

CSL7570

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Introduction to AR-VR

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Project Report

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Content

- Introduction
- Procedure to make Project

Introduction

In this project, we have made a whole universe which contains all the part like galaxy, Solar system. When we run our application then camera will be open, then we have to scan image on which we have made all project. After scanning, whole universe will be appear in our phone.

Working Procedure

- First, we have made one project in Unity Editor name as my project (5).
- Then create a scene as Solar.
- We have already an account on Vuforia Engine Developer portal.

- We have created a license key and a database name as solar system.

vuforia engine[™]
developer portal

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[Target Manager](#)

Target Manager

[Add Database](#)

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

Database	Type	Targets	Date Modified
AR-VR-PROJECT	Device	10	Mar 25, 2022
AROne	Device	4	Feb 13, 2022
SolarSystem	Device	1	Apr 17, 2022
Sun	Device	6	Feb 17, 2022
Sun_	Device	1	Mar 25, 2022

[License Manager](#) > [Project_clg](#)

Project_clg

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

[License Key](#)
[Usage](#)

Please copy the license key below into your app

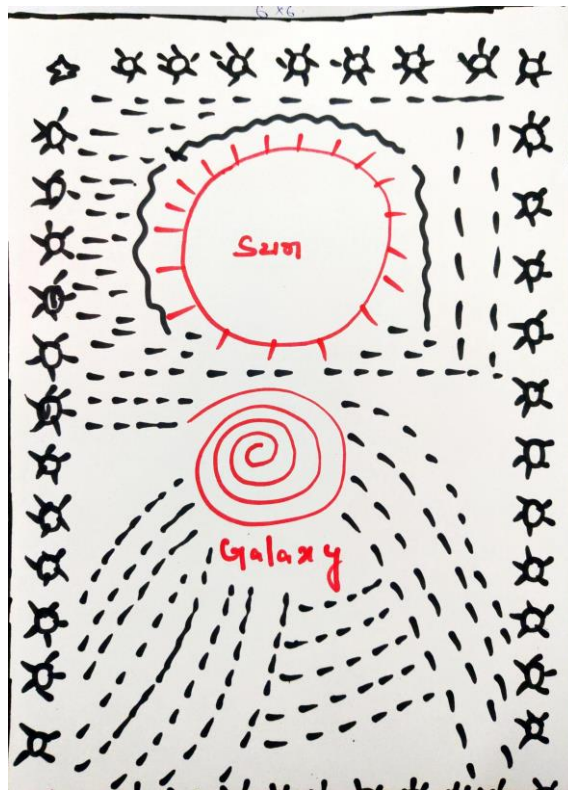
```

AZx0qAj/////AAABmWItSTXT0UYHsjRFru0rJzNRNKV83C1PqCNDV8wndoJkMbK/wmAYTlkoLcYDTX/gsyXbmPM6IfuyU4wRA5+E6Yp
1OLcy9Sb8SvoKCNT6CmKZTOEMGzRXPRINrwkOfVuMlRZm+KvSTFdmTpZknK1e+IikKnOx3mRuRXKBG4XZWMpcQPUNNnKu27XRz3LSr3
aVmoF1tSXJAODXhKZv10Gaia0y8dcNPFJq51ARoOrp2HDecRAOaVFxEjprNgBvVdKh04syk4JSu0JeLLQ5Q2hz4HAEoKTtexCr2KLVRO
qUnjRQqjHsqXdpFI9NCgJuiwZ+TmiQgOhMhJ6qmeHQhszqYC40h0jfl53ug7KAKNzIQf4eV

```

Plan Type: Basic
Status: Active
Created: Mar 25, 2022 04:16
License UUID: f031f47d8f234a94a0cb54c5885fee94

- Then I uploaded one image inside the database and downloaded it for importing into the unity editor.



- From the developer portal, we have downloaded Vuforia Engine 10.6 and then imported into the unity editor.

vuforia engine[®]
developer portal

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SDK Samples Tools

Release Version

10.6 Apply

Vuforia Engine 10.6

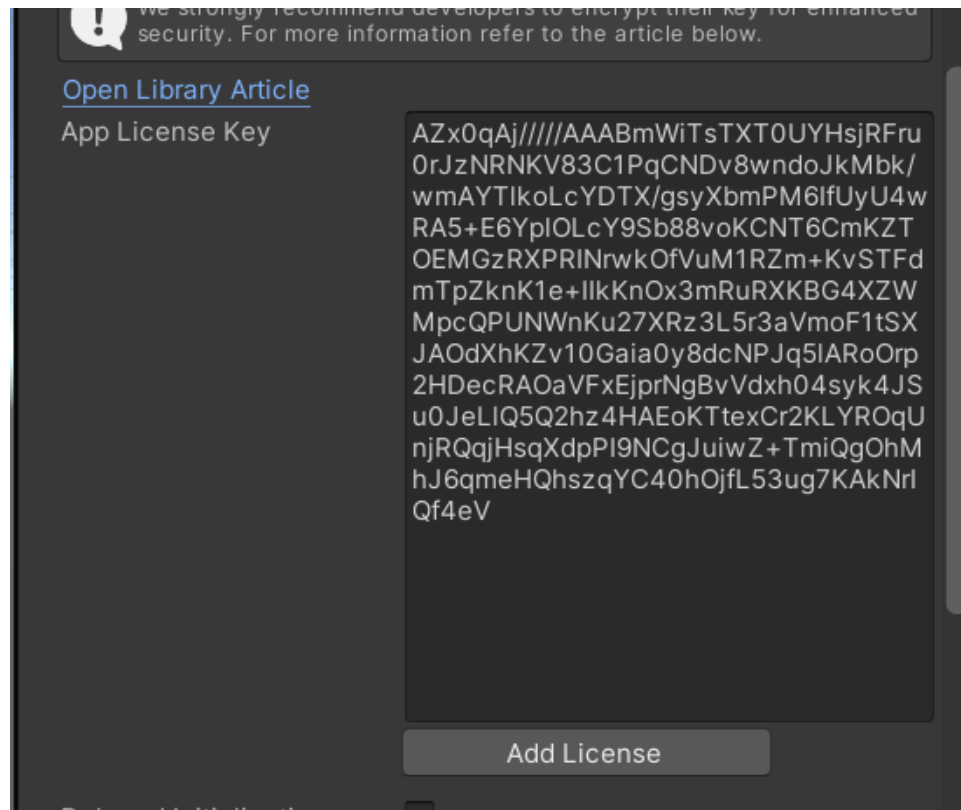
Use Vuforia Engine to build Augmented Reality Android, iOS, and UWP applications for mobile devices and AR glasses. Apps can be built with Unity, Android Studio, Xcode, and Visual Studio. Vuforia Engine can be easily imported into Unity by downloading and double-clicking the .unitypackage below.

 [Add Vuforia Engine to a Unity Project or upgrade to the latest version](#)

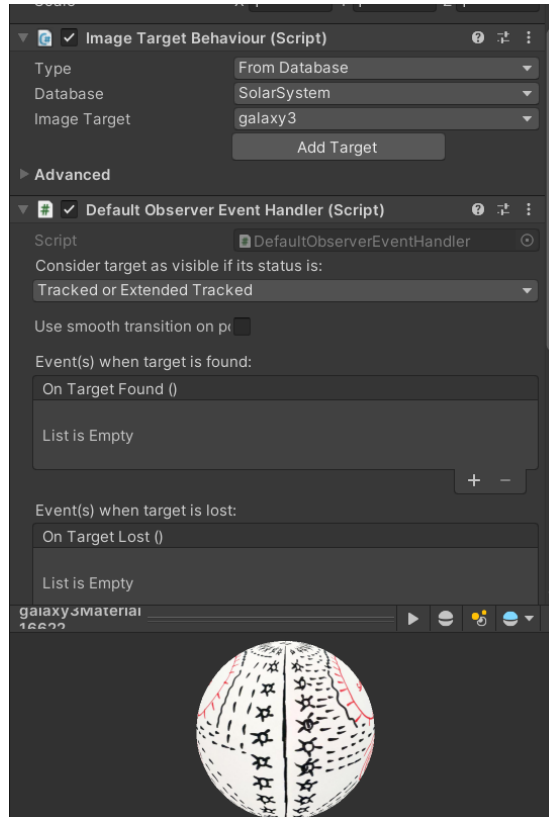
add-vuforia-package-10-6-3.unitypackage (228.26 MB)

MD5: f0758e703696376aa029d5f47c914a9a

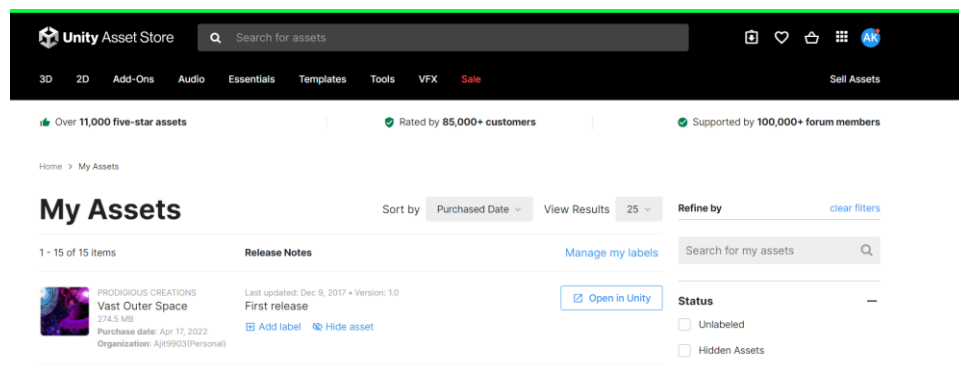
- Deleted the main camera and take the AR-Camera from the Vuforia-Engine.
- Inside the AR camera, we have added the license key that we have already.



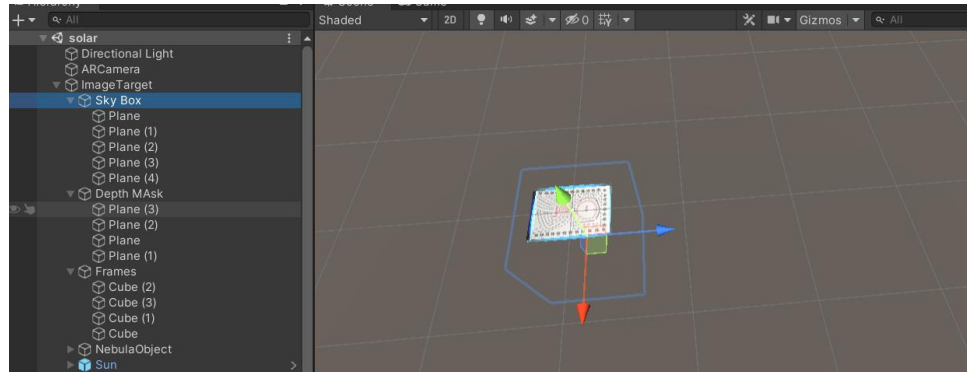
- Next, we have taken Image Target from the **Vuforia Engine**.
- Inside the image target, **Image Target Behaviour** , selected the type, Database and Image Target.



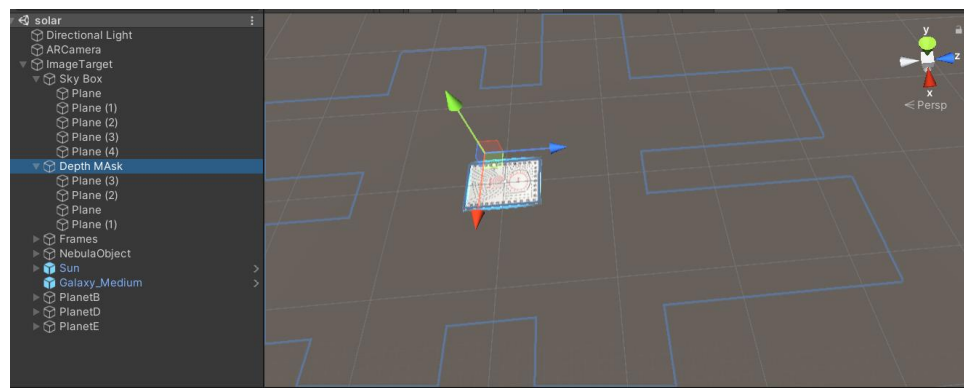
- Next downloaded Vast Outer Space from the unity store and import it into unity editor.



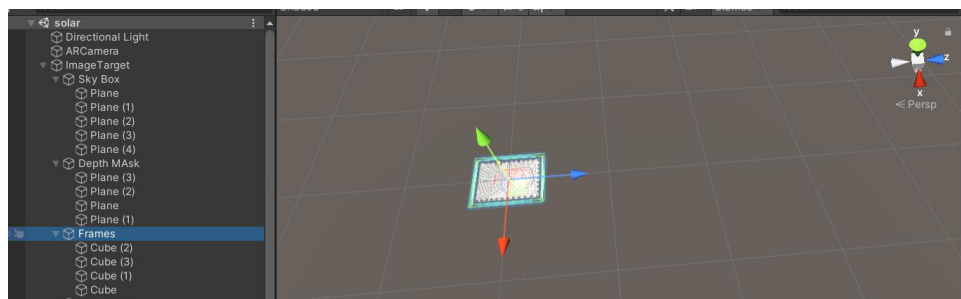
- Created a sky box to make universe.



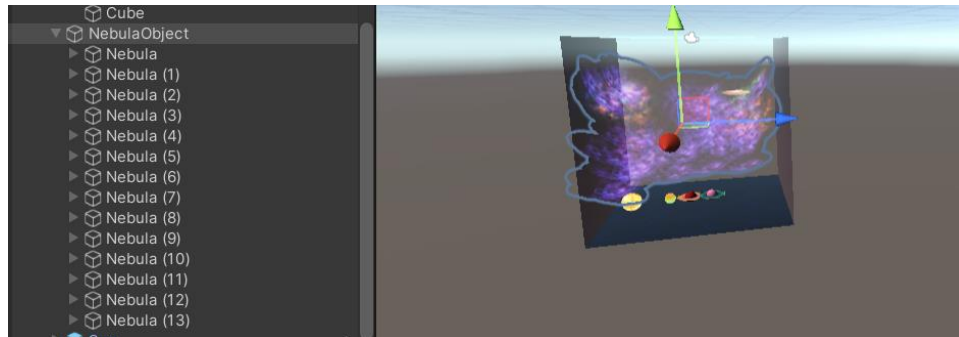
- Created a Dept Mask to remove all the surrounding unwanted view and increase it scale.



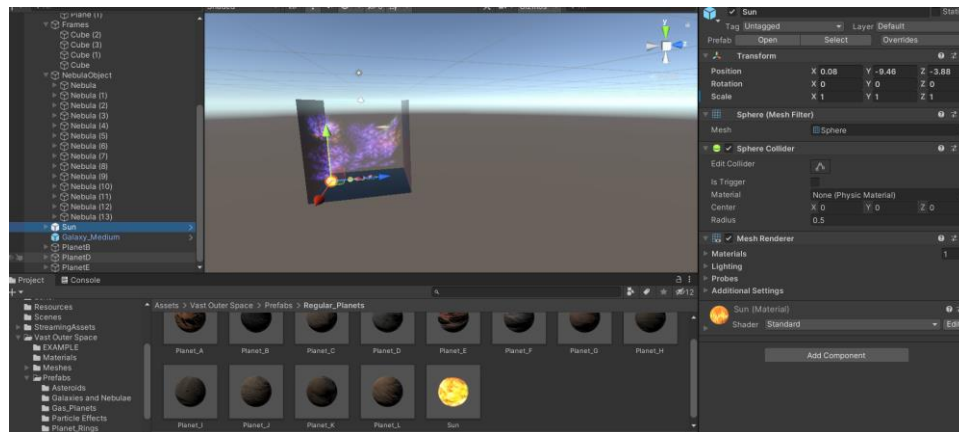
- Next, we have created Frame to look image target as a frame.



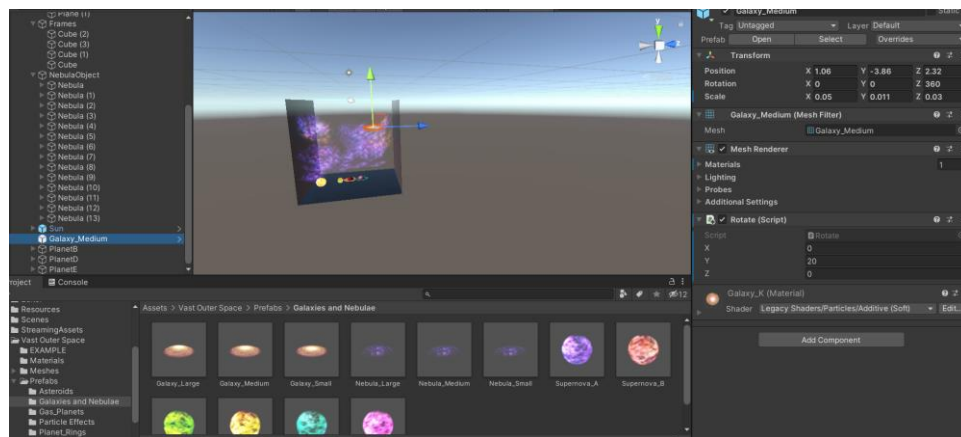
- Next, we have create Nebula object to make visual effect as universe.



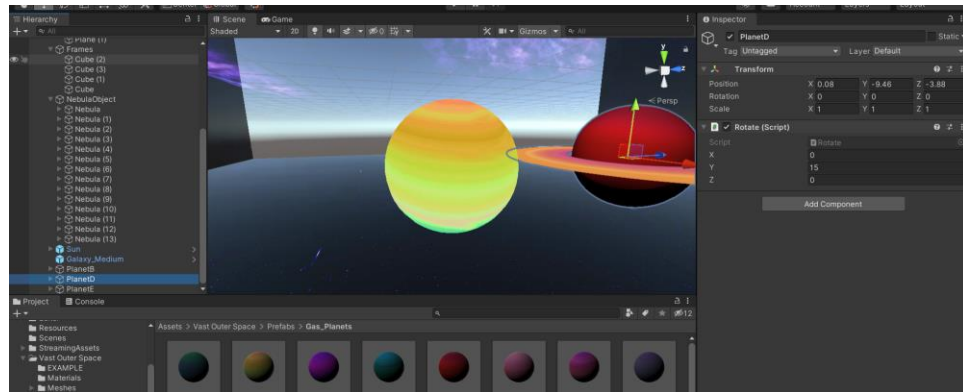
- Next, created sun object from prefab and makes its position inside the **sky box**.



- Then created Galaxy, inside the sky box.



- Then created 3 planets only to look good. If we are going to make eight planets then crowd become high and interface is small. So, it doesn't look good.
- Created 3 empty objects to store all the planet and to make revolving towards the sun, position of these three objects is same as sun then make child to these empty objects to each planet.
- After that applied the rotation script on each object of planet and on planet too and set the rotation value in y –direction.



- At last, we built the app and test the output in phone.

Thank You