

EE 491 Weekly Report - MAY15-05

Week 11 (11/10/14-11/16/14)

Advisors: Manimaran Govindarasu

Client: Intelligent Solutions Group, John Deere, Urbandale

Members:

Jesse Walther, team leader

Brian Moran, key concept holder

Haoyu Liu, webmaster

Tanner Hildebrand, communication leader

Sang Han, testing leader

Project Title: Augmented Reality Mobile App for Vehicle Maintenance

Weekly Summary

This week we were a bit hamstrung in our development process by the TLA being taken over for a competition but we were able to do some further research into a problem this week which popped up regarding how iOS handles WiFi. Security settings in the iOS set up restrict us from being able to switch WiFi connections in app so we are looking into possible workarounds or some other method of connecting to the MTG. With further discussion with ISG and Dr. Manimaran we have established a plan of action for addressing the issue and have contacted some people who may have more experience working with iOS than we do.

We have also discussed a bit how to present the project in our end of Semester review with Dr. Manimaran and have gained much better insight into that process. Going over this process has also helped us to develop a better understanding of how we are to work towards completing this project and learning as a team.

Meeting notes:

11 NOV 14 – Group Meeting

Duration: 30 hr

Purpose and Goals:

We just wanted a quick meeting to touch base on how we are doing and address any issues which had arisen.

Achievements:

We delved further into the WiFi connectivity issue and tried to brainstorm a few solutions on how to solve the problem or go about finding some method to work around it. The problem continues to plague us but we are working towards solving it. Our website also was put up officially so that we can post our documents there now.

14 NOV 14 – Phone Meeting
Duration: 2 hr

Purpose and Goals:

This meeting was to check in with ISG and to let them know about the issues we were having with the WiFi connectivity requirement and see if they had any input into how they would like us to handle it. We coordinated for next weeks work on our project for a bit as well.

Achievements:

We let ISG know about our issue and they will be looking into it as we do so we can try to find a solution that works for them. Additionally we updated ISG on our progress so far in reaching the next demo requirement and let them know as of now we appear to be on track to completing this demo.

We spoke with Dr. Manimiran for some time after the phone meeting as well to update him on the project and he gave us many helpful insights into creating an effective process and presentation for our project.

Pending issues

1. John Deere identity site
2. iOS wifi connectivity issue

Plans for next week

1. Jesse: .Improve AR recognition & Vuforia integration
2. Tanner: User and tractor management work, database work, Design Document, Project Plan, reports
3. Haoyu: Work on alerts when thresholds received from ISG
4. Brian: connect to websites via wifi and meet with andrew Hoyt to learn more about Xcode and wireless data transfers.
5. Sang: Meeting with Andrew Hoyt who has experience in Mobile Application Development to learn about XCode

Individual Contributions

Jesse: Attended meeting, coordinated with client/advisor, worked on Vuforia and AR functionality (7 hr)

Brian: (8 hrs) researched wifi protocols, attended meetings, attempted wifi connections, contacted additional help regarding xcode.

Haoyu: Attended meetings, created and maintained web page, worked on solving WiFi issue (7hr)

Tanner: Attended meeting, worked on project plan version 2, worked on data storage and management for users and tractors on app (8 hr)

Sang: Attended meeting, worked on wifi functionalities, created a testing plan for next version (9hrs)

Total contributions for the project

Jesse Walther (52 hr)

Brian Moran (53hr)
Haoyu Liu (57hr)
Tanner Hildebrand (79 hr)
Sang (62 hr)