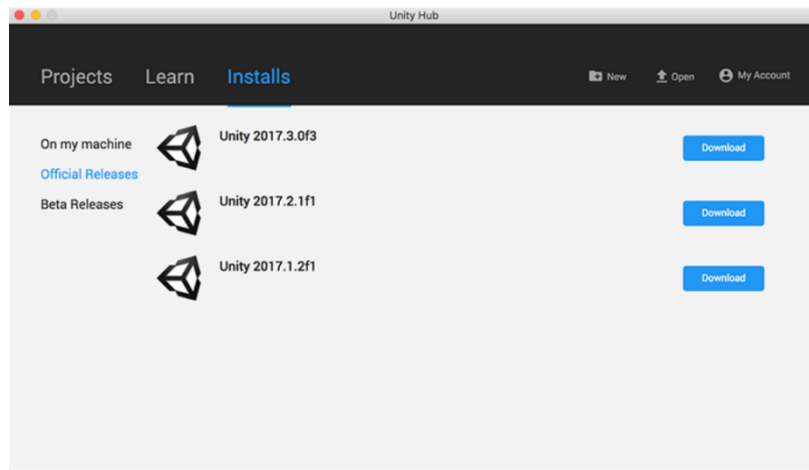


# STEP BY STEP PROCEDURES FOR MAKING A PROFESSIONAL AUGMENTED REALITY

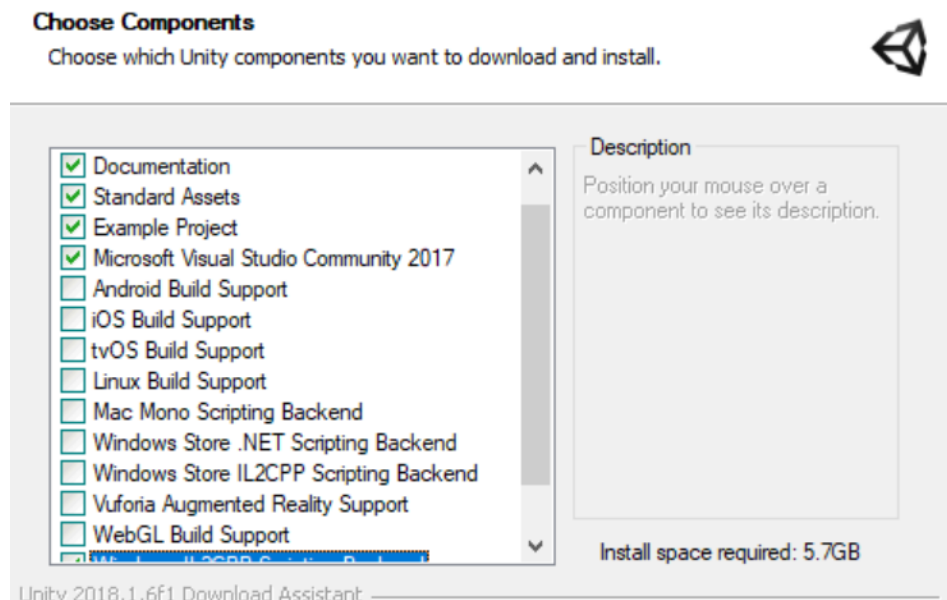
Powered By: Mohammad Sefidgar

## Installation of Unity and Unity Hub.

- Install Unity Hub



**Important Notice:** Make sure Unity is installed in Unity Hub direction and WebGL Build Support is checked when choosing installation components during the installation of Unity.



## Download Vuforia extension for unity and Perform essential steps to make Target Image detectable with application.

- Download and install executive file from Vuforia download website.

**vuforia engine**  
developer portal


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SDKSamplesTools


### Vuforia Engine 8.5

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 is also delivered with the latest versions of Unity.

 [Download for Android](#)  
vuforia-sdk-android-8-5-8.zip (26.42 MB)

 [Download for iOS](#)  
vuforia-sdk-ios-8-5-8.zip (51.92 MB)

 [Download for UWP](#)  
vuforia-sdk-uwp-8-5-8.zip (14.98 MB)

 [Download for HoloLens Development in Unity 2018.4](#)  
VuforiaSupportInstaller-Windows-8-5-8.zip (101.23 MB)

[Release Notes](#)

## Generating a License Key


1. Go to the [License Manager](#) page and click the "Get Development Key" button.

License ManagerTarget Manager

### License Manager

Create a license key for your application.

Get Development KeyBuy Deployment Key

Name	Type	Status	Date Modified
<div><p>Create your first license key</p></div>			

2. Add a desired name for your app in the "App Name" box. Check the confirmation box to accept the Vuforia Developer Agreement.

[Back To License Manager](#)

## Add a free Development License Key

### App Name

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 [Vuforia Developer Agreement](#).

Cancel

Confirm

3. Press "Confirm". Your new license will appear in the License Manager.

## License Manager

Create a license key for your application.

Get Development Key

Buy Deployment Key

Name	Type	Status ▾	Date Modified
<a href="#">MY_DEVELOPMENT_APP</a>	Develop	Active	Sep 12, 2018 16:30

#### 4. Uploading Image Targets inside Vuforia

License Manager


Target Manager

### License Manager

Create a license key for your application.

Get Development Key

Buy Deployment Key

Name	Type	Status ▾	Date Modified
<div><p>Create your first license key</p></div>			

#### 5. Tab Target management and click create Database button.

### Create Database

**Name:**

MY\_VUMARK\_DATABASE

**Type:**

☐ Device

☐ Cloud

☒ VuMark

Select License Key ▾

MY\_CLOUD\_APP

MY\_VUMARK\_APP

Cancel


Create


- Choose type of target to be processed by Vuforia.


### Add New Target ✕


**Target Name** ⓘ

**Target Type**

  
Single Image

  
Cube

  
Cuboid

  
Cylinder

**Target Dimension** ⓘ

Width:

**Target Image File** ⓘ

- Upload target image and set width of the object.

**File:**

.jpg or .png (max file 2mb)

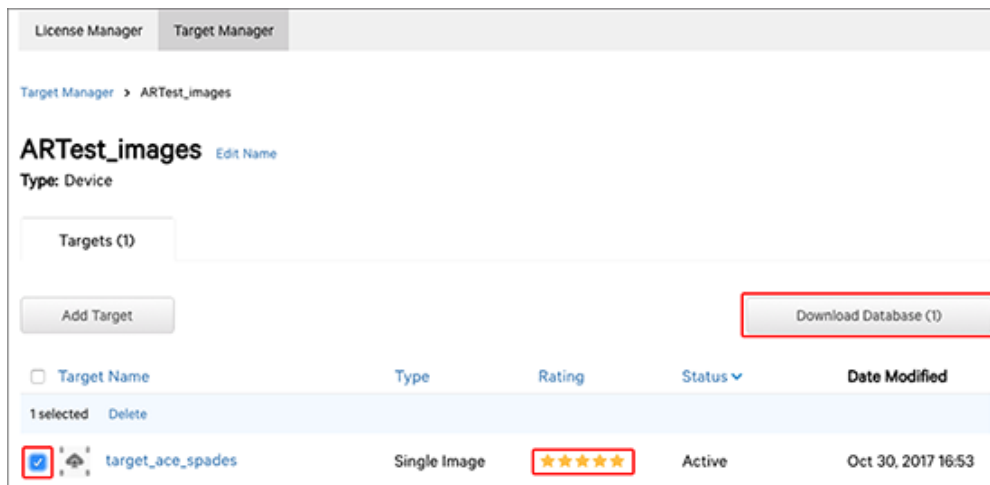
**Width:**

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.

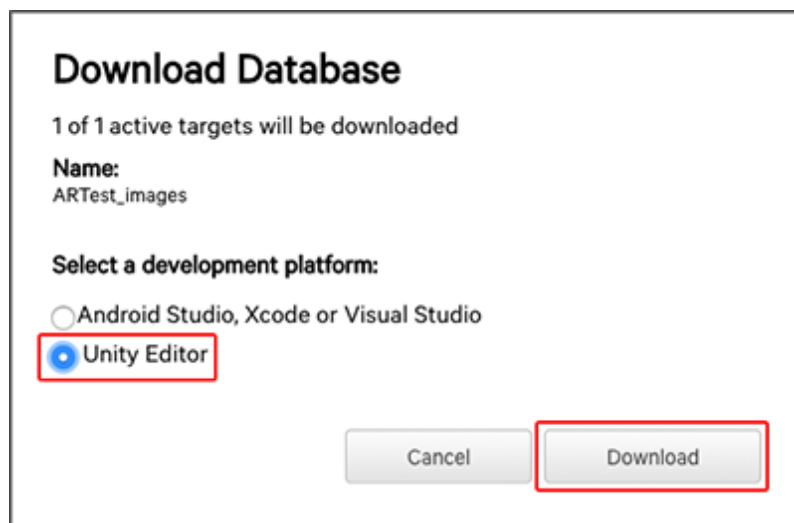
**Name:**

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

8. Check the Rating to make sure the application will recognize target image correctly.

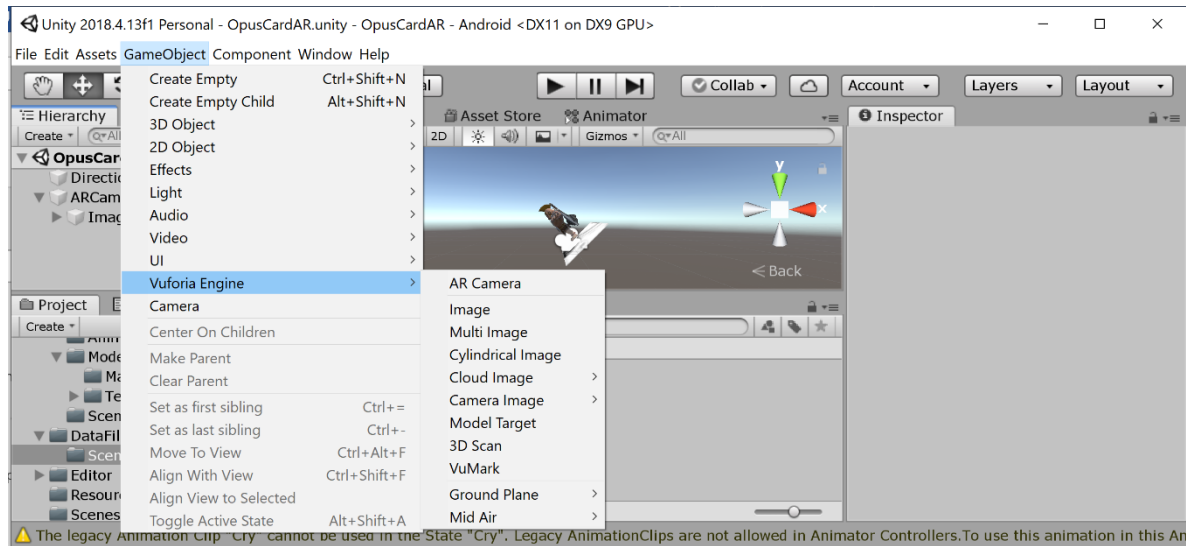


9. Click Download Database set the “select a development platform” to “Unity Editor”.



## Setting Vuforia Engine for Augmented Reality.

1. Delete the default camera view and add AR camera from GameObject>Vuforia Engine.

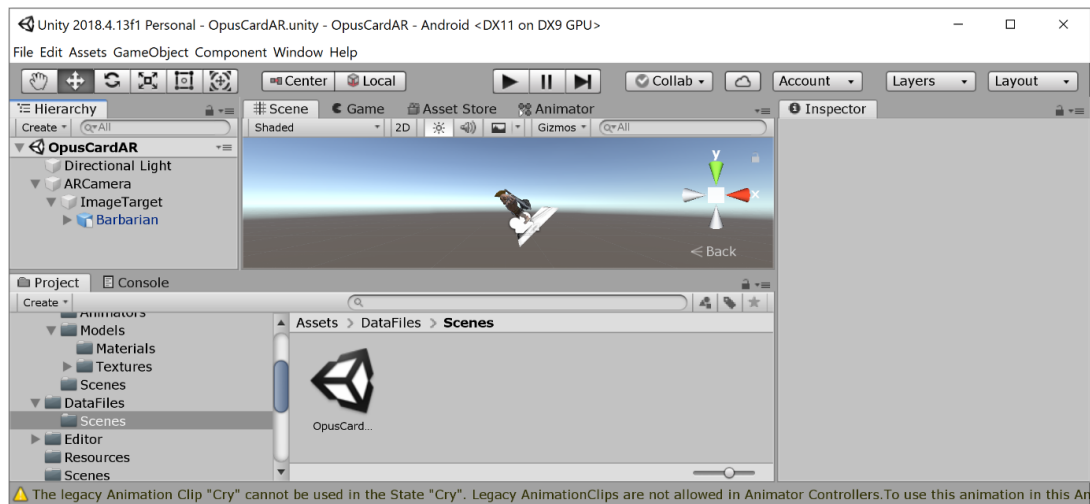


## Importing 3d Model and corresponding tuning for AR

1. Projecting Barbarian 3D Model on Image Target from Unity Asset Store:

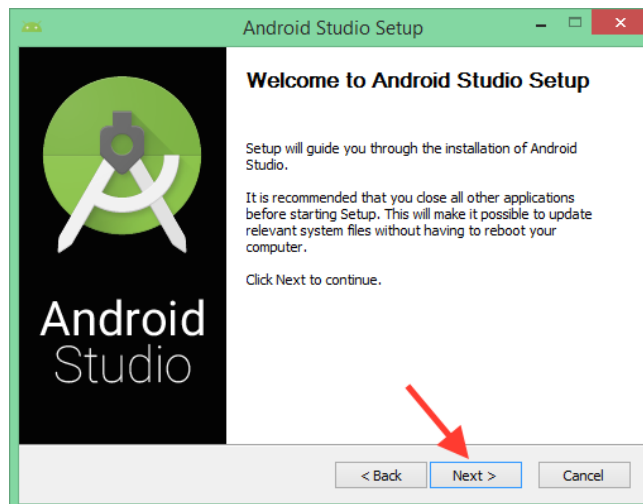


2. Make the Image target the child of ARCamera and the 3D barbarian model child of ImageTarget.



## Installation of Android Studio Software

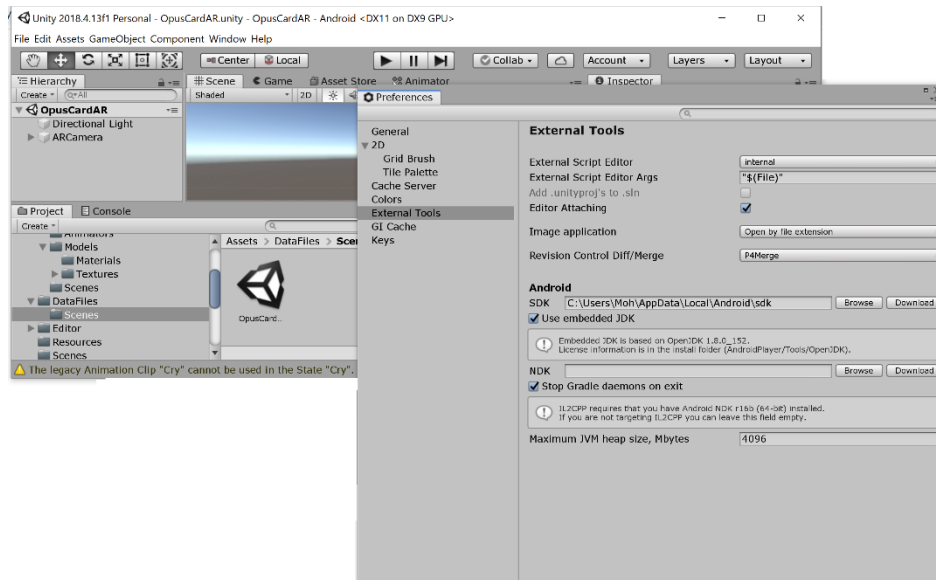
Download android studio SDK and follow procedures for installation.





## Setting Unity for building process.

From EDIT>PREFERENCES>EXTERNAL TOOLS>SDK set the write link between Android Studio and Unity.



## Building the apk file for App

With carrying out some setting and pressing Build Button the Android app will be made.

