

Min Bridge Building Speed: 25

Max Bridge Building Speed: 30

**Items Configuration**

Min Coin Item Amount: 2

Max Coin Item Amount: 6

**Platforms Configuration**

Platform Type: GREEN

Min Platform Amount: 17

Max Platform Amount: 27

Min Platform Distance: 6

Max Platform Distance: 15

► List Platform Size: 5

**Level Number Configuration:** this section is about the configuration of the level number.

**Level Number Configuration**

Min Level: 100

Max Level: 105

- ❖ *Min Level & Max Level:* the minimum and maximum level of this config. All the level between this range will use these parameters below to create the level.

**Background Configuration:** this section is about the configuration of the background colors and background music.

**Background Configuration**

Background Top Color: [Red color bar]


Background Bottom Color: [Blue color bar]

Background Music Clip: background\_1

- ❖ *Background Top Color:* the top color of the background.

- ❖ *Background Bottom Color*: the bottom color of the background.
- ❖ *Letter Color*: the color of all the letters will be created in this level.
- ❖ *Background Music Clip*: the music clip that play as the background sound.

**Player Parameters Configuration:** this section is about the configuration of the player's parameters.



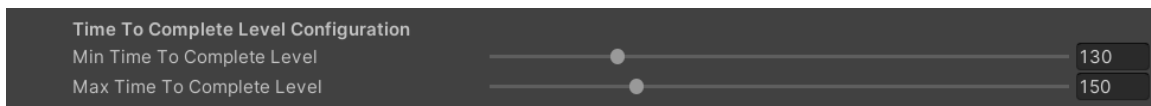
Player Parameters Configuration

Min Player Movement Speed 6

Max Player Movement Speed 12

- ❖ *Min Player Movement Speed & Max Player Movement Speed*: the minimum and maximum movement speed of the player in this level. The actual speed will be randomized between these two values.

**Time To Complete Level Configuration:** this section is about the configuration of the maximum time player will have to complete this level.



Time To Complete Level Configuration

Min Time To Complete Level 130

Max Time To Complete Level 150

*Min Time To Complete Level & Max Time To Complete Level*: the minimum and maximum time player will have to complete this level. The actual value will be randomized between these two values.

**Item Configuration:** This section is about the configuration of the all the items in this level.



Items Configuration

Min Coin Item Amount 2

Max Coin Item Amount 6

- ❖ *Min Coin Item Amount*: the minimum amount of coin item will be created on each platform.
- ❖ *Max Coin Item Amount*: the maximum amount of coin item will be created on each platform.

When player placed a bridge at center of the next platform, multiple coins will be created. The amount of coin will be randomized between these two values. But when player placed the bridge at the platform but not at center of it, only one coin will be created.

**Platforms Configuration:** This section is about the configuration of the all

the platforms and its parameters in this level.

Platforms Configuration	
Platform Type	GREEN
Min Platform Amount	17
Max Platform Amount	27
Min Platform Distance	6
Max Platform Distance	15
▼ List Platform Size 5	
Element 0	
Platform Size	HUGE
Frequency	0.2
Element 1	
Platform Size	BIG
Frequency	0.3
Element 2	
Platform Size	MEDIUM
Frequency	0.5
Element 3	
Platform Size	NORMAL
Frequency	0.5
Element 4	
Platform Size	SMALL
Frequency	0.4

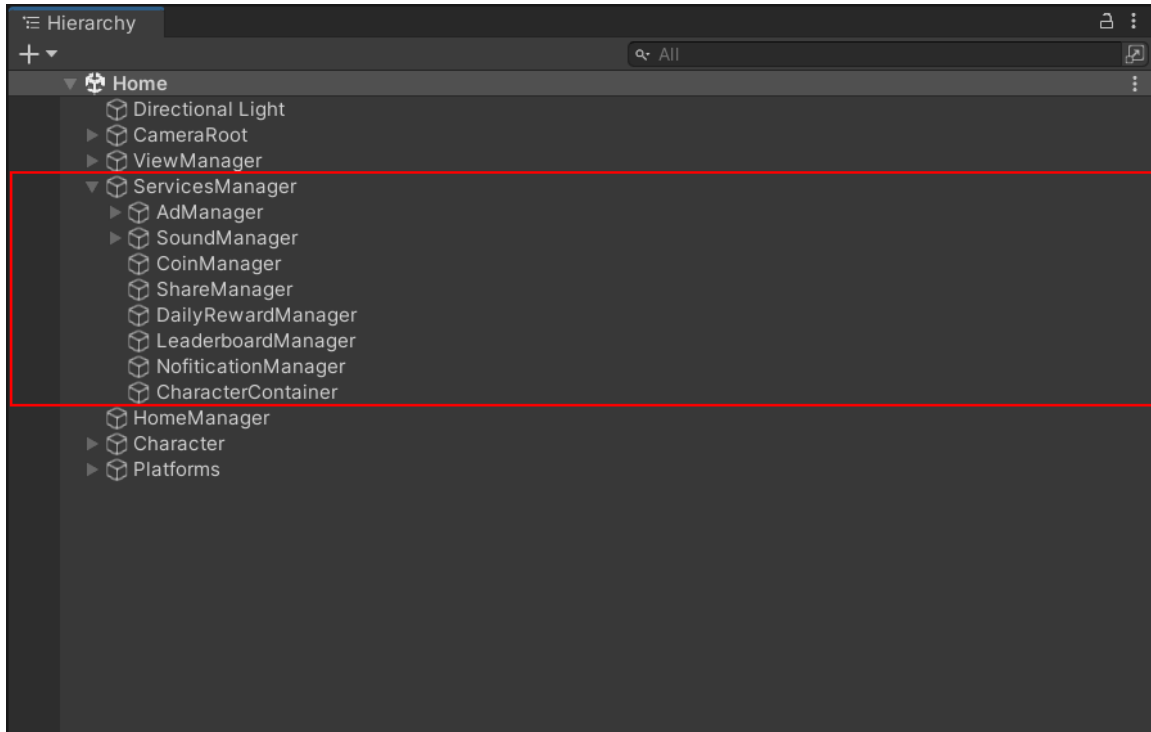
- ❖ *Platform Type*: the type of platform will be created this level. Currently this template comes with 10 types of platforms.
- ❖ *Min Platform Amount & Max Platform Amount*: the minimum and maximum amount of platform will be created in this level. The actual value will be randomized between these two parameters.
- ❖ *Min Platform Distance & Max Platform Distance*: the minimum and maximum distance between two platforms. The actual value will be randomized between these two parameters.
- ❖ *List Platform Size*: the list of platform size will be created in this level:
  - *Platform Size*: the size of the platform. Current this template comes with 5 different sizes.
  - *Frequency*: the frequency to create this platform's size.

In this game, player has to build the bridge to move through all platforms. The amount of platform will be randomized between: *Min Platform Amount* and *Max Platform Amount*. The distance between each platform will be randomized between: *Min Platform Distance* and *Max Platform Distance*. The size of each platform will be randomized based on the *Frequency*.

If you want to add more levels, just resize the *List Level Configuration* to a higher number, config the parameters above as you want to make sure the levels are generated the way you want to. That's all.

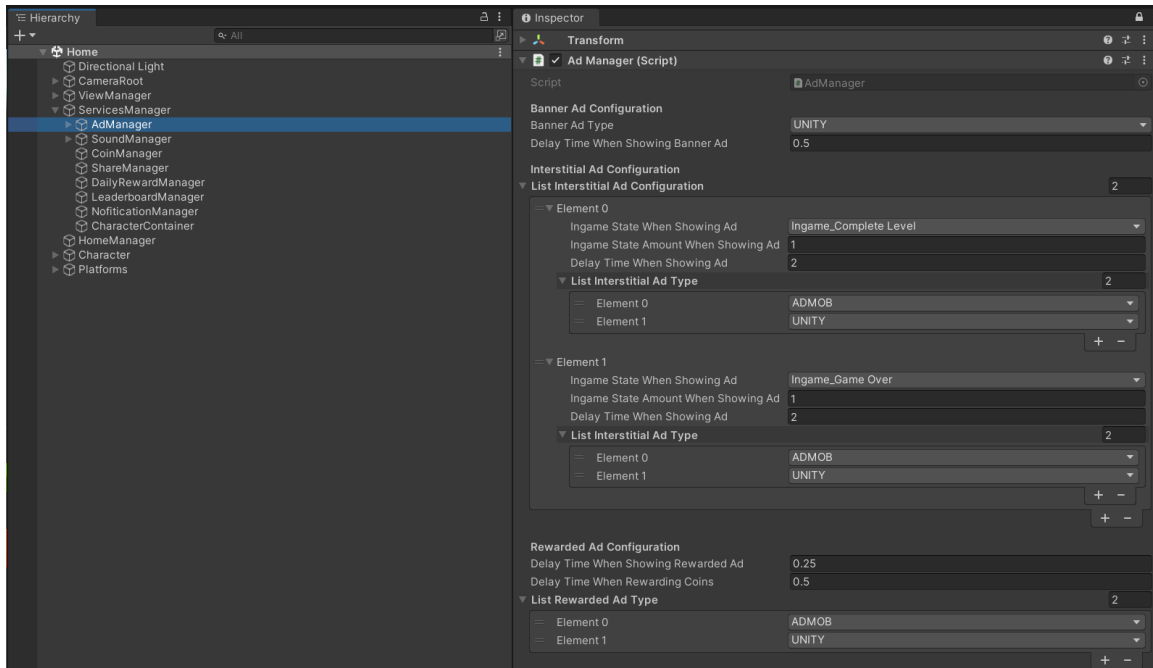
## VI. SERVICES CONFIGURATION

This template comes with many features like multiple ads, leaderboard, daily reward, notification...ect. You can find all the scripts for these features under ServicesManager object in Home scene.

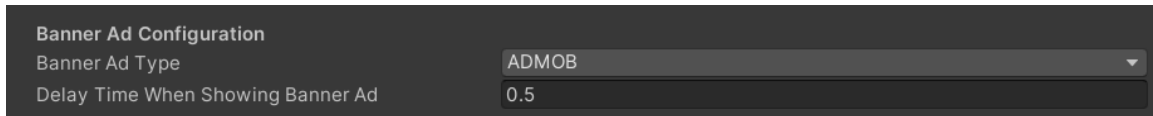


### 1. Ad Manager

The AdManager object in hierarchy of scene Home contains AdManager component, in which you can customize which type of ads you want to use and how you want to show the ads.



**Banner Ad Configuration:** this is the section where you can control which type of banner ad you want to show. Currently, the template support for 2 types of banner ad: Admob and Unity.



- ❖ *Banner Ad Type:* the type of banner ad you want to show.
- ❖ *Delay Time When Showing Banner Ad:* the delay time when showing banner ad.

**Interstitial Ad Configuration:** this is the section where you can control which type of interstitial ad you want to show and how you want to show it. Currently, the template support for 2 types of interstitial ad: Admob and Unity.

**Interstitial Ad Configuration**

▼ **List Interstitial Ad Configuration** 2

==▼ **Element 0**

Ingame State When Showing Ad: Ingame\_State Complete Level

Ingame State Amount When Showing Ad: 1

Delay Time When Showing Ad: 2

▼ **List Interstitial Ad Type** 2

= Element 0: ADMOB

= Element 1: UNITY

+ -

==▼ **Element 1**

Ingame State When Showing Ad: Ingame\_State Game Over

Ingame State Amount When Showing Ad: 1

Delay Time When Showing Ad: 2

▼ **List Interstitial Ad Type** 2

= Element 0: ADMOB

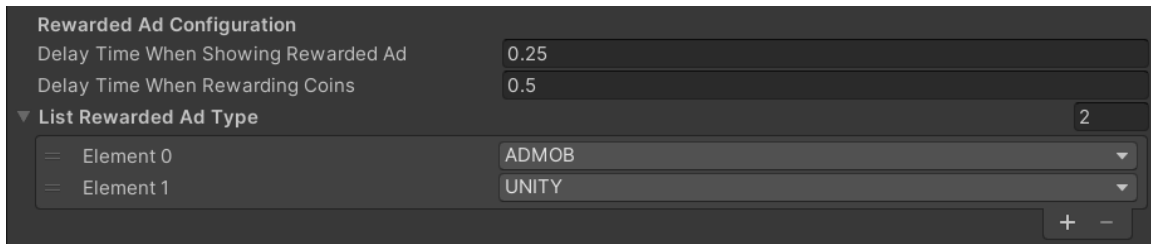
= Element 1: UNITY

+ -

+ -

- ❖ *Ingame State When Showing Ad*: the game state you want to show the ad.
- ❖ *Ingame State Amount When Showing Ad*: the amount of game state that player go through to show ad. Example: if the value is 2 and *Ingame State When Show Ad* is *Ingame\_GameOver*, that mean the ad will show after 2 times of game over.
- ❖ *Delay Time When Showing Ad*: the delay time when showing the interstitial ad.
- ❖ *List Interstitial Ad Type*: the list of interstitial ad type. The first item of this list will be the first priority of interstitial ad. Example: in the image you can see 2 items: ADMOB and UNITY. ADMOB is the first item so, *Ad Manager* will load the interstitial ad of Admob first, if there's no Admob's interstitial ad to load, then *Ad Manger* will continue to load Unity interstitial ad.

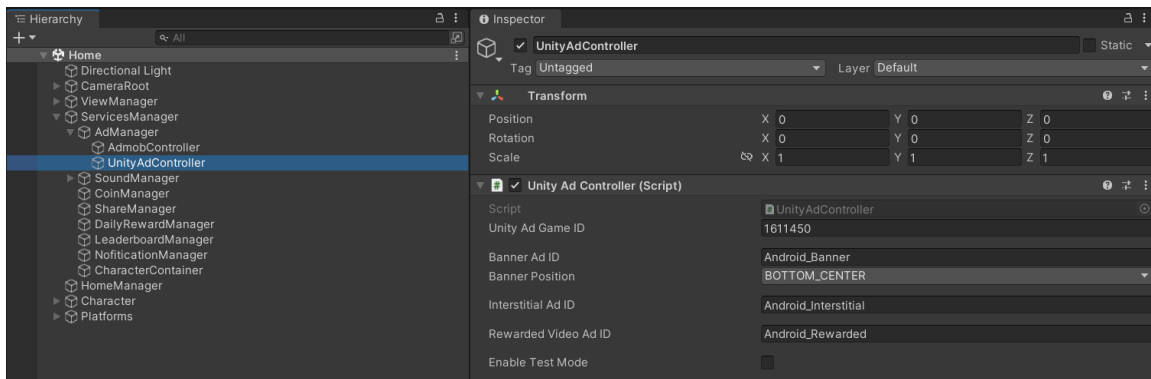
**Rewarded Ad Configuration**: this is the section where you can control which type of rewarded ad you want to show and how you want to show it. Currently, the template support for 2 types of rewarded ad: Admob and Unity.



- ❖ *Delay Time When Showing Rewarded Ad*: the delay time when showing rewarded ad.
- ❖ *Delay Time When Rewarding Coins*: the delay time when rewarding coins to user after they watched rewarded ad.
- ❖ *List Rewarded Ad Type*: the list of rewarded ad type. The first item of this list will be the first priority of rewarded ad. Example: in the image you can see 2 items: ADMOb and UNITY. ADMOb is the first item so, *Ad Manager* will load the rewarded ad of Admob first, if there's no Admob's rewarded ad to load, then *Ad Manger* will continue to load Unity rewarded ad.

## 2. Unity Ad Controller

**Before setting up Unity ad, you need to set up your project for Unity Services first, you can see the instruction [here](#).** After setting up Unity Services, just put your game id and your ad ids and you will good to go.

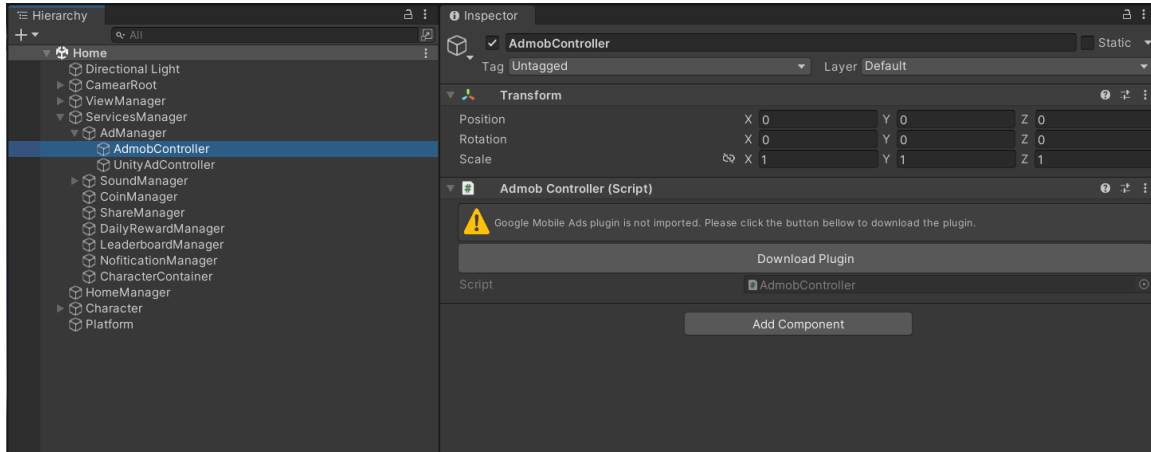


- ❖ *Unity Ad ID*: the id of your unity ad project. You can find all of your ad projects [here](#).
- ❖ *Banner Ad ID*: the banner ad id of your ad project.
- ❖ *Banner Position*: the position of the banner ad.
- ❖ *Interstitial Ad ID*: the interstitial id of your ad project.
- ❖ *Rewarded Ad ID*: the rewarded ad id of your ad project.
- ❖ *Enable Test Mode*: show ads on test mode.



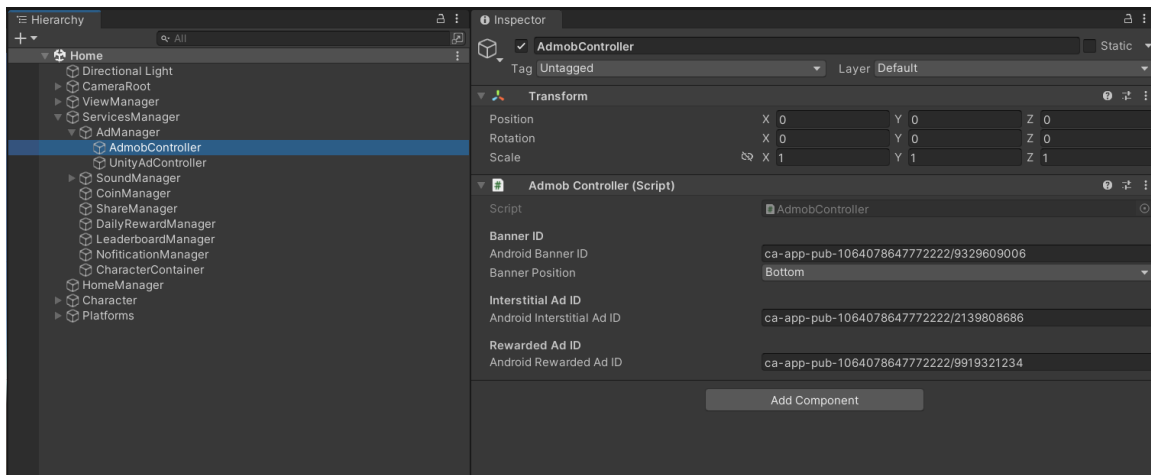
### 3. Admob Controller

The AdmobManager object in hierarchy of scene Home contains AdmobController component, in which you can customize parameters like admob id, ad units...



As you can see in the image, there's no option to change ads units because the template did not have google mobile ads plugin included, so if you want to use Admob, please click to the Download Plugin button, download the latest version of google mobile ads and import it into the project.

After imported the plugin, select AdManager object in the hierarchy, wait for few seconds for the project rebuild and you will see this.



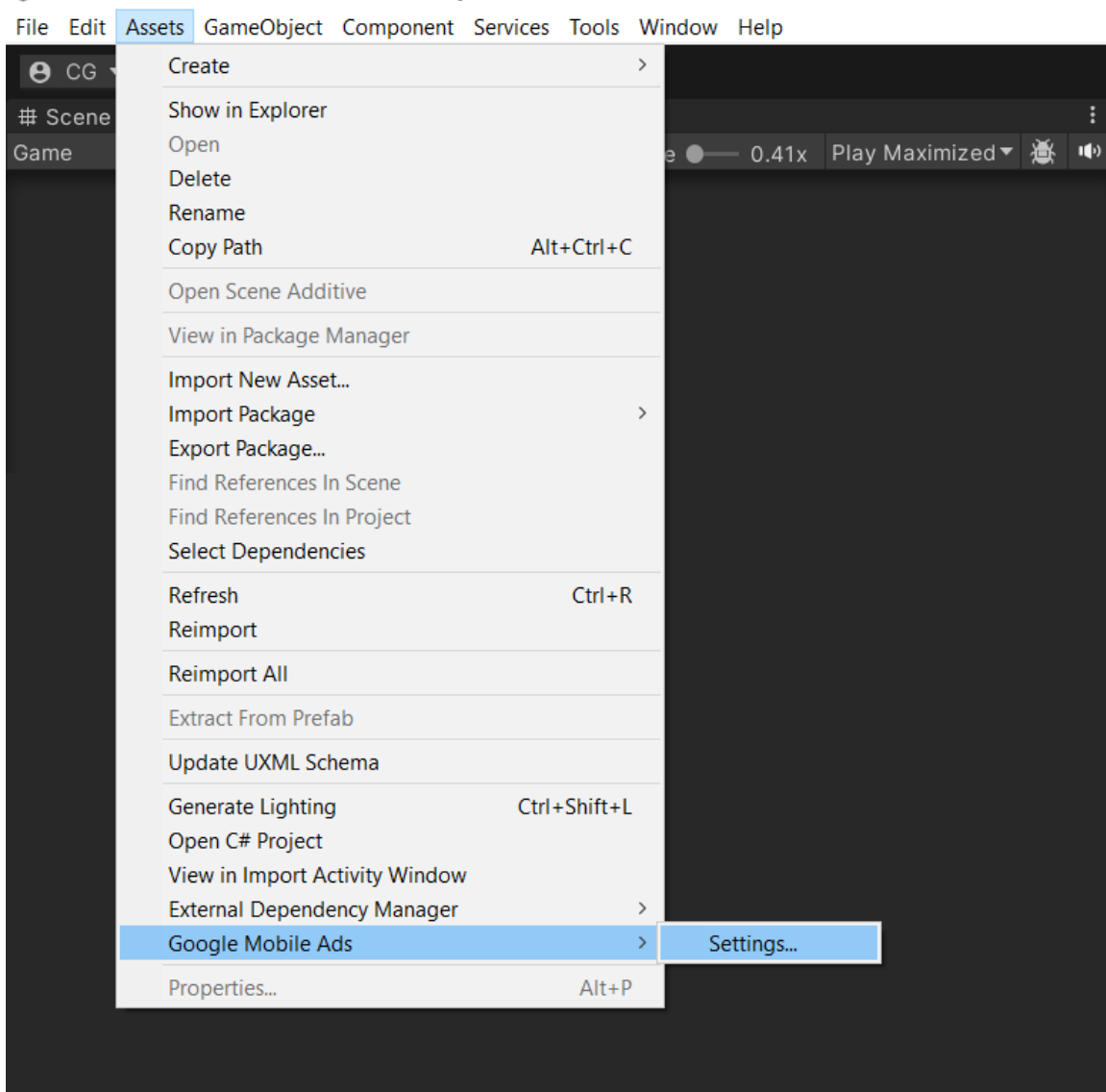
Now you can config Admob id and all the ad units as you want. Currently, the platform using is Android, that why all the ids in the image showing for Android, of course it will show the ids for iOS when you switch the build platform to iOS.

- ❖ *Android Banner Ad ID*: the unit of banner ad in your Admob account.
- ❖ *Banner Position*: the position of the banner ad.
- ❖ *Android Interstitial Ad ID*: the unit of interstitial ad in your Admob

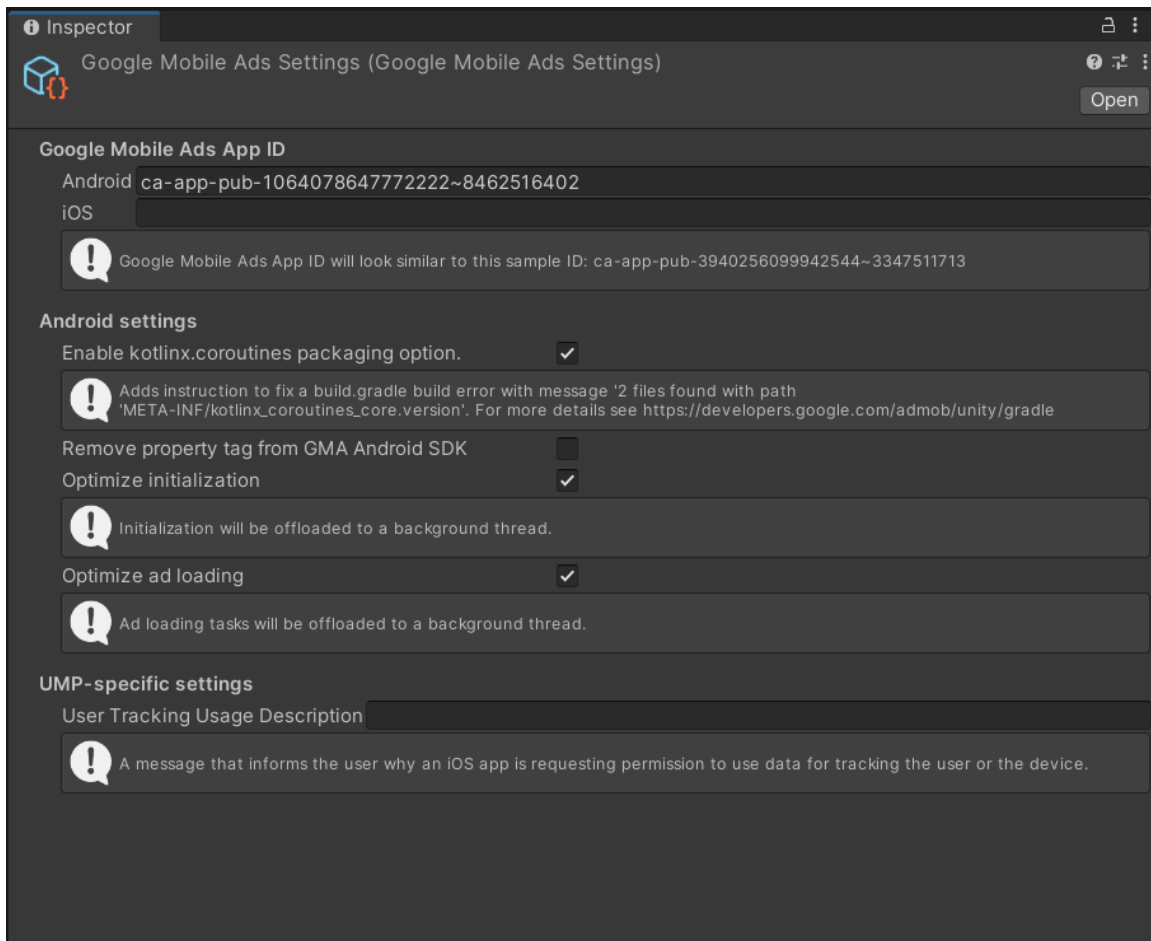
- ❖ *Android Rewarded Ad ID*: the unit of rewarded ad in your Admob account.

Now we need to setup the Admob App ID. Please follow these steps to setup the Abmob App ID.

- Go to Assets/Google Mobile Ads/Setting



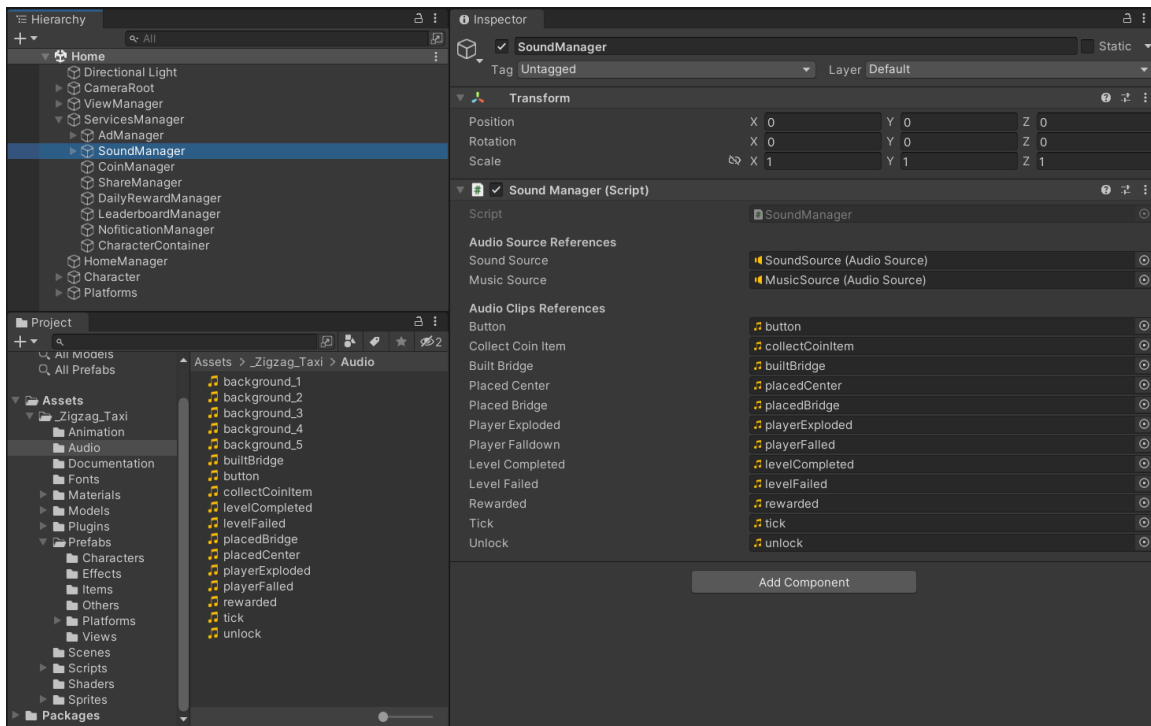
- Insert the Google Mobile Ads App ID at Android/iOS field base on your current platform.



➤ Hit Ctrl + S to save, that's all.

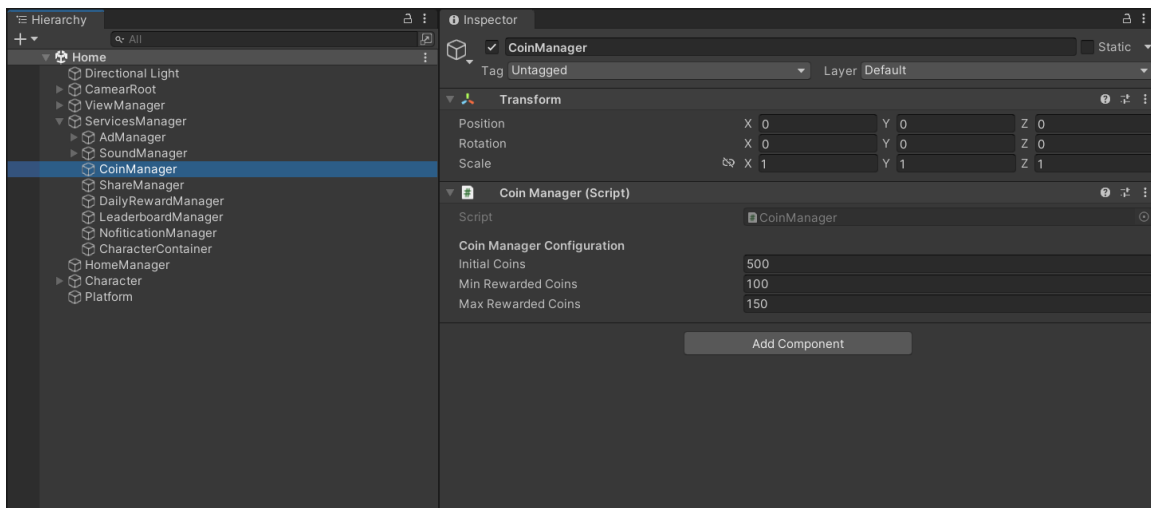
#### 4. Sound Manager

All sounds included in this game are free-to-use in commercial projects and are located under the path *Assets/\_Zigzag\_Taxi/Audio* folder.



## 5. Coin Manager

Coin is the currency in the game that player collect to unlock new characters. All information about coin can be config in CoinManager game object.

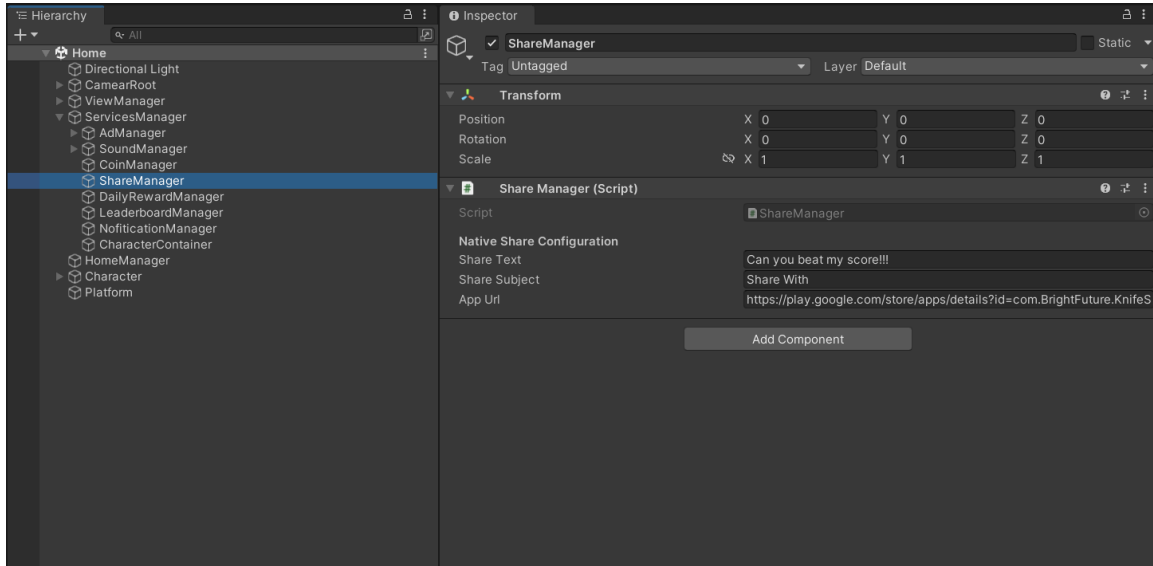


- ❖ **Initial Coins:** the initial coins that player will have when the game start at the first time.
- ❖ **Min Rewarded Coins:** the minimum coin amount that user will be rewarded after they watched rewarded ad.
- ❖ **Max Rewarded Coins:** the maximum coin amount that user will

be rewarded after they watched rewarded ad.

## 6. Share Manager

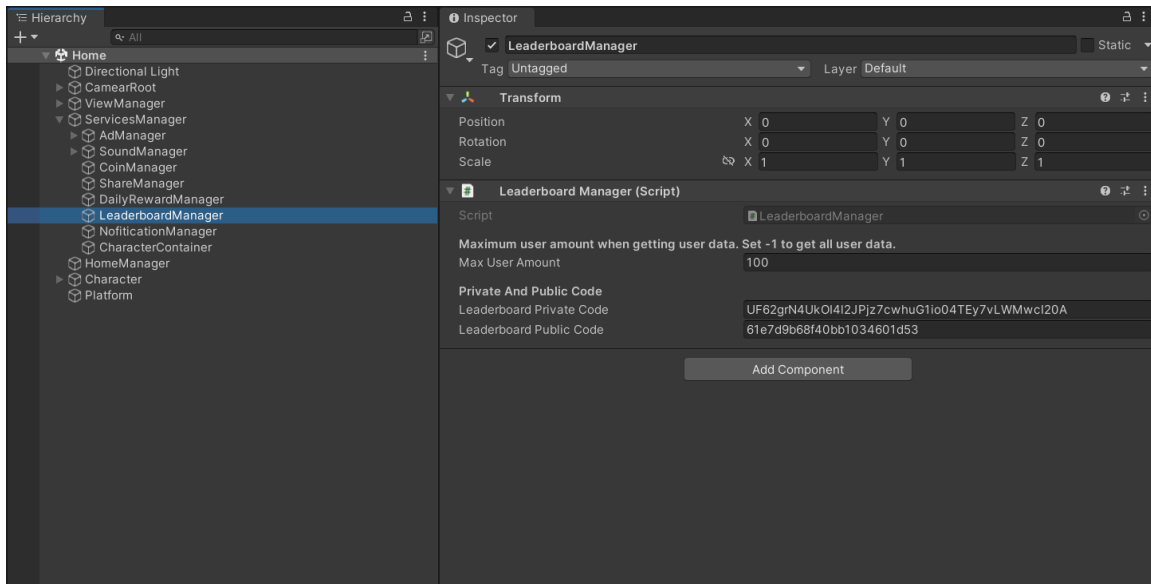
All information for sharing feature can be config in ShareManager game object. It contains the information likes shreenshot's name, text, subject and url...You can config these features from the ShareManager object in the hierarchy.



- ❖ *Share Text*: the text for sharing feature.
- ❖ *Share Subject*: the subject for sharing feature.
- ❖ *App Url*: the url of the app (Google Play on Android and App Store on iOS).

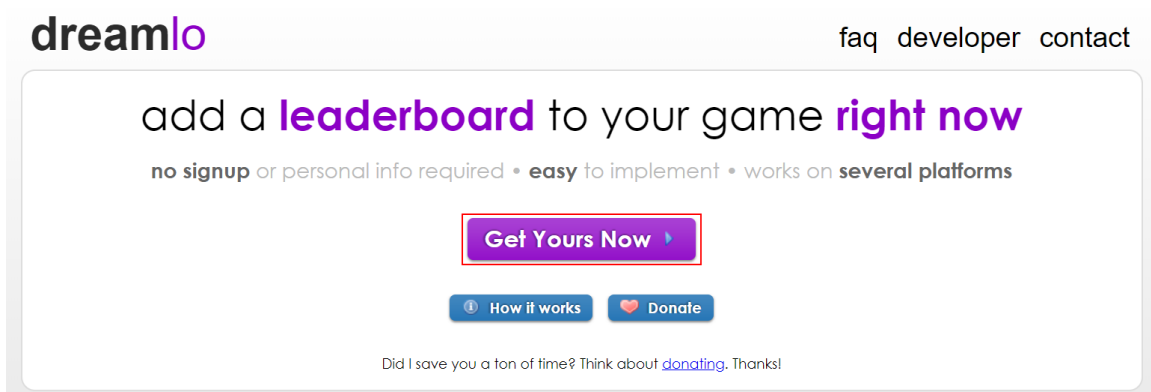
## 7. Leaderboard Manager

All information for leaderboard feature can be config in LeaderboardManager game object. It contains 2 parameters for you to config the leaderboard. Currently, we used Dreamlo to handle leaderboard feature.



- ❖ **Max User Amount:** the maximum amount user show in the leaderboard. If you set it to -1, it will show all the user that played the game and report to leaderboard table. We suggest you to limit it to 50 or 100, because if your game have 1000 downloads, which mean you have 1000 user in the leaderboard and when you load it all to the leaderboard view, the game will become laggy.
- ❖ **Leaderboard Private Code:** the leaderboard private code of Dreamlo.
- ❖ **Leaderboard Public Code:** the leaderboard public code of Dreamlo.

Now we will show you how to get the private and public code from Dreamlo. First, you need to go to [Dreamlo.com](https://dreamlo.com), at the top of the front page, click to Get Yours Now button.



After that, you will be direct to a page that you can get your private and public code.

Here is your **private** url. Copy and paste this somewhere.

**Do not tell anyone about this link.**

[http://dreamlo.com/lb/2\\_qIYeHSOkCtoGpQU2ENegN6JOfe5uUUCf46IhWjJ3eQ](http://dreamlo.com/lb/2_qIYeHSOkCtoGpQU2ENegN6JOfe5uUUCf46IhWjJ3eQ)

WebGL builds hosted at itch.io and other services as well as some versions of **Android** may need SSL to work!

Want to use **https (SSL)**? [Donate \\$5 or more](#) and let me know.

Want to store **more than 1000 scores**? [Contact](#) me.

(If you have a limit of 1000 scores and another score comes in, the lowest will get bumped out.)

**You copy and pasted that somewhere and are never going to tell anyone right?**

**You can not have an asterisk \* character in your URL, scores, usernames, etc.**

### Your Leaderboard

Highest 1000 scores.  
Your leaderboard is empty.

[Remove All Scores](#)

### Codes for Unity Example

Here are just your public and private code so that you can cut and paste them into the sample code for Unity.

Private Code (It's long, get all of it!)

2\_qIYeHSOkCtoGpQU2ENegN6JOfe

Public Code

5e7c0020fe232612b8e01d54

### Adding and deleting scores

Changes and updates to your leaderboard are made through simple **http get requests** using your **private** url.

A player named **Carmine** got a score of **100**. If the same name is added twice, we use the higher score.

[http://dreamlo.com/lb/2\\_qIYeHSOkCtoGpQU2ENegN6JOfe5uUUCf46IhWjJ3eQ/add/Carmine/100](http://dreamlo.com/lb/2_qIYeHSOkCtoGpQU2ENegN6JOfe5uUUCf46IhWjJ3eQ/add/Carmine/100)

A player named **Carmine** got a score of **1000** in **90 seconds**.

[http://dreamlo.com/lb/2\\_qIYeHSOkCtoGpQU2ENegN6JOfe5uUUCf46IhWjJ3eQ/add/Carmine/1000/90](http://dreamlo.com/lb/2_qIYeHSOkCtoGpQU2ENegN6JOfe5uUUCf46IhWjJ3eQ/add/Carmine/1000/90)

A player named **Carmine** got a score of **1000** in **90 seconds** and is **Awesome**.

[http://dreamlo.com/lb/2\\_qIYeHSOkCtoGpQU2ENegN6JOfe5uUUCf46IhWjJ3eQ/add/Carmine/1000/90/Awesc](http://dreamlo.com/lb/2_qIYeHSOkCtoGpQU2ENegN6JOfe5uUUCf46IhWjJ3eQ/add/Carmine/1000/90/Awesc)

Delete **Carmine's** score

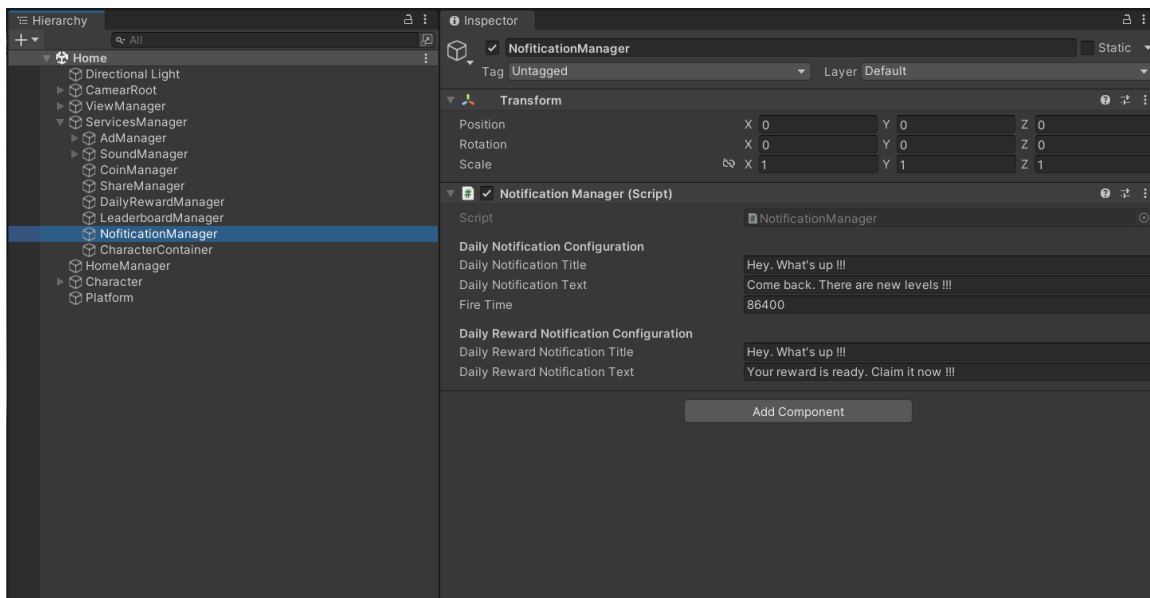
[http://dreamlo.com/lb/2\\_qIYeHSOkCtoGpQU2ENegN6JOfe5uUUCf46IhWjJ3eQ/delete/Carmine](http://dreamlo.com/lb/2_qIYeHSOkCtoGpQU2ENegN6JOfe5uUUCf46IhWjJ3eQ/delete/Carmine)

Clear **all** scores

Copy 2 codes and paste it on LeaderboardManager component. That's it.

## 8. Notification Manager

All information for notification feature can be config in NotificationManager game object. It contains 3 parameters for you to config the notification. Currently, we used Mobile Notification package provided by Unity to handle the notification.



**Daily Notification Configs:** this is the notification that fire daily.

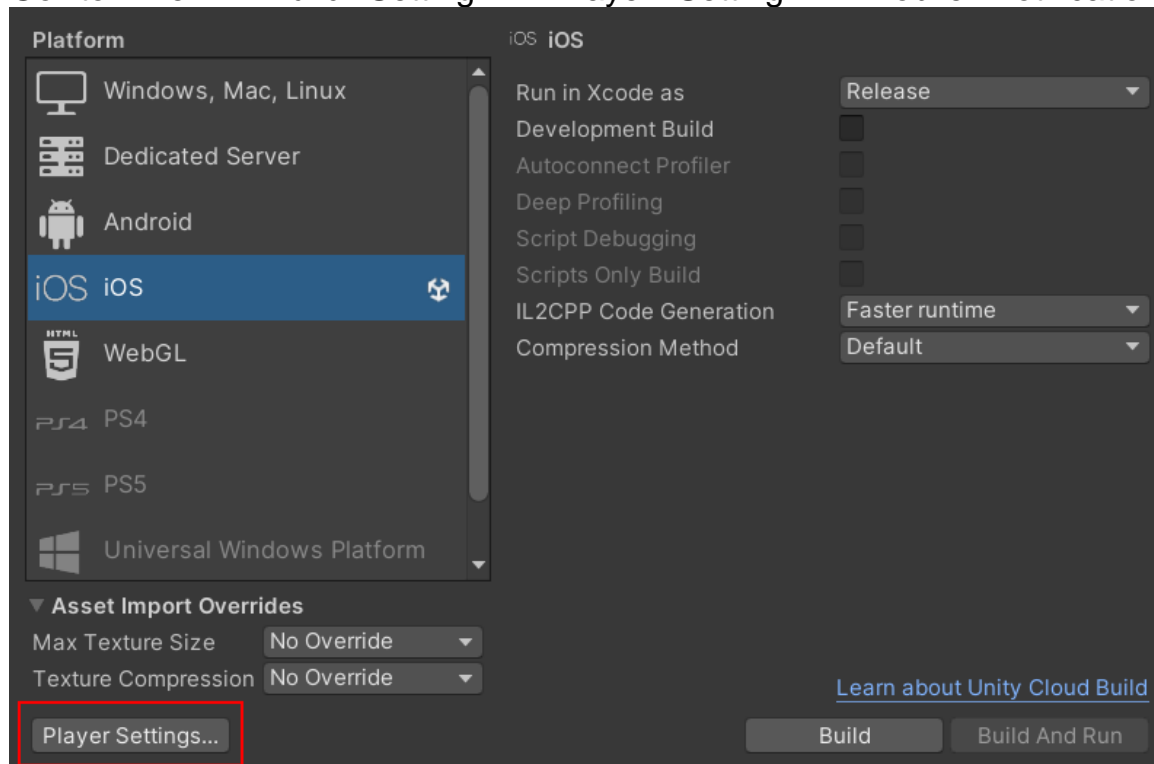
- ❖ *Daily Notification Tile*: the tile of the notification when it fired.
- ❖ *Daily Notification Text*: the text of the notification when it fired.
- ❖ *Fire Time*: how long till the notification get fire (in seconds) after the game close. Currently it's 86400 seconds which is 1 day.

**Reward Coins Notification Configs**: this is the notification that fire when a reward is ready to claim.

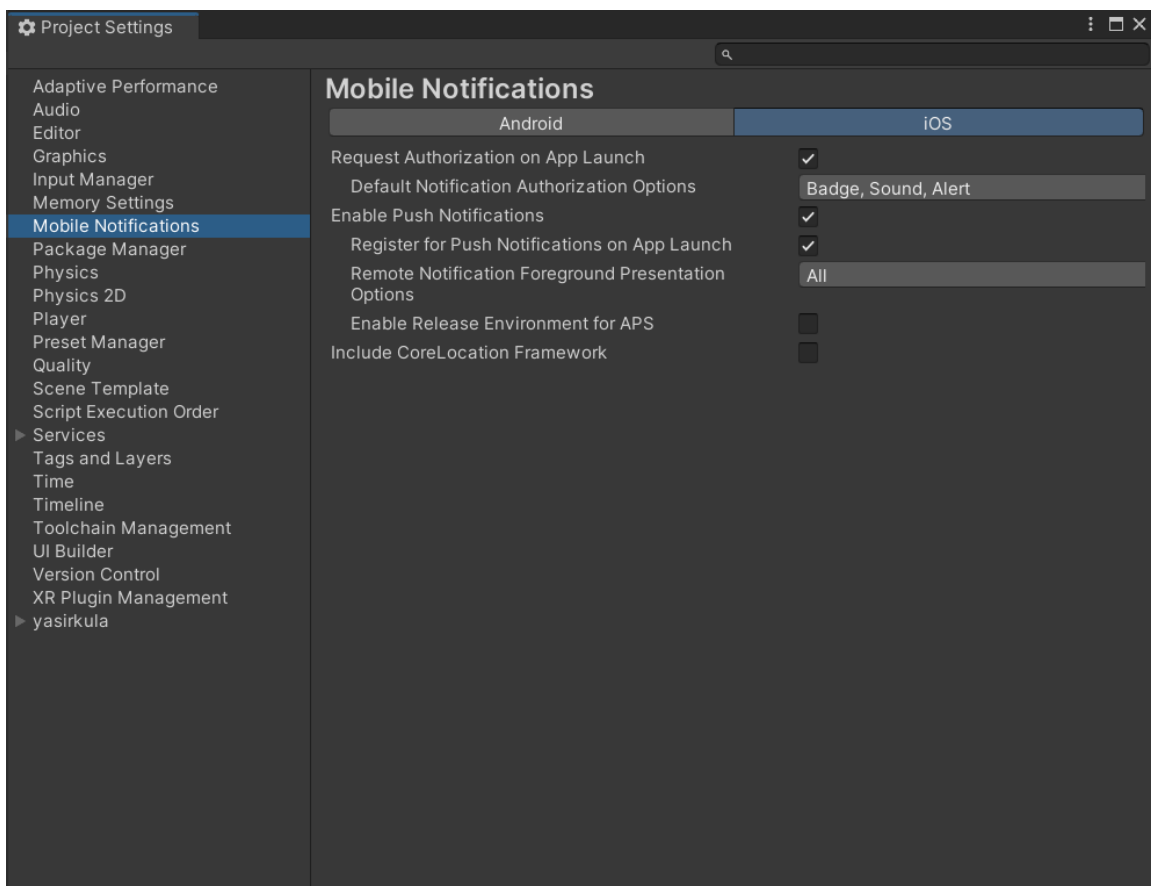
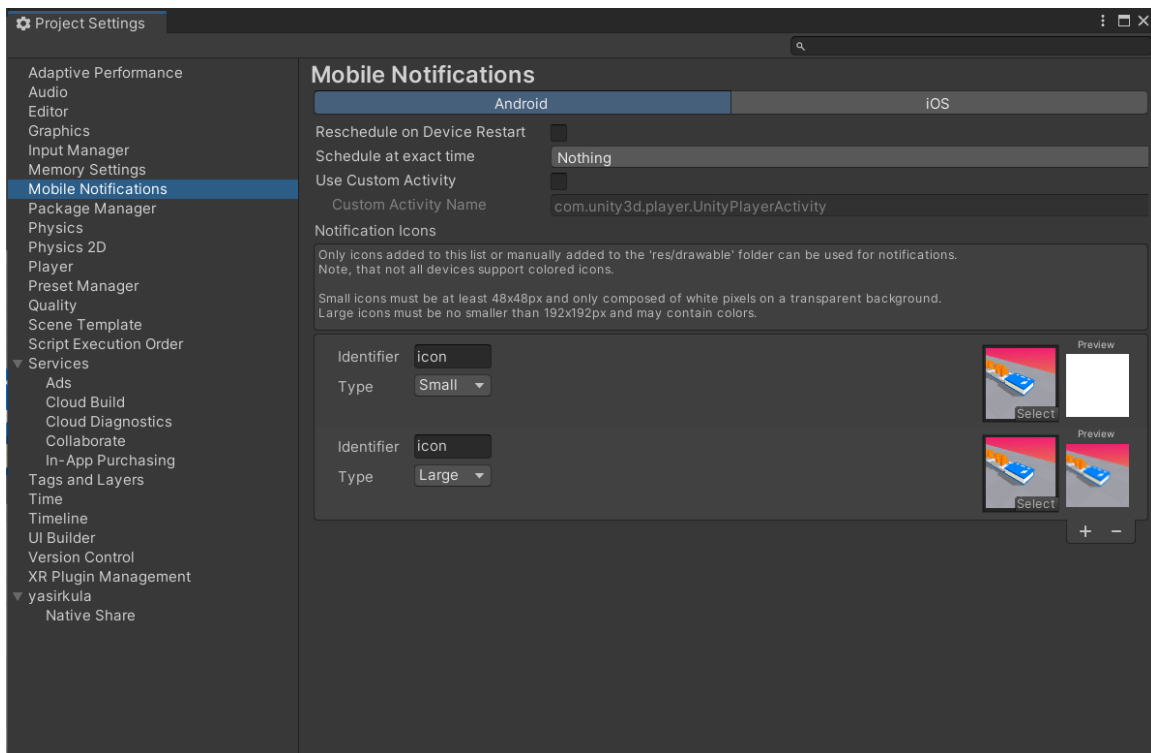
- ❖ *Reward Coins Notification Tile*: the tile of the notification when it fired.
- ❖ *Reward Coins Notification Text*: the text of the notification when it fired.

You can set up the notification icon by following these steps.

Go to File -> Build Setting -> Player Setting -> Mobile Notification





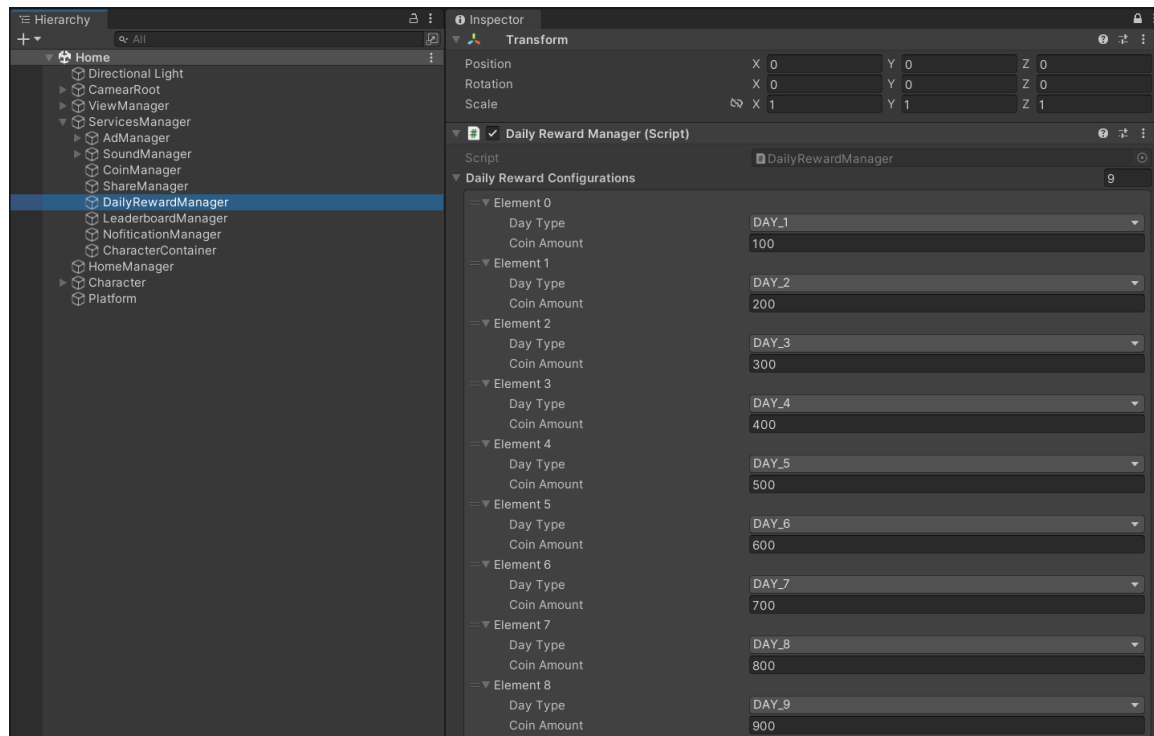


As you can see, there's a filed for you to setup icon for notification.

Remember, you must set the Identifier as “icon”.

## 9. Daily Reward Manager

This template has a built-in daily reward system in which the user will be rewarded with coins every predefined interval of time. This is an effective way to increase user engagement and retention for your game. You can configure this feature from the *DailyRewardManager* object in the hierarchy.



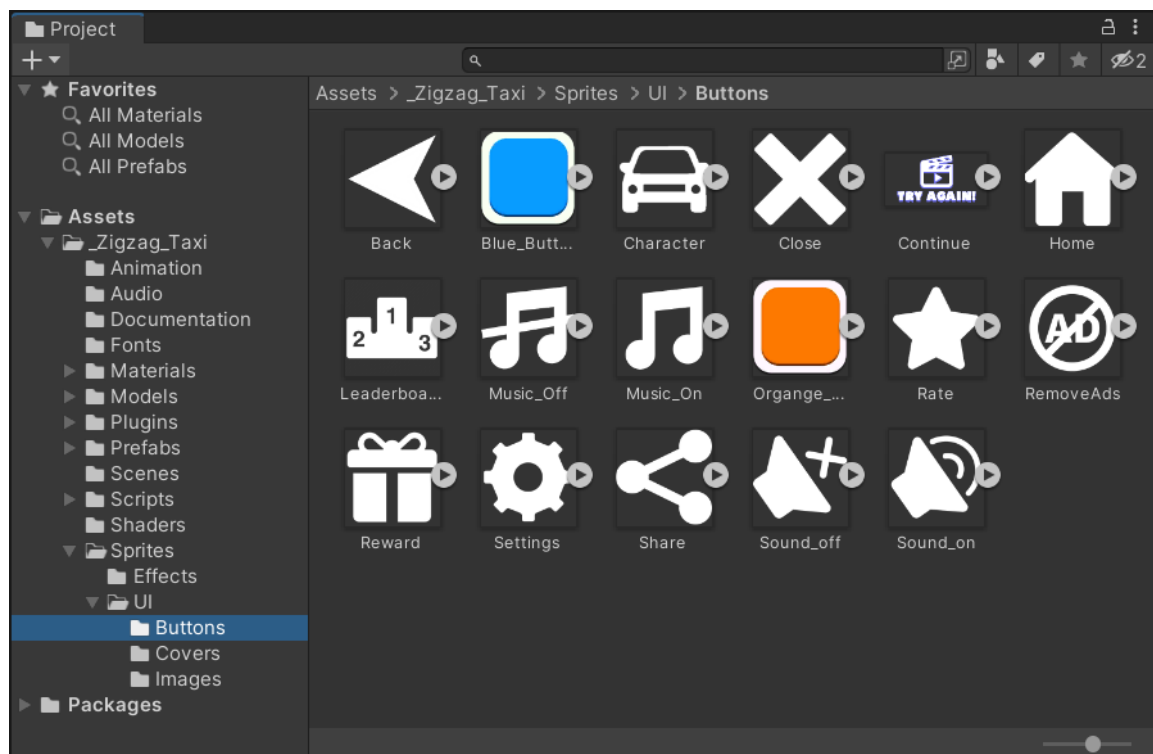
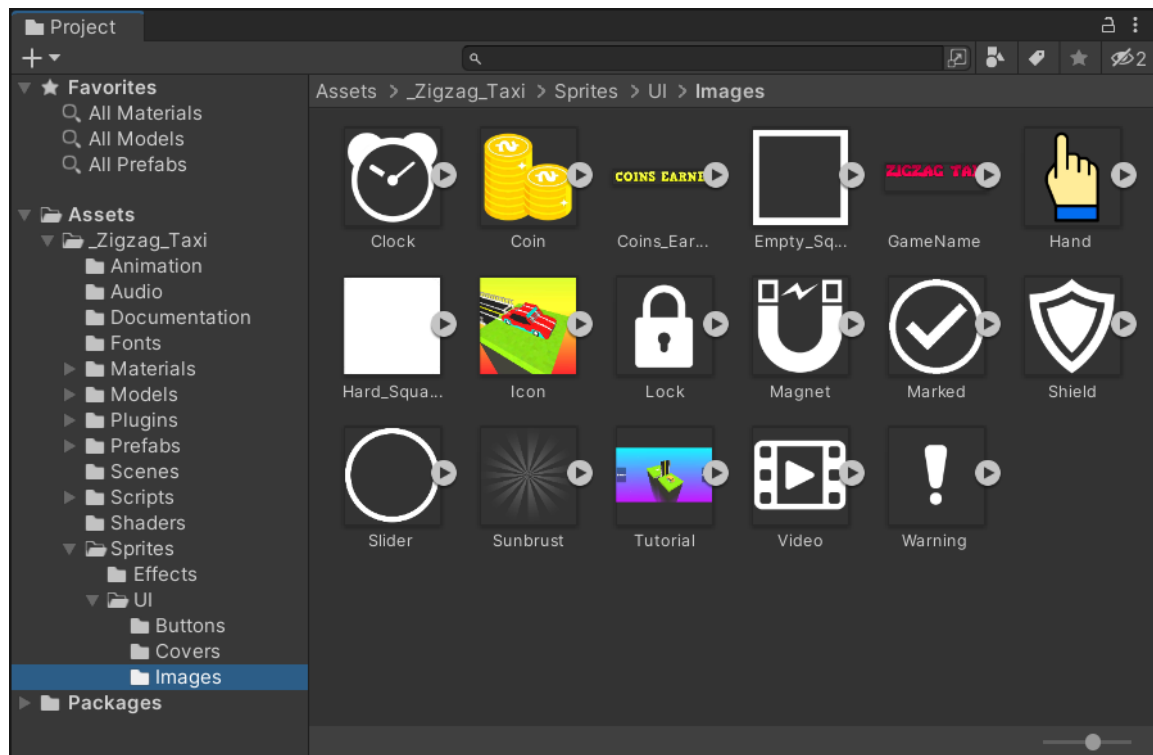
***Daily Reward Configurations:*** this array allows you config the rewarded coin amount for each day.

- ❖ *Day Type:* the day of the reward.
- ❖ *Coin Amount:* the amount of coin player will be rewarded.

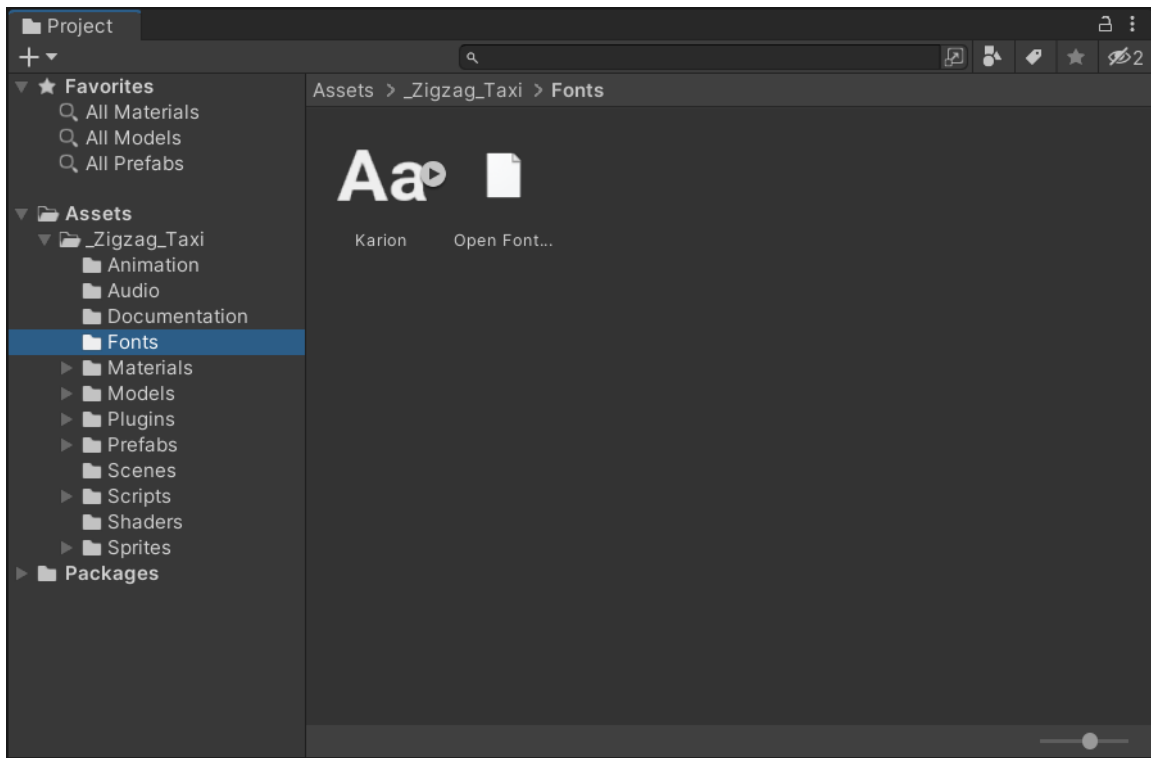
**\*IMPORTANT:** Currently, the daily reward system was designed for only 9 days, after player get all the reward (claimed 9 rewards), the daily reward system will reset to day 1. DO NOT ADD MORE ELEMENT TO THE ARRAY, IT MAY CAUSE UNEXPECTED ERRORS.

## 10. Customizing UI

All sprites used in this game (for buttons and other UI components) are located under the path *Assets/\_Zigzag\_Taxi/Sprites* folder. You can replace them with your own sprites to modify the images as you like.



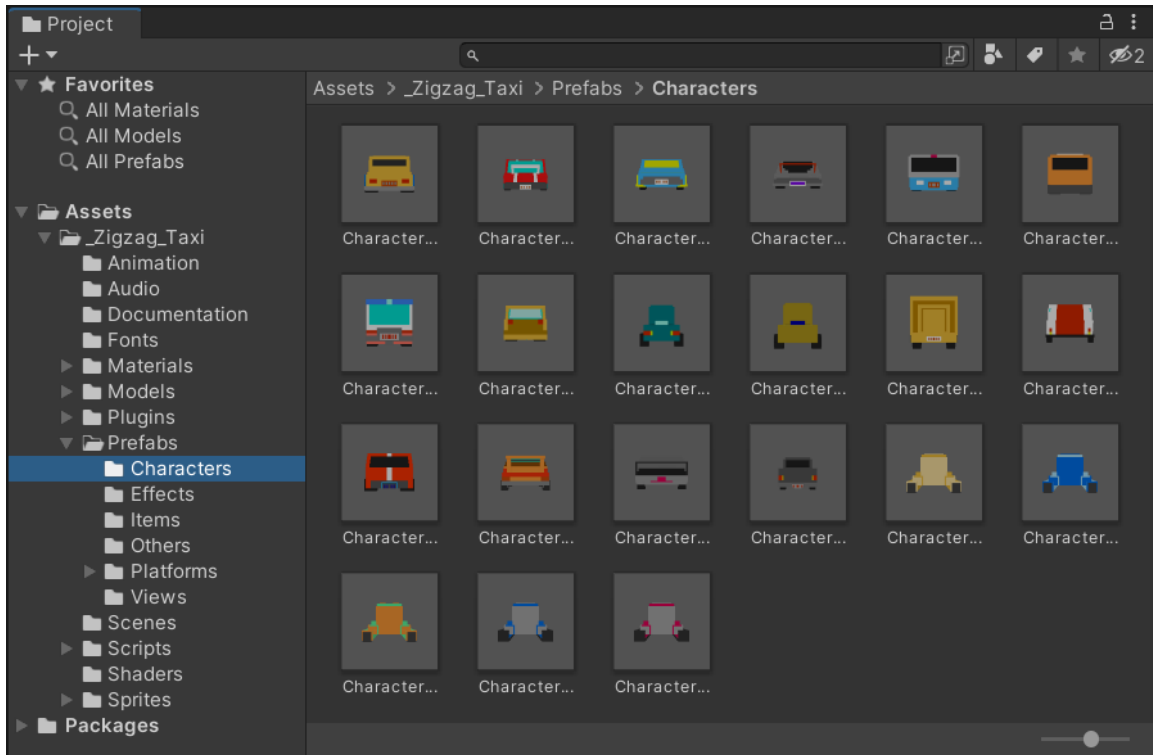
All fonts used in this game are free-to-use in commercial projects. Fonts are located under the path *Assets/\_Zigzag\_Taxi/Fonts* folder together with appropriate license files.



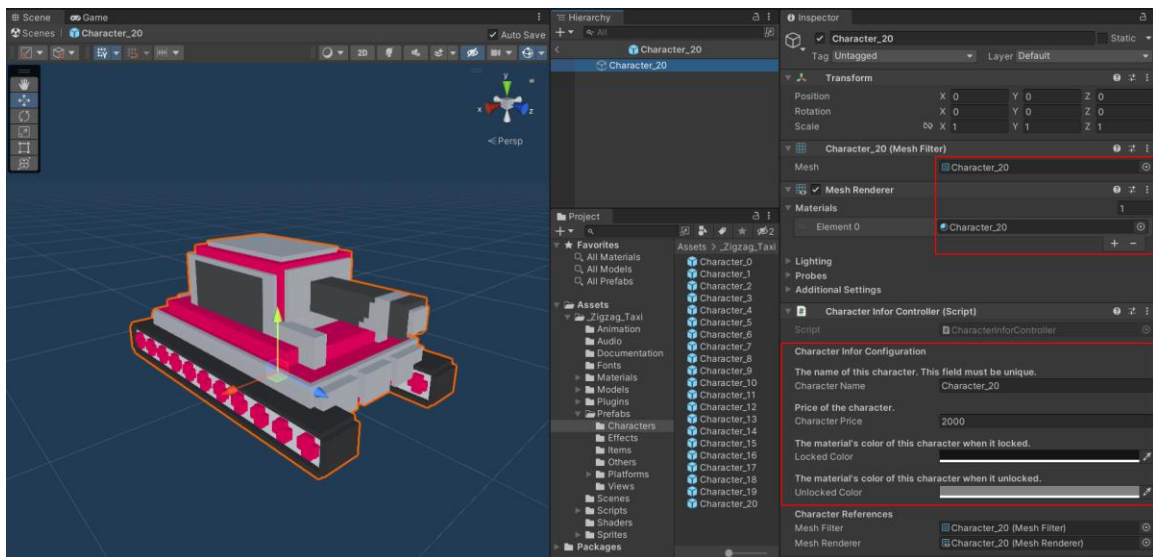
## VII. CHARACTER MANAGERMENT

This template comes with built-in 21 characters ready to unlock, each character has one mesh and an empty child object for fire point. You can find all the characters under the path *Assets/\_Zigzag\_Taxi/Prefabs/Characters*. Here's the step to add more characters.

- Create a model, change the pivot of it to center (x: center, y: bottom, z: center). You can use any software out there like Maya, Zbrush, Blender, Magical Voxel...The software I used to create these models is Blender.
- Navigate to *Assets/\_Zigzag\_Taxi/Prefabs/Characters* and duplicate one of the available character prefabs.



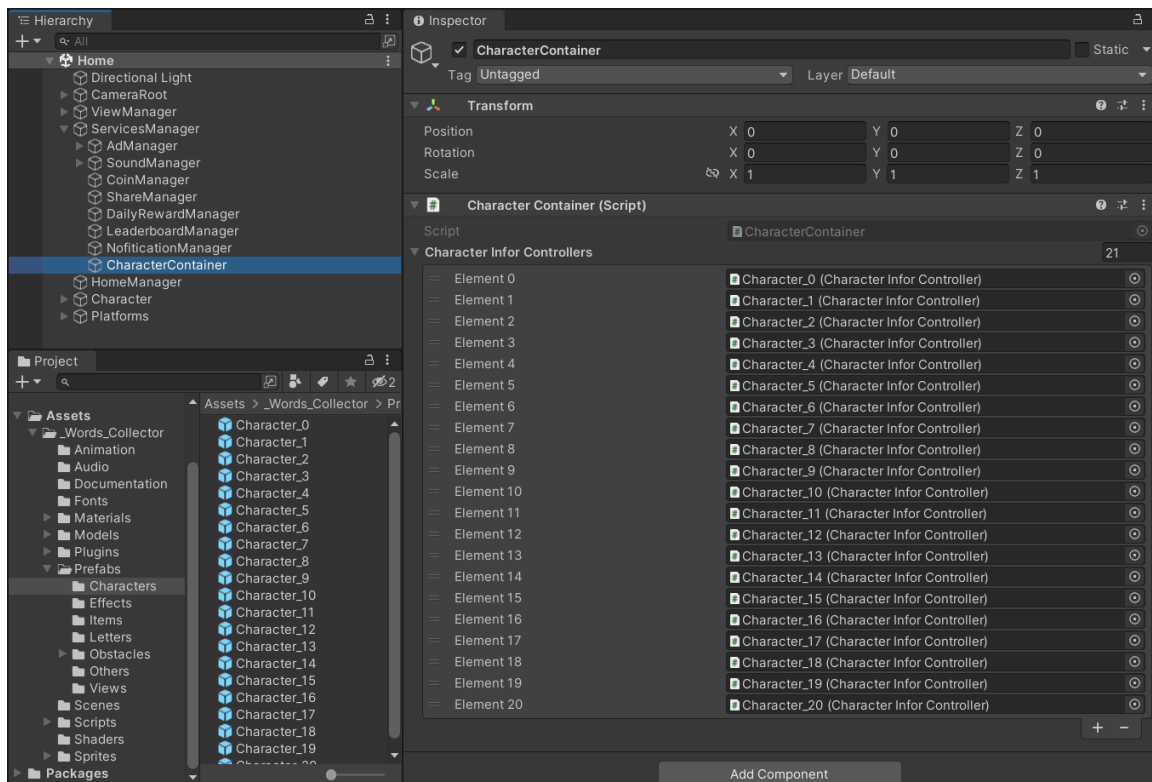
- Change the name of the prefab to a preferred one.
- Each character contains a head and two bodies. Replace the *Mesh* in the *Mesh Filter* component of the head with your new head model. Replace the *Mesh* in the *Mesh Filter* component of the bodies with your new body model. Replace the *Material* in the *Mesh Renderer* component with your new character's material.



- Enter the character name and character price to the

*CharacterController* component. If you want to give out this character for free, leave the *Character Price* to be 0 (it will be automatically unlocked). *Locked Color* is the color of the character when it still not un lock. *Unlocked Color* is the color when the character already unlocked. You can change these two colors as you want. *Mesh Filter* is the component Mesh Filter of the character, *Mesh Renderer* is the component Mesh Renderer of the character. *Pencil Body Texture* is the texture you create when you model the pencil.

- Resize the character array in *CharacterContainer* game object then drag the new character to it and hit *Ctrl + Z* to save changes.



Now the new character has been added and ready to use in game! You will see it listed in the *Character* scene.

\* **IMPORTANT:** the new character's name must not repeat any existing character name.

**THANK YOU AND GOOD LUCK WITH YOUR GAMES!**