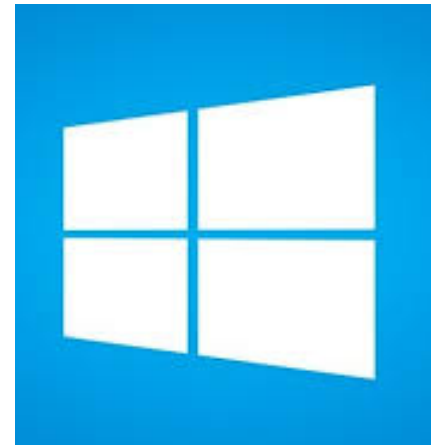


Research Seminar: Cognitive Science

Making a Simple VR App

13/Mar/2019

Tadamasawada
School of Psychology



Computer Set-up (Android phone + Windows computer)

<https://developers.google.com/vr/develop/unity/get-started-android>

1) Install **Unity** with **Android build support** and with **MS Visual Studio**

<https://unity3d.com/unity>

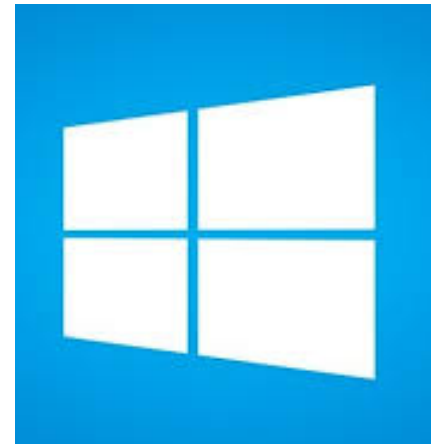
2) Install **Android Studio**.

<https://developer.android.com/studio/index.html>

3) Register for these softwares.

4) Download **GoogleVRForUnity_XXXX.unitypackage**

<https://github.com/googlevr/gvr-unity-sdk/releases>



Smartphone Set-up (Android phone)

5) Set your Android phone for running app developed by you.

<https://developer.android.com/studio/debug/dev-options.html>



Computer Set-up (iOS phone + Apple computer)

<https://developers.google.com/vr/develop/unity/get-started-ios>

Computer Set-up (iOS phone + Windows computer)

It does not look a good idea.

<https://www.google.com/search?q=unity+iphone+app+develop+windows>; <https://stackoverflow.com/questions/46706852/developing-unity-game-on-windows-for-ios-devices>

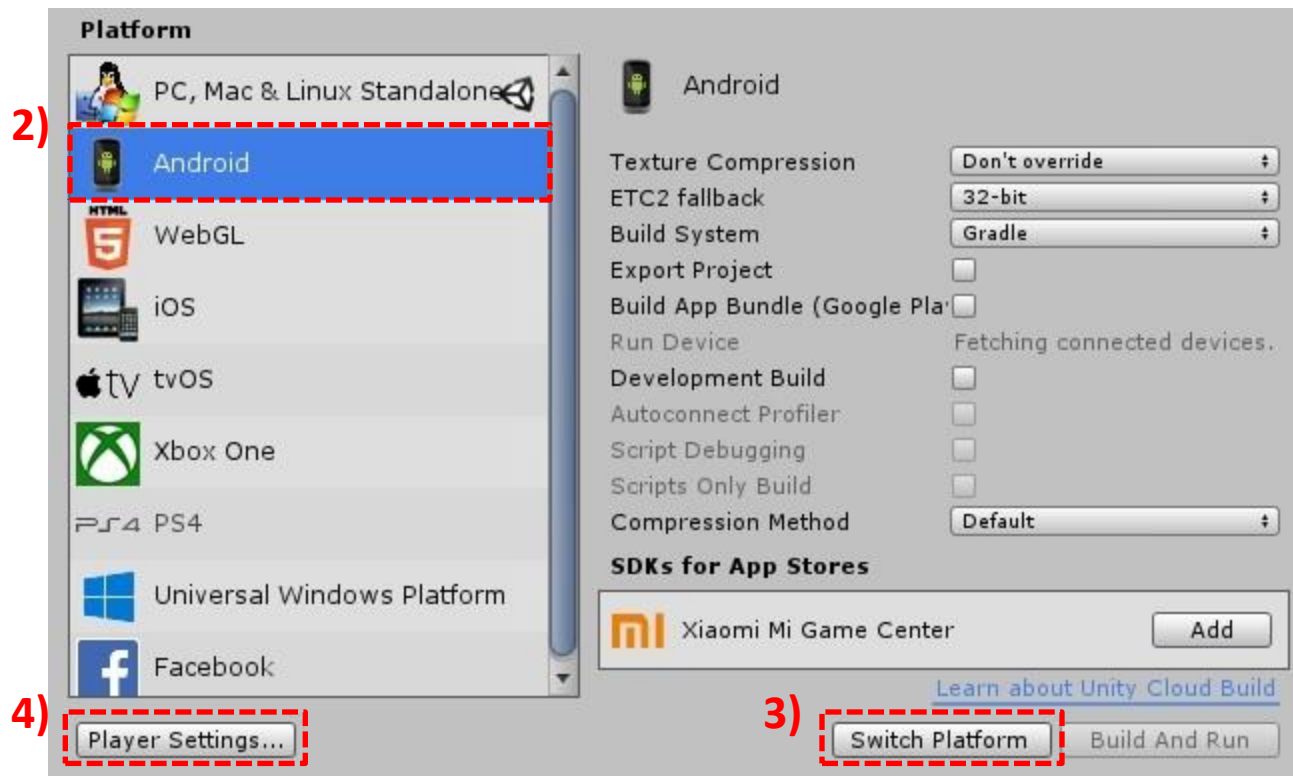
Computer Set-up (Android phone + Apple computer)

I cannot find any useful information.



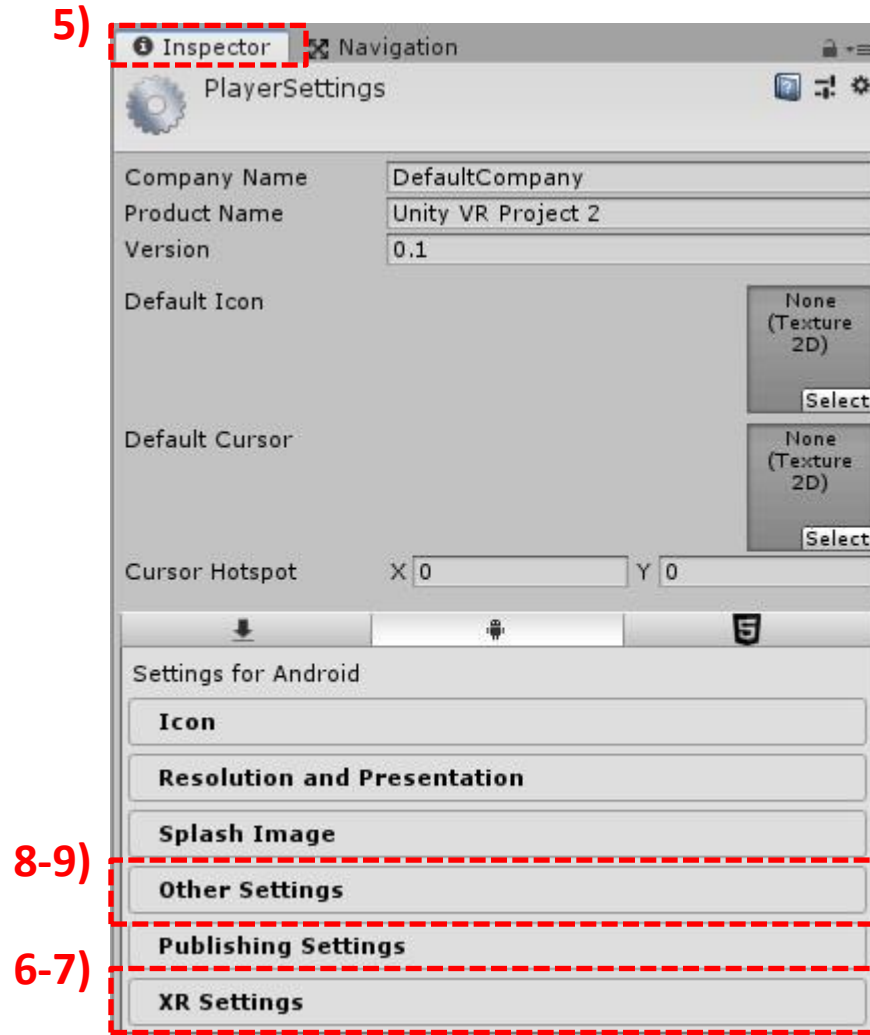
Unity Set-up 1

- 1) Select **File** menu > **Build Settings**.
- 2) A small window is opened (see below). You probably find that “PC, Mac & Linux Standalone” is selected in **Platform** list at the beginning.
- 3) Choose Android from **Platform** and press **Switch Platform** button.
- 4) Press **Player Settings...** button.



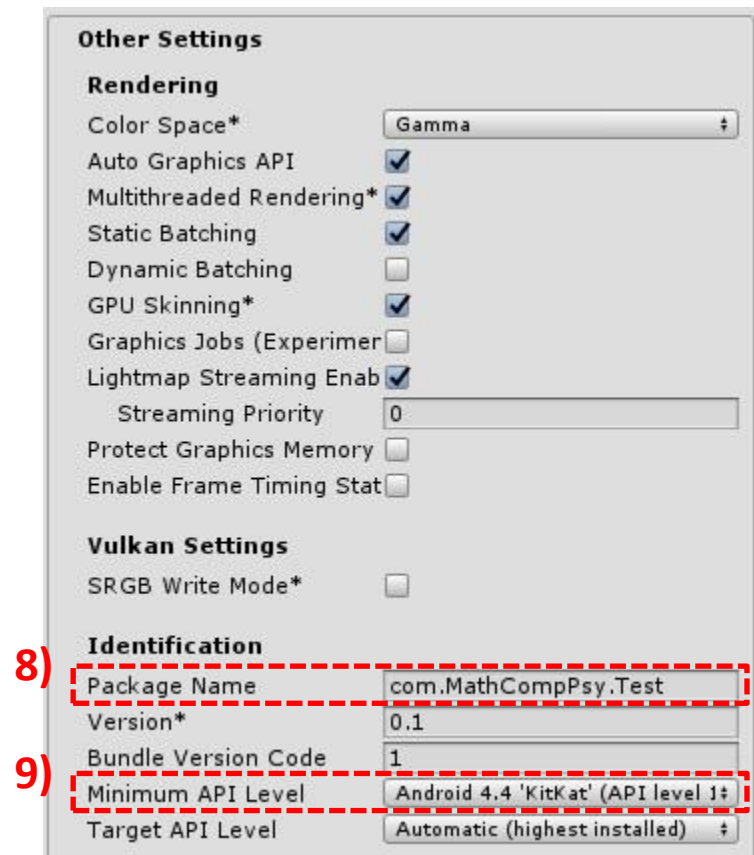
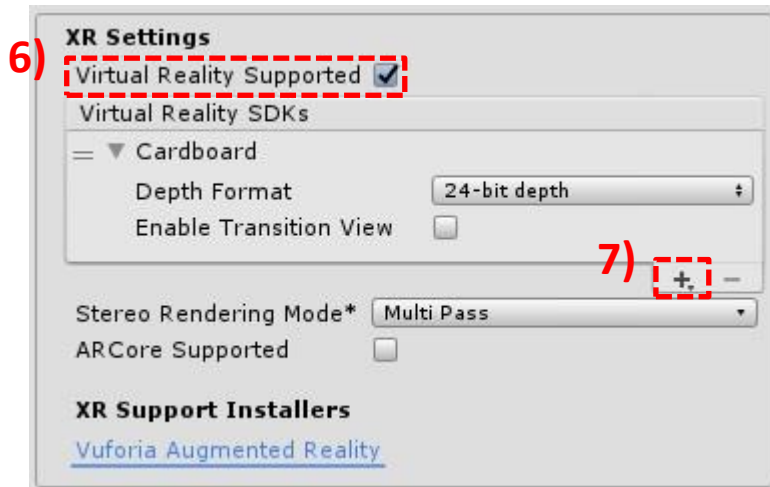
Unity Set-up 2

5) (**Build settings** window in steps 1-4) should remain open.) Check **Inspector** tab of the main window of Unity. **XR Settings** and **Other Settings** in this tab will be modified in the following steps.



Unity Set-up 3

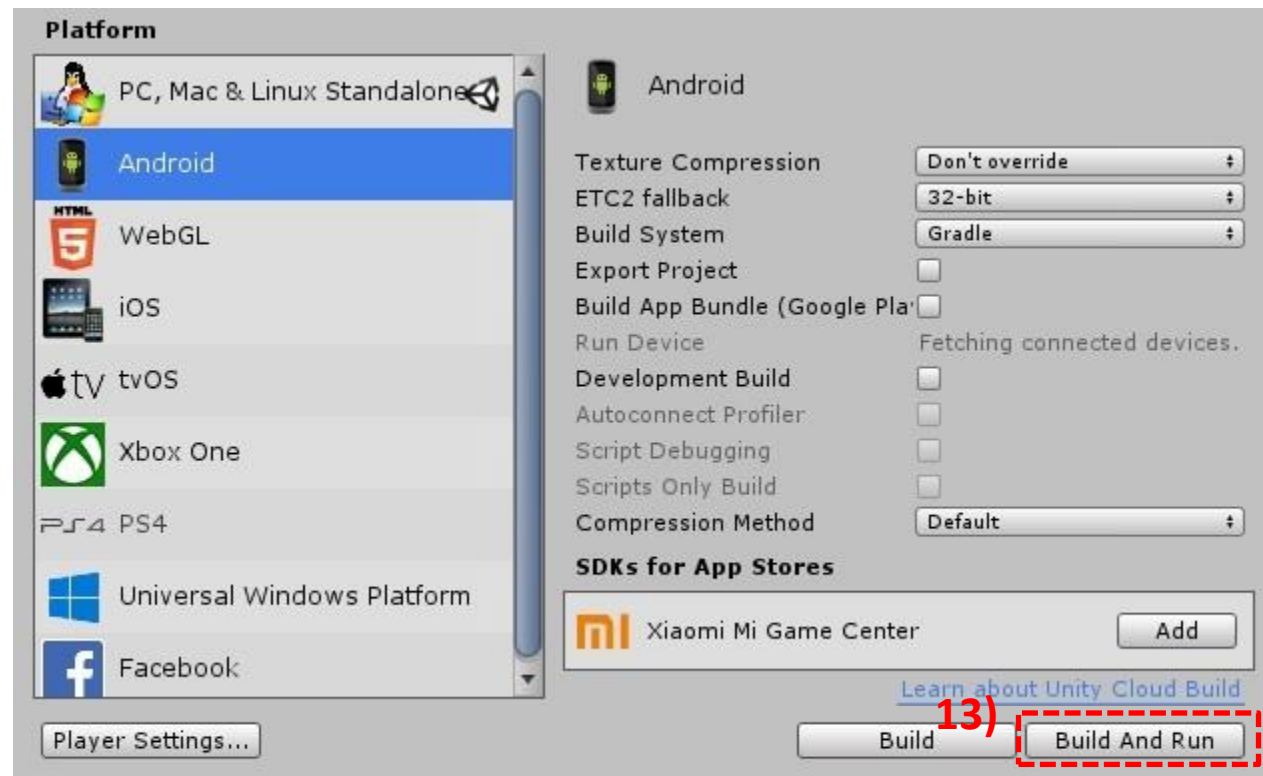
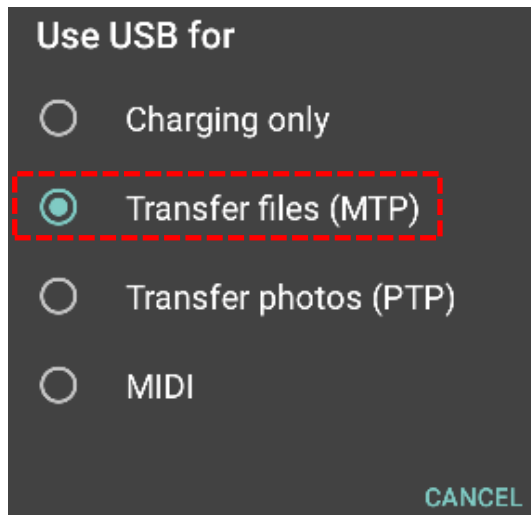
- 6) In **XR Settings** of **Inspector** tab, check **Virtual Reality Supported**.
- 7) Click **+** symbol and it will show a list of devices. Choose **Cardboard**.
- 8) In **Other Settings** of **Inspector** tab, change **Package Name** to “com.(name of your group/company/laboratory).(name of your app)”.
- 9) Set **Minimum API Level** as **Android 4.4 ‘KitKat’** (or later version).



Build and Run

- 10) Go back to **Build settings** window.
- 11) Connect Android phone (USB debugging enabled).
- 12) Choose **File transfers** on a screen of Android phone.
- 13) Press **Build And Run** button on **Build settings** window.
- 14) After a few minutes, a VR screen of an empty scene opens on Android phone. You will find an icon of this VR app on Android phone.

12)



Any Error?

- Check whether **Android SDK** is properly specified in **Edit menu > Preferences > 2D > External Tools**.
- Try **Transfer photos** for connection with Android phone.
- Try another USB cable for connection with Android phone.
- Restart Unity with Android phone connected.
- Check OS of Android phone is **4.4 'Kitkat'** or later from **Settings** app.

