Introduction to Virtual/Augmented Reality and Telepresence

Assignment 2 Topic: Building a VR App on Your Mobile Phone

This assignment will teach you how to target a VR App on a mobile phone, navigate using the phone capabilities, and display a scene in stereo using Google Cardboard. The model to be displayed is a low polygon <u>medieval village</u> from Unity assets.



To guide you at developing this App, here are the step-by-step tutorials on how to transfer a unity model on your mobile phone:

- For Android, please follow the following instructions:
 - https://docs.unity3d.com/Manual/android.html
 - https://developers.google.com/unity/packages#android
- For IOS, please follow the following instructions:
 - https://docs.unity3d.com/Manual/iphone.html

You can choose which OS to use based on your mobile device.

Once the App is ported, I would like you to add the following to the mobile phone capabilities:

• Part I: In mono mode (no cardboard VR), please develop a way to navigate the virtual world by pointing with your finger on the screen using basic gestures such as:



- You can use Mobile device input https://docs.unity3d.com/Manual/MobileInput.html
- Part II: I would like you to implement navigation in the virtual world by using the
 magnetic clicker provided with the Google cardboard. The main idea is that once
 you click, you should move slowly in the direction you are looking with your
 cardboard.

You can buy the following <u>Google Cardboard</u> at Amazon for \$14.90. It can be delivered in a day.



The making will be based on the following:

- The functionality of the App 70%
- Additional features: FOV 10% IOC 10% navigation 10%

Send the working game (as a video capture) at the following e-mail VRARMM806@gmail.com on October 17.