

USER MANUAL (3D Flashcard AR Application)

1. Installation Checklist:

- Visual Studio 2017
- HoloLens Emulator and Holographic Templates (build 10.0.14393.1358)
- Unity 2017.4
- Vuforia

2. For Android Phone:

- Android SDK and JDK:
Download recent JDK, Android SDK tools.
Unzip the downloaded file and install latest version of Android packages.
- To use Project for Android:
Download and extract the project zip folder.
Open the project in Unity.
Edit>Project Settings>Player>XR Settings: Check Vuforia Augmented reality support for Android
Edit>Project Settings>Quality>check Fastest for Android
File>Build Settings: Add scenes in build, Choose Android as a platform, Click Switch platform
Click Build and Run. Create folder UWP while prompted and click Save. You will get APK file.
Navigate to Edit>Preferences>External Tools:
Where it says Android SDK Location, click browse and navigate to the Android SDK downloaded files.
- On your Android phone:
Navigate Settings>Developer Option>USB Debugging, enable debugging from your android phone
Turn on developer mode too
Connect the phone with the laptop
Double click on APK and you will see the application running.

USER MANUAL (Forest View and Interactive Shape Collection)

3. HoloLens:

- Unity:
Download and unzip the project
Open the project in Unity
Navigate Edit>Project Settings>Player>XR Settings: Check Virtual Reality Supported for Universal Window Platform (UWP)
Navigate Edit>Project Settings>Quality>check Fastest for UWP
Navigate File>Build Settings: Add scenes in build, Choose UWP as a platform, Click Switch platform
Select HoloLens as Target Device, SDK 10, and latest visual studio 2017
Click Build and Run. Create folder UWP while prompted and click Save. You will get visual studio .sln file.
- Visual Studio:

Connect HoloLens with the laptop
Open the Solution file (.sln) of the project in VS
Change the architecture to x86 and select Remote Machine as a hosting platform. Enter IP address of HoloLens when prompted
If not prompted navigate to Debug>Project Properties>Debugging. Enter IP address in Machine Name field and select Register to network in Advanced Remote Type option
Navigate Debug>Start Without Debugging
Application will run on HoloLens Device

4. Without HoloLens

Follow the same steps except:
Choose HoloLens Emulator as the hosting platform to deploy the application
Discard the IP address part
You will see the emulator is running.