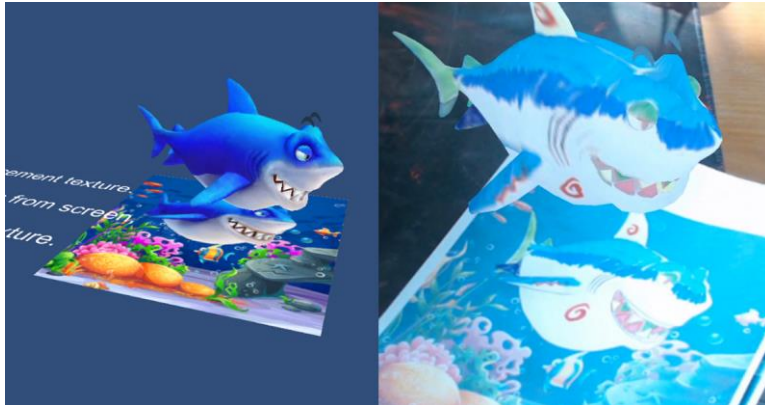


Thank you for downloading **AR Color Fishes** Package!



## 1 DESCRIPTION

2 .How to use Example Scenes

3.How to Change Fish In AR Scene

4. **Common problem !! (Very Important!!)**

5. How to make your own ARColor

## DESCRIPTION

The classic technology in AR.

You can make a AR color app with this package.

Detailed instructions for use are included in the manual.

Fill the pattern with the color and display it on the AR model.

Support for Unity Editor/PC/Android/iOS.

7 fishes models with animations:

Shark, Angelfish, Clownfish, Monkfish, Swordfish, Turtle, Tuna

Very meticulous UV layout.

And It's fit to all AR SDK.

## How To USE Example

There are two patterns in

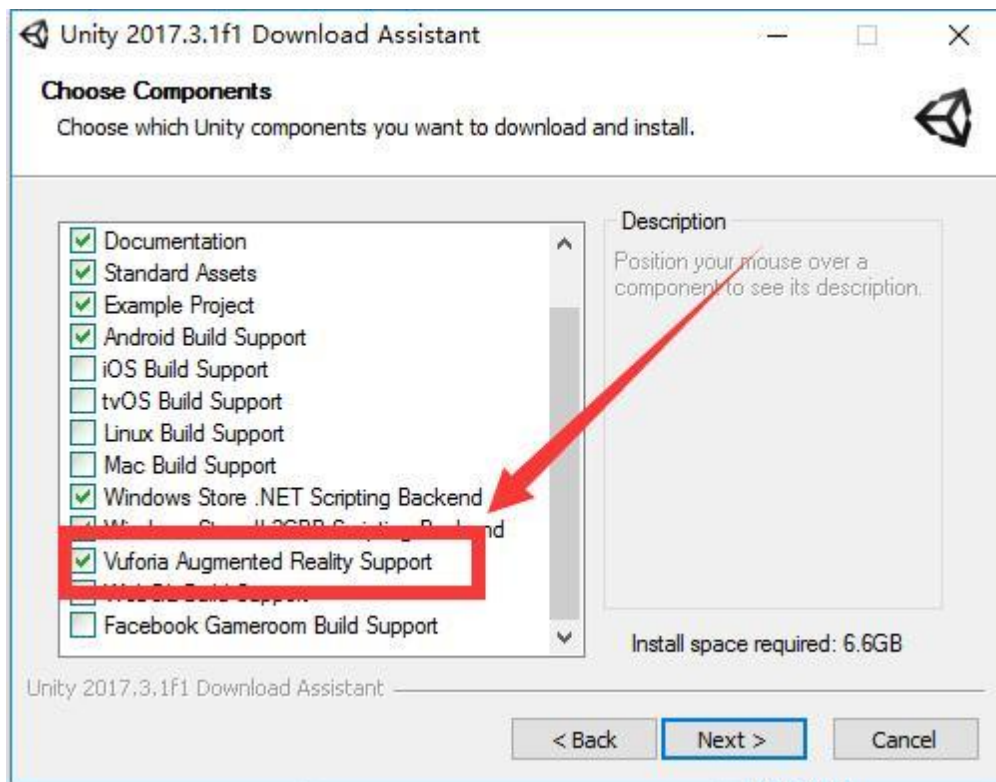
- 1.Normal mode: Can run without AR
2. AR mode: Run after adding ARSDK

Show you the Normal Mode first 😊

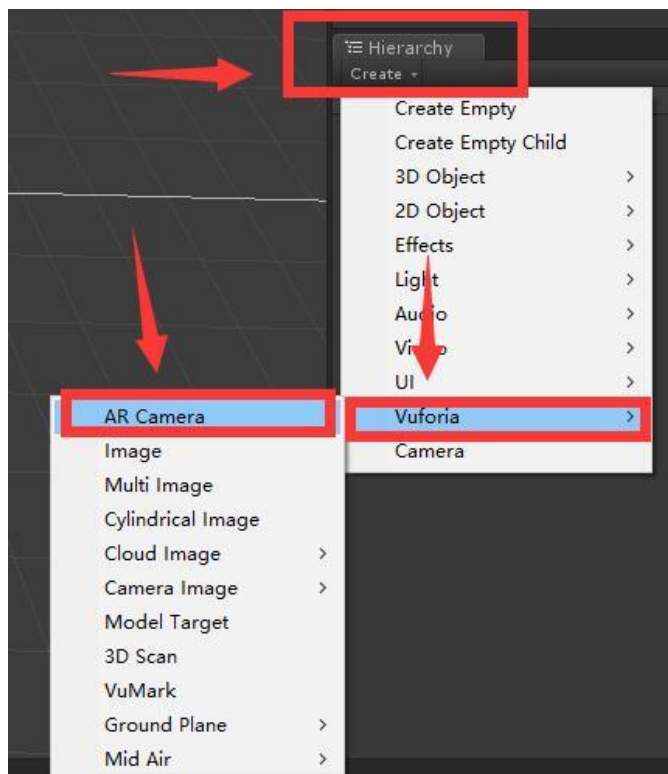
Normal mode: Just Run it ;

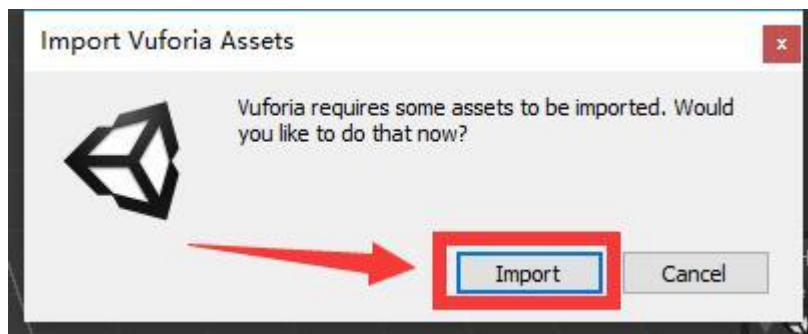
AR mode :

1. Make sure vufoira is selected when you install unity

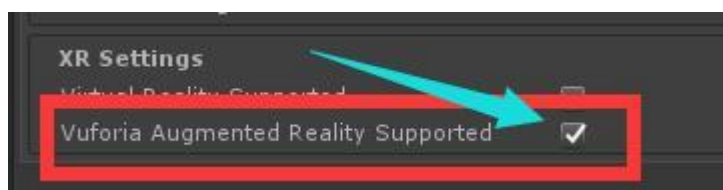
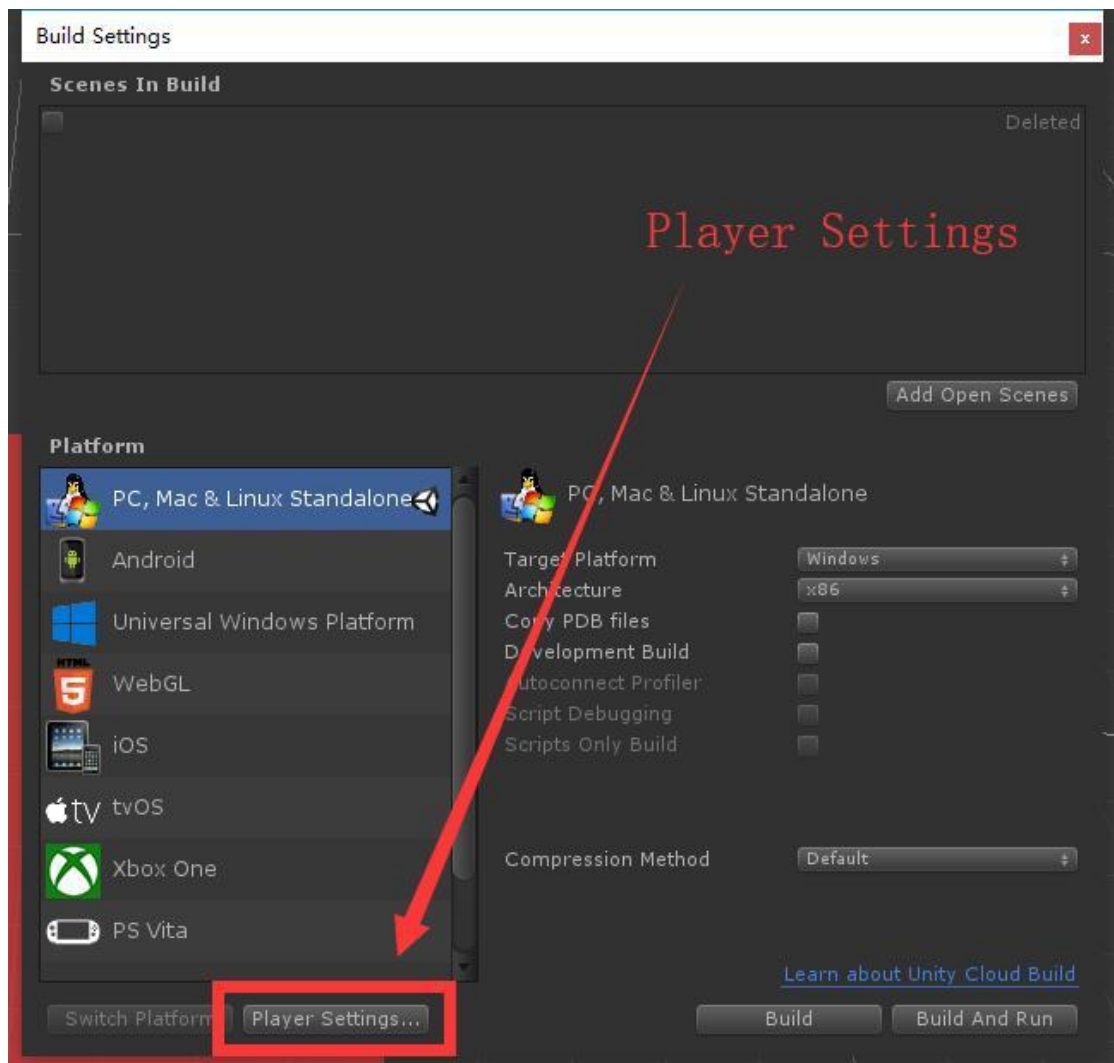


2. Adding an AR camera to the scene, options for loading vuforia components will appear





### 3. Confirming Vufoira Function in PlayerSetting



#### 4. Get Vufoira Key

The screenshot shows the Vufoira web interface. At the top, a green navigation bar contains links for Home, Pricing, Downloads, Library, and Develop. The 'Develop' link is highlighted with a red box. Below this, a secondary navigation bar shows 'License Manager' and 'Target Manager', with 'License Manager' also highlighted by a red box. The main heading is 'License Manager', followed by the instruction 'Create a license key for your application.' Below this are two buttons: 'Get Development Key' (highlighted with a red box) and 'Buy Deployment Key'. The section 'Add a free Development License Key' follows. Under 'App Name', there is a text input field containing 'ARSciFIEffect' (highlighted with a red box) and a note 'You can change this later'. The 'License Key' section lists details: Develop, Price: No Charge, Reco Usage: 1,000 per month, Cloud Targets: 1,000, VuMark Templates: 1 active, and VuMarks: 100. A checkbox (highlighted with a red box) is checked, with a red arrow pointing to it from the 'Get Development Key' button. The text next to the checkbox states: 'By checking this box, I acknowledge that this license key is subject to the terms and conditions of the [Vufoira Developer Agreement](#).' At the bottom, there are 'Cancel' and 'Confirm' buttons, with the 'Confirm' button highlighted by a red box and a red arrow pointing to it from the checkbox area.

Home Pricing Downloads Library **Develop**

**License Manager** Target Manager

## License Manager

Create a license key for your application.

**Get Development Key** Buy Deployment Key

### Add a free Development License Key

**App Name**

ARSciFIEffect You can change this later

**License Key**

Develop  
Price: No Charge  
Reco Usage: 1,000 per month  
Cloud Targets: 1,000  
VuMark Templates: 1 active  
VuMarks: 100

☒ By checking this box, I acknowledge that this license key is subject to the terms and conditions of the [Vufoira Developer Agreement](#).

Cancel **Confirm**

## ARSciFiEffect

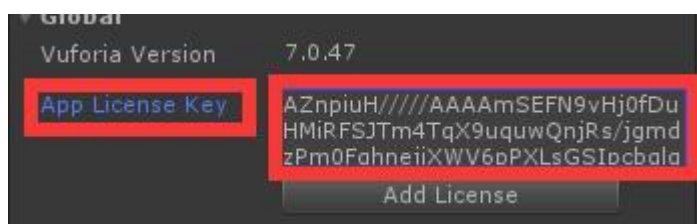
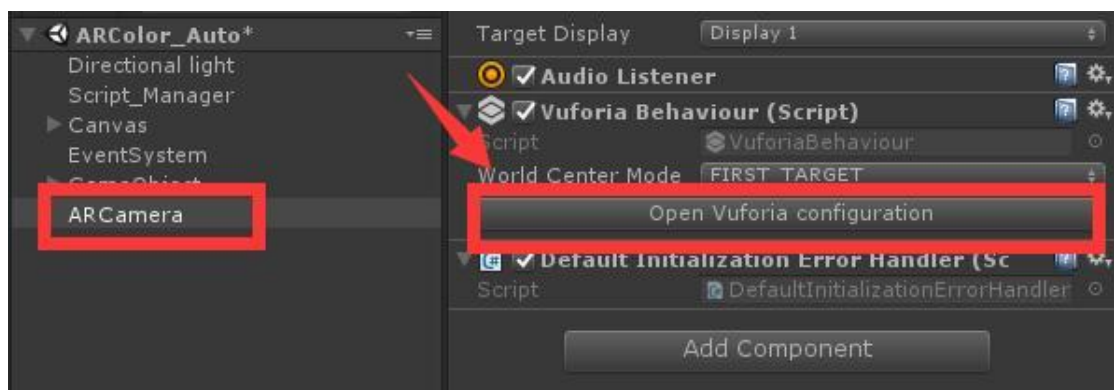
[Edit Name](#) [Delete License Key](#)

License Key

Usage

Please copy the license key below into your app

```
AZnpiuH/////AAAAmSEFN9vHj0fDu  
HMiRFSJTm4TqX9uquwQnjRs/jgmd  
zPm0FahneiiXWV6pPXLsGSIPcbala  
ae7W4rw+Rv4TmF8L+GBKFZrva2elFBizscYSkifagHmxKa2z9v  
V9/jXEnn6VKmKQbkNeywG3D9U/6Dcssg1fQA/hsQglL81eZoT8  
eq8C6jMuLYW4vXG2kvML4QT6xQbrOe
```



5. Get Vuforia Image Database

## Target Manager

Use the Target Manager to create and manage databases and targets.



### Create Database

Name:

Type:

- ☒ Device
- ☐ Cloud
- ☐ VuMark

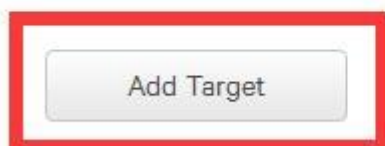


Cancel **Create**

**ARColor** [Edit Name](#)

Type: Device

Targets (0)



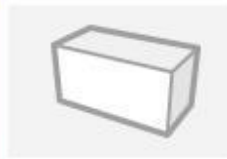


## Add Target

Type:



Single Image



Cuboid



Cylinder



3D Object

File:

Card\_Girl.jpg

Browse...

.jpg or .png (max file 2mb)

Width:

0.1

Enter the width of your target in scene units. The size of the target should be on the same scale as your augmented virtual content. Vuforia uses meters as the default unit scale. The target's height will be calculated when you upload your image.

Name:

Card\_Girl

Name must be unique to a database. When a target is detected in your application, this will be reported in the API.

Cancel

Add




## ARColor [Edit Name](#)

Type: Device

Targets (3)

Add Target

Download Database (3)

<input checked="" type="checkbox"/>	Target Name	Type	Rating	Status ▾	Date Modified
3 selected <a href="#">Delete</a>					
<input checked="" type="checkbox"/>	 Card_Square	Single Image	★★★★★	Active	Mar 15, 2018 23:53
<input checked="" type="checkbox"/>	 Card_Rectangle	Single Image	★★★★★	Active	Mar 15, 2018 23:52
<input checked="" type="checkbox"/>	 Card_Girl	Single Image	★★★★★	Active	Mar 15, 2018 23:50



## Download Database

3 of 3 active targets will be downloaded

**Name:**

ARColor

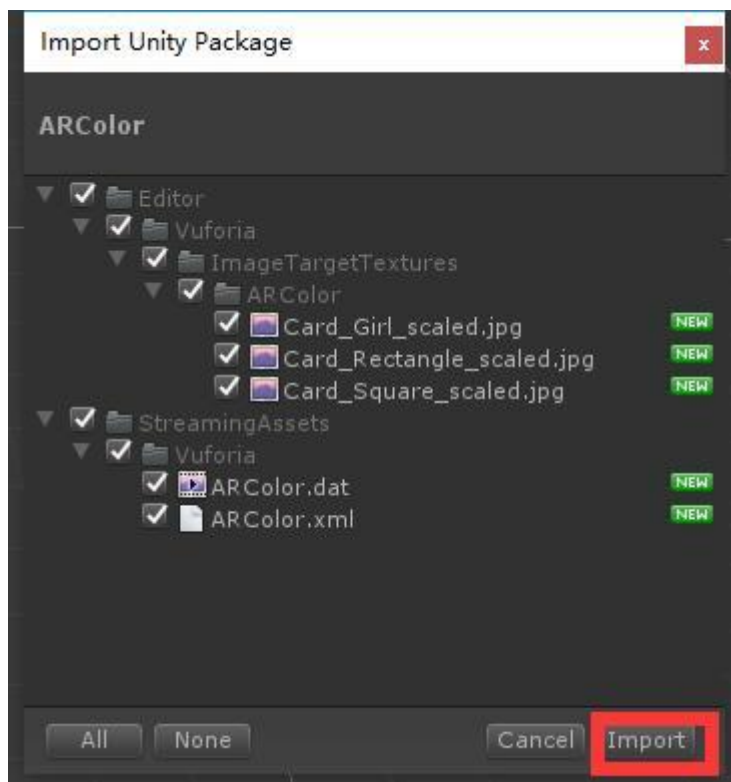
**Select a development platform:**

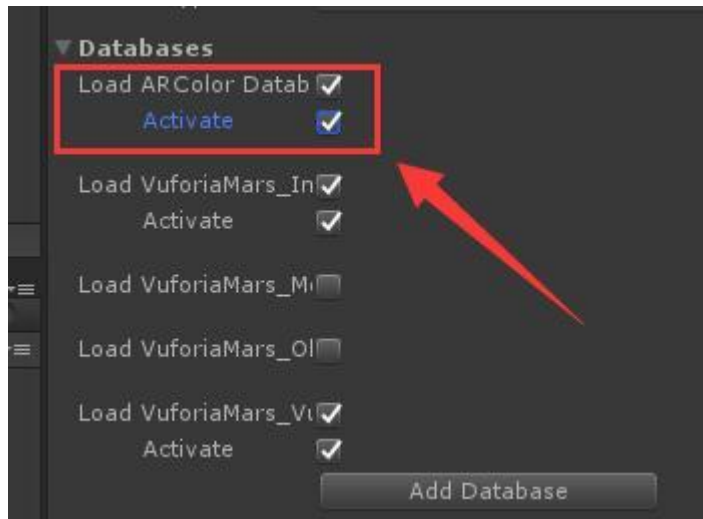
☐ Android Studio, Xcode or Visual Studio

☒ Unity Editor

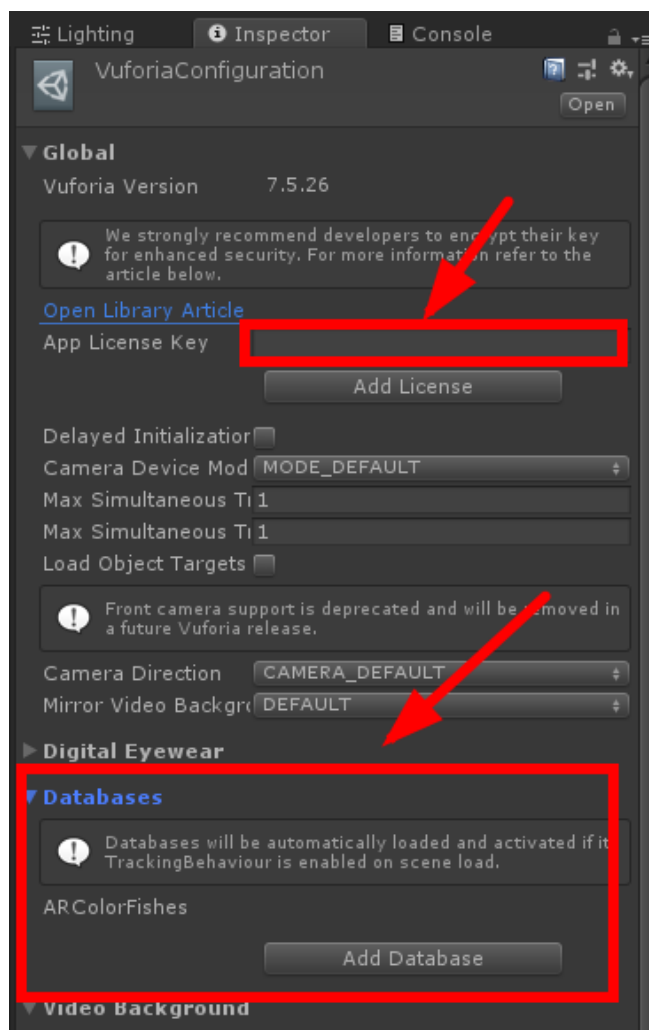
Cancel

Download





If the vuforia version is new, maybe you will see it like this, in this case , No need to check Database by hand

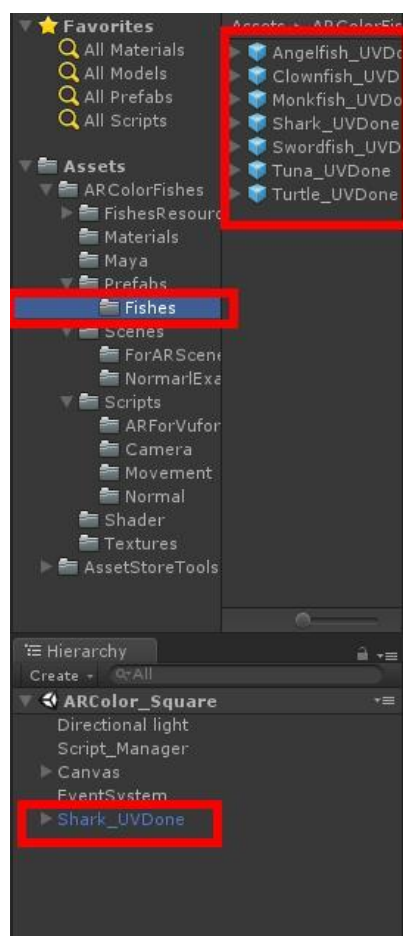


6. add Vufoira ARCamra in the scene
7. add Vufoira Image in the scene
8. Adjust the size of image to match the model
9. Add Image to the script variable

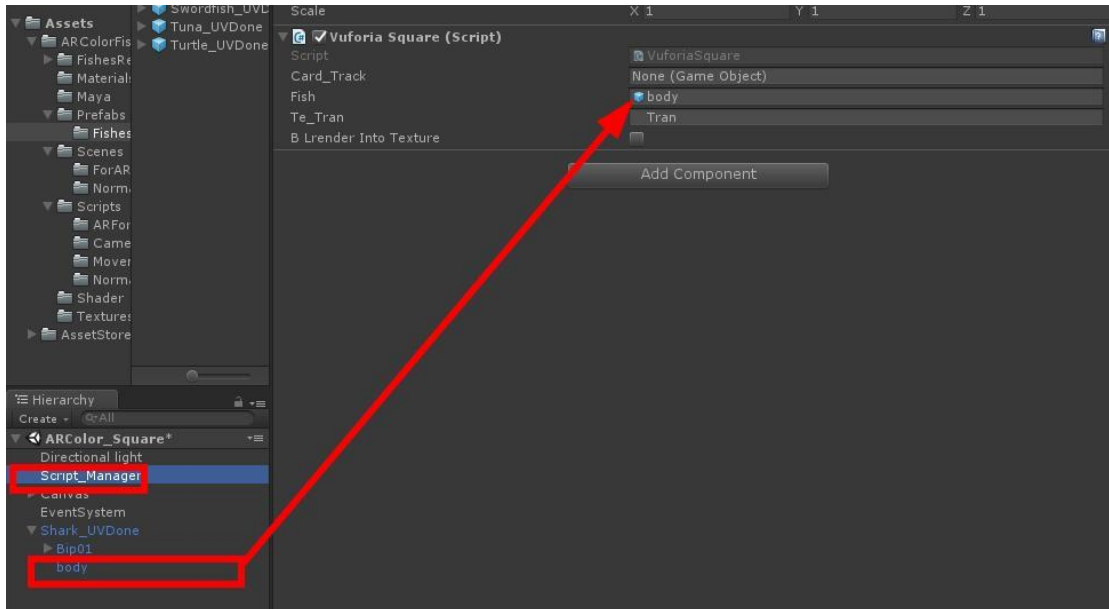
Run program,color the picture,It's done

## How to Change Fish In AR Scenes

1. Delete the original shark model in the scene, add a model of the fish you need to the scene. Prefab models in ARColorFishes-Prefabs-Fishes.



2. Expand the fish in Hierarchy, find "body" in the child object. Find "Script\_Manager" in the Hierarchy, add body to "Fish" in Inspector of "Script\_Manager".



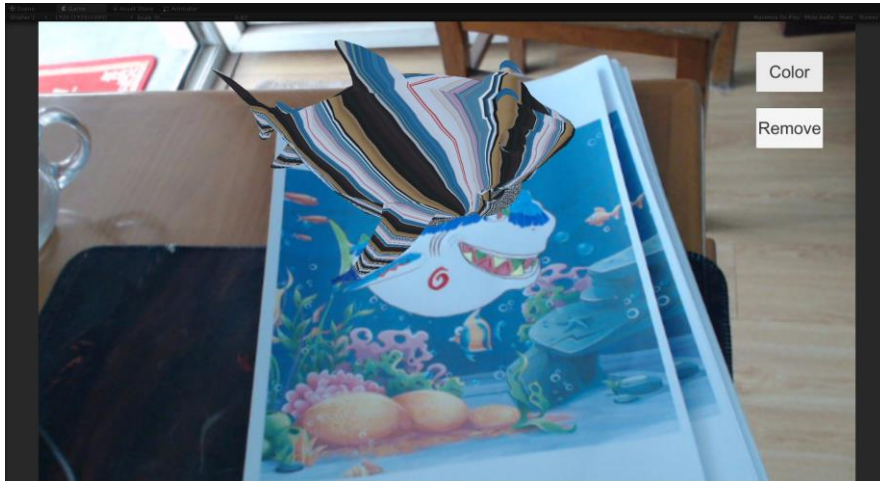
2. The rest of the operation is the same as in the "How to use Example Scenes" section.
- 3.

## Common problem (Very Important)

1. Why are there no configured AR scenarios in the asset?

Third-party plug-ins is not allowed when upload Asset. This is an official requirement of Unity3D.

2. Abnormal color on the model



Different Unity versions, different vuforia versions, may have different default configurations, which may cause some differences in coordinates.

Common problems are:

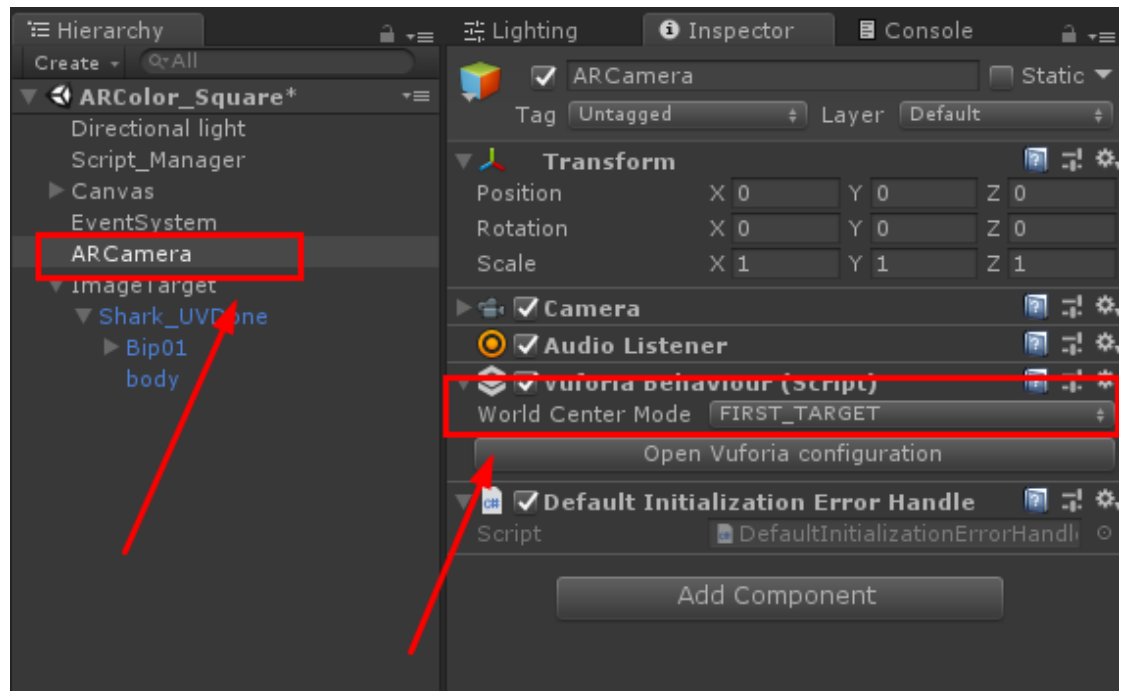
a . The space parameter of the camera and target is wrong.

**Solution** :Make sure the main camera in the scene is ARCamera.If the main camera is other camera, It may result in parameter errors that C# passed to the shader.

b . World Center mode Wrong

**Solution** :World Center mode please select FIRST\_TARGET.

If you are familiar with the mechanism of ARColor, of course, you can use other patterns and adjust them from the code accordingly.



3. Failure to recognize the target image, resulting in failure to display the corresponding model
  - a. Because the resolution of the camera of the computer is generally low, the slice that can recognize the picture on the mobile end is sometimes not recognized on the PC .

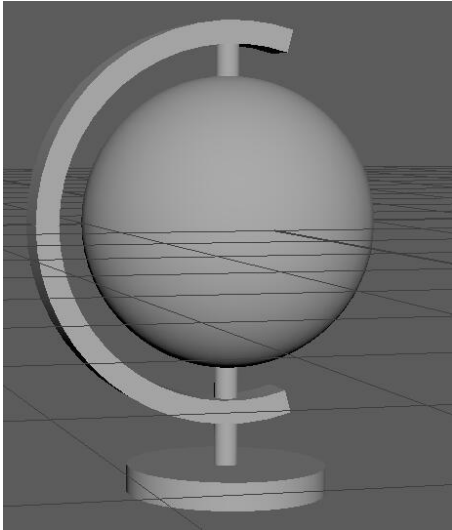
**Solution :** Replace higher resolution camera hardware

- b. Check whether the printed paper is flat or not. If the paper curls, it may affect the recognition effect.

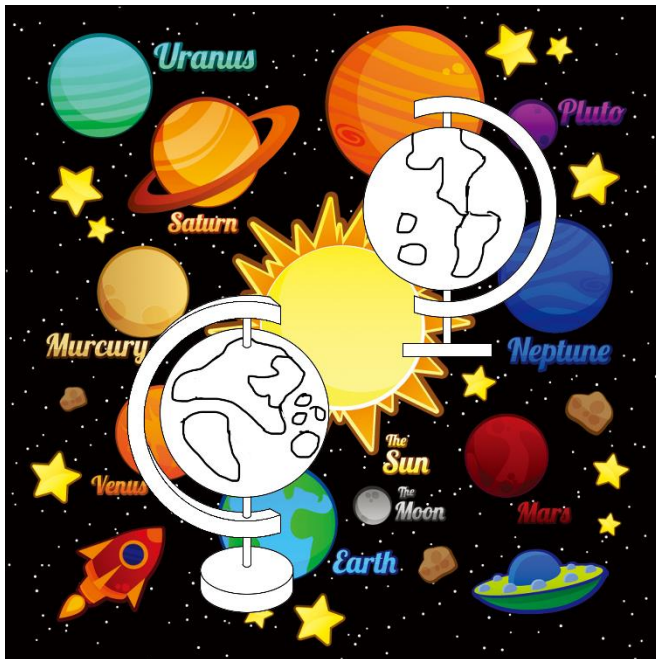
**Solution :** Place the paper flat

## How To Make Your Own ARColor

1. You need to know the principle of this kind of AR.
2. Prepare a 3D model.

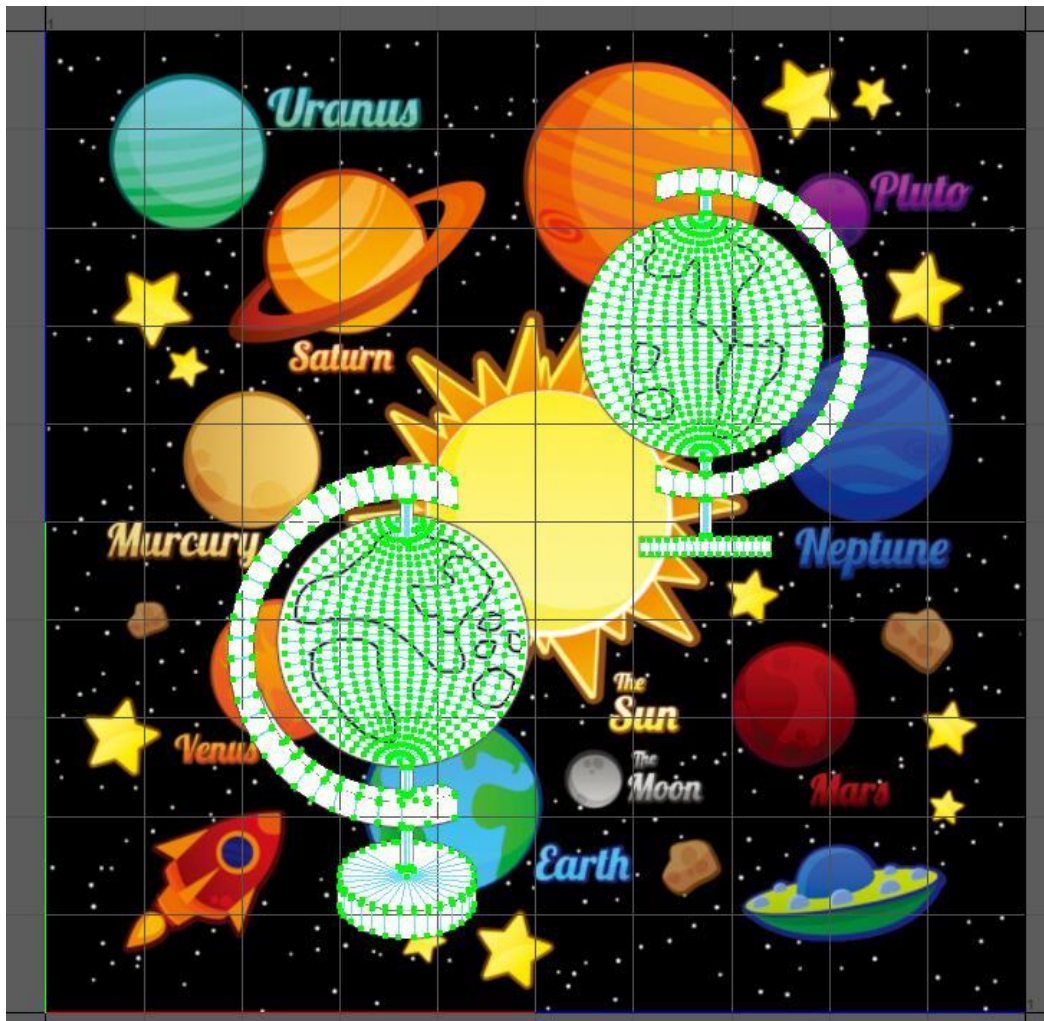


3. Make a picture you like (or your child likes), the picture content needs to be related to the model. The model part of the pattern blank, the background as complex as possible. This is a picture used to paint, also as a Track card.



4. Let the UV of model itself match the pattern on the image.





5. In the unity, give the model a transparent map. To prevent effects on screenshots
6. Use the Script and shader in this package. Take the screenshot as a Texture of the model, correctly calculate the rendering method.

## principle of this kind of ARColor

1. The content displayed on the model is represented by a texture.

2. The correspondence between the texture and the location on the model is determined by the model UV.
3. The color of the reality is displayed on the virtual model because the screenshots are passed as a texture to the model.
4. But the correct corresponding to the UV need to AR through the screen and the relative position of the camera to calculate. And by the shader to adjust the rendering.