

## Download Unity

1. get latest version from [store.unity.com](https://store.unity.com)
2. this will install **Unity Hub**
3. run Unity Hub
4. create a **Unity ID**, Login and choose a **Personal license** if prompted
5. go to Installs on the main page of Unity Hub.  
Choose **Add** and select the latest version of Unity to download - e.g. **2019.1.12f**
6. make sure to check and install:  
**+ Visual Studio 2019 Community**  
**+ Android Build**  
**+ Android SDK and NDK**
7. Unity docs on Unity for Android setup:  
<https://docs.unity3d.com/Manual/android-sdksetup.html>

## Setup a Unity Project

1. in Unity Hub - Create a new Unity Project  
**+ choose 3D project**  
**+ choose a project name and directory**
2. launch!

## Create a small VR scene

1. in Unity go to **Asset Store** and search for **Oculus Integration**.
2. download and **import** Oculus Integration into the project.  
Should see **Oculus folder** added to the Project view.
3. drag **OVRCameraRig** from **Oculus > VR > Prefabs** into the Hierarchy view.
4. in **OVR Manager** component of **OVRCameraRig** change **Tracking Origin Tyoe** to **Floor Level**
5. Remove existing Main Camera from the hierarchy.  
Place some objects around and save the scene. Done.

## Build for Quest

1. go to **File > Build Settings**
2. click **Add Current Scene**.  
You should see the current scene in the list
3. select **Android** and press **Switch Platform**
4. select **Player Settings** and make the following adjustments
  - + change Company name and Project name**
  - + XR Settings** - check **Virtual Reality Supported**
  - + XR Settings** - add **Oculus** to **Virtual Reality SDKs**
  - + Other Settings** - set package name  
(e.g. com.company.projectName)
  - + Other Settings** - remove **Vulkan Graphics API**
  - + Other Settings** - **minimum API level** - **KitKat 20**
5. press Build and choose the .apk destination  
(e.g. Builds/VRGame.apk)

## Oculus Companion App setup

1. get the **Oculus Companion App** from App store / Play store
2. create an account
3. add your Quest Headset at **Settings > Add new Headset > Oculus Quest**
4. enable **Developer mode** in **Settings > your headset > More Settings > Developer Mode**
5. follow the device setup guide
6. Oculus documentation for Quest developer setup  
<https://developer.oculus.com/documentation/quest/latest/concepts/mobile-device-setup-quest>

## Installing the .apk app on Quest

1. first get **Android Platform Tools** that include **adb** that we use to install .apk apps on Quest
  - + <https://developer.android.com/studio/releases/platform-tools.html>**
  - + download the .zip file**
  - + extract its contents (e.g. into c://Android/platform-tools)**
  - + add the platform-tools path to environment variables**
2. (Windows only) - get and install the **adb driver from Oculus**:  
<https://developer.oculus.com/documentation/quest/latest/concepts/mobile-device-setup-quest>
3. after adb (Android Debug Bridge) is installed we can finally install our app
4. **connect your Quest** via usb port.  
And click **Always allow access** when prompted
5. **run Windows Powershell or Terminal** (or any other shell)
  - + navigate to your build location**
  - + e.g. cd c://UnityProjects/QuestVRExample/Builds**
  - + check if Quest device is connected - adb devices**
  - + install the .apk - adb install -r QuestVRExample.apk**
6. on Quest find your app in **Library > Unknown Sources**.  
If Unknown Sources is not visible, check again if **developer mode is enabled**