EE/CprE/SE 491 WEEKLY REPORT 3 2/12 – 2/27

Group number: sdmay20-19

Project title: To Online Shop, or to Not Online Shop

Client &/Advisor: Goce Trajcevski

Team Members/Role:
Amiah Gooding - Electrical Engineer
Matthew Martin - Report Manager/Scrum Master
Max Minard - Software Manager
Smruthi Sandhanam - Meeting Manager
Travis Stanger - Test Engineer
Yana Aleksandrova - Meeting Facilitator

o **Weekly Summary -** Software team has finished the first two week sprint. Frontend has developed all necessary screens with basic functionality and navigation. Backend has set up database and necessary infrastructure, and components for API calls. Software team is halfway through the developmental process working on integrating and API calls. The hardware team has been working on writing the python script for sending the barcode to the database from the Raspberry Pi. We were blocked for some time due to the API calls and backend code not yet running on the server; however, the skeleton code is complete. For the conference we are presenting in, we also booked flight tickets, hotel, and registration.

o **Past week accomplishments -** Software views on the application have been initialized and the AWS database has been set-up. The necessary application views have been accomplished. Software is ready for the integration component. Back-end code has been created and tested locally. Finished all travel-related items for the conference in March. Python script is almost complete to send the barcodes to the database.

Yana: After setting up, finished views I was working on, launch screen, registering, login, and hardware initialization aspects of the application. Worked on API calls which are almost completed in order to interact with the database. Ready for the integration component.

Matthew Martin: EC2 instance and RDS on AWS were both created and given enough security permissions for external access. Implemented database diagram into MySQL database. Began creating the repositories and controllers for API calls that will be used for hardware and front-end to access the database.

Max Minard: Began developing a front-end application. Setup initial project without Amplify installed since we are moving away from that. Started the development of the map portion of the iOS app as well as some research into possible third party map API replacements. Began discussing design decisions of listed features as well as met with other teammates to help guide them on where to go and tips on using Xcode/Swift

Smruthi Sandhanam: Worked with Amiah to set up the raspberry pi. Ran into initial issues, as I was trying to set up the Pi on my Mac. I realized that I would need a separate monitor to run the Raspbian OS. Also needed to obtain additional components such as keyboard/mouse and figure out how to register the device on the network. Initial setup has been completed. Starting initial work on python script to get data in from the barcode.

Amiah Gooding: Finished raspberry pi set up. Had a brief issue with stable internet connection. However, it was remedied by sending ETG the relevant information about our pi and having it added to the ISU network. From there we moved to working on the python script to help send the barcodes to the phone application. This will be our integration step between software and hardware.

Travis Stanger: Met with Sara and Goce to discuss information regarding travel to the PerCom conference. Added additional sample data to the database tables, and changed some table columns. Implemented continuous integration. Updated senior design website.

o **Pending issues**
Max Minard: Testing Location Services
Smruthi Sandhanam and Amiah Gooding: Proper transmission of barcodes to phone application
Yana Aleksandrova: Testing API calls

o **Individual contributions**

Name	Individual Contributions	Hours this week	Hours cumulative
Amiah Gooding	Picked up keyboard and mouse. that came in. Finished set up of raspberry pi. Reviewed barcode scanner instructions and connected it with pi. Started Python script. Got more information about poster requirements.	12	33

Matthew Martin	Created the Spring-Boot application in eclipse and ensured all dependencies were in the Pom file and the application was able to talk to the database. Additionally created all the controllers and repositories for the back-end code. Began creating the API end points that will be used by the hardware to update the database and the front-end to pull any needed information. Began documenting the API calls for everyone to utilize.	14	38
Max Minard	Decided to stick with iOS MapKit. Restructured the front end code to Solve the issue of async calls to location services for gaining current location and surrounding food market locations. Implemented background processing to update surrounding food market locations as the user's location is moving. Got annotations to dynamically render with surrounding locations within a specific radius.	12	38
Smruthi Sandhanam	Worked with professor and organization to purchase flight tickets, hotel rooms, and registration. Worked with Amiah to develop python script to send barcode to the database. Got Raspberry Pi registered on the network. Helping with some of the software tasks.	12	35
Travis Stanger	Met with team, discussed plan for next few weeks. Implemented continuous integration on GitLab. Met with Sara and Goce to discuss travel information. Updated senior design website.	10	32
Yana Aleksandrova	Finished assigned view (launch screen, registration screen, login screen, and hardware config). Added API calls to	12	36

	these features, ready for integration component.		

o **Plans for the upcoming weeks**

Yana Aleksandrova: Integration application views with the hardware and making sure features are tested and working. Will make sure all aspects linked to the backend function properly. Once this is accomplished I will move on to further features on the frontend to help with Max's screens.

Max Minard: Continue testing of background processing and location tracking services. This will lead into the implementation of notifications for new food markets popping up near the user's current location, which involves background processing to occur. Help implement smaller, essential features and possibly help with front end API calls and handlers.

Matthew Martin: Finish creating the API calls that will be needed by either the front-end or the hardware. As new features get created on the application, create any additional API calls needed. Assist the hardware team in creating the script to update the database. Document all API calls so everyone can continuously utilize it.

Smruthi Sandhanam: Working towards end-to-end demo to present to Goce, March 8th. Finishing sending barcode scanner data into the database. Helping with remaining software tasks. Meeting with Amiah to complete all other tasks required before the conference.

Amiah Gooding: Meeting with Smruthi this upcoming weekend to start work on python script and test code. Starting poster for conference.

Travis Stanger: Meeting with the software team this week to discuss where to go next. Plan on meeting with Matthew to help him with backend features and further the project progress.

o **Summary of weekly advisor meeting**

Professor Trajcevski gave us details on what he wanted to see completed by the week before spring break. An end-to-end demonstration should be completed by this time frame. We had a discussion about the poster that will need to be created for senior design, which is what we will be using for the conference invited to. Will continue to have meetings with Professor Trajcevski except taking one week off of meetings.