Today

• Admin
  • Project Assignment #3
• Eye-Tracking, Wearable Trackers and Quantified Self Intro
• Research presentation
This week you will be using PrototipAR to create prototypes for your project idea(s) in their intended environment. For example, an application that is meant to be a surgical aid will need to be prototyped in an operation room. One that's meant to be used in a bus will be prototyped on, say, one of the campus shuttles.

If you need help getting access to an environment of your choice, reach out to your mentor TA.

You are required to submit the following:

1. Prototype Videos - each prototype you create will require two videos:
   HoloLens Perspective (recorded through the HoloLens)
   Third-person Perspective (recorded through another device like your phone)

2. A description of the prototype (max 1/2 page): This should include a description of the environment as well as the specific problem you are designing for. You should also include any other contextual details or clarifications that help us understand your videos.

3. A google doc detailing your experience with the tool: This document only serves as a way for you to document your experience with PrototipAR. What worked? What was hard? What are your thoughts or feelings about it? You can also include details about any errors or bugs you see, something you would like to change etc. Feel free to include videos or pictures to this document if it helps make your point. This is NOT a formal document so don't worry too much about using formal language, we just want you to capture your experience and encourage you to do so after each session or even during one.
Eye Tracking Device

- An **eye tracker** is a device for measuring eye positions and **eye movements**.
- The most popular variant uses video images from which the eye position is extracted.
- Input source: visible spectrum vs. infrared.
State-of-the-art Eye tracking Technology
Eyetribe Eye Tracker

- **Features**
  - Camera, multiple infrared LEDs
  - Band-pass filter
  - Operating Range: 45 - 75cm
  - USB 3.0 Superspeed
  - API/SDK: C++, C#, Java
  - Cost: $99
Tobii EyeX + 4C

https://tobiigaming.com/
Wearable Trackers
https://www.youtube.com/watch?v=QTyWv2e1yWs
Grad Students Presentation

- The secret behind wireless Physiological Sensors: Apple watch, You-Yi Jau, Pankhuri Choudhary
Next Steps

• Readings to discuss on Thursday


• Design Paper: Dow, Steven, Blair MacIntyre, Jaemin Lee, Christopher Oezbek, Jay David Bolter, and Maribeth Gandy. "Wizard of Oz support throughout an iterative design process.”
Wizard of Oz Prototyping
Optional Papers


Thanks