Augmented Reality Mobile Application

Patrick Green, Christopher Livingston, Billy Rathje, and Eli Spiegel

So, what is our project?

Overall Goal:

 Create a mobile application that will allow prospective students to take tours, learn about campus, and better navigate to their classes

How do we plan to do this?

- To create a mobile application in both Android and iOS
- Use Augmented Reality, GPS location, and compass data
- Integrate and advertise our app with Admissions to ensure its use during campus visits

What are our features?

- Using Augmented Reality we will display building names throughout campus
- The user can click on the building name and view information about that specific building and its department
- Building search and routing information
- Preloaded tour routes and information

What have we accomplished?

- We are developing in both Android and iOS
- We are successfully pulling Google Maps information and have most buildings on campus tagged
- We have compass and GPS data working and integrated
- We can update and display the relevant building information to the screen with our custom Augmented Reality algorithm

What obstacles have we encountered?

- Android quirks
- Augmented Challenges
- Location & Heading Data
- Manual input of markers(we have a solution started)
- Differences with the iOS port

What have we learned?

- We have learned about Android development and have developed our own AR algorithm
- Learned the capabilities of mobile phones including GPS and compass limitations

So are we on track?

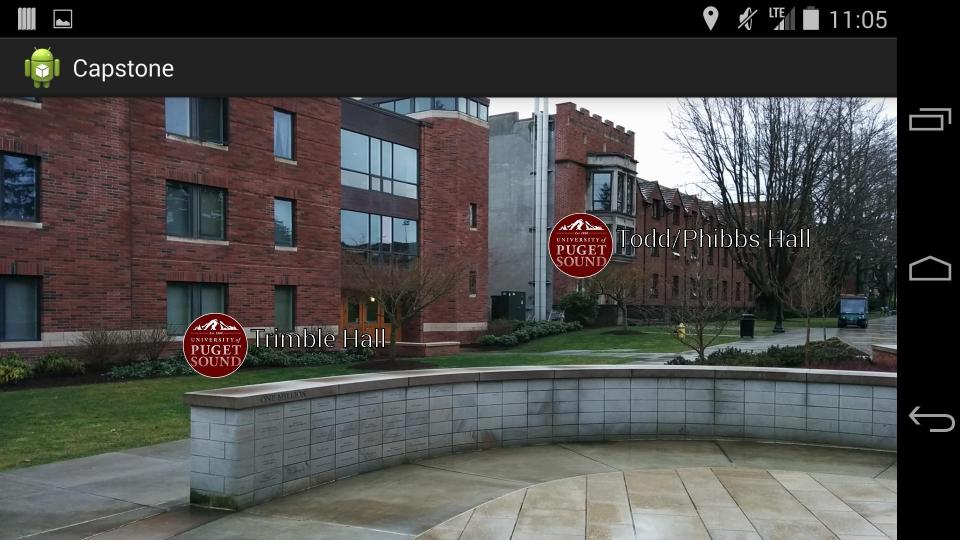
Week 1	Requirements Design
Week 2	Camera working
Week 3	Pulling GPS data
Week 4	Fundamental GUI in place
Week 5	Working app with building tagging
Week 6	Testing basic app and thinking aboutfeatures
Week 7	Feature design and development*
Week 8	Feature design and development*
Week 9	Feature design and development*
Week 10	Feature design and development*
Week 11	Feature testing and debugging
Week 12	Feature testing and debugging
Week 13	Polishing code and final report write up
Week 14	Upload working app to app store
Week 15	Prepare for presentation

Our Timeline

What's next?

More features:

- Input real data for buildings
- Incorporate media for buildings and points of interest
- Improve our UI
- Have modes such as tour mode
- Website and web server
- Create apps based on our current AR



Thank You