CPRE 491 Weekly Report 11

Date:
04/10/2017

Project Title:
Performance Livestock Analytics

Group Number:
DEC1708

Team Members & Roles:
Jacob Johnson - Key Idea Holder
Jeffrey Murray - Key Idea Holder

Client & Advisor:
Dustin Balsley & Prof. Daji Qiao

Michael Rhodas - Team Leader
Rachel Hartman - Communication Leader
Ken Kohl - Webmaster

Weekly Summary

This week we completed work on the largest branch of our minimum viable product. This includes the addition of Firebase authentication and the My Medications user story arch. There a few navigation polishing steps that need to be taken and the addition of the final Firebase supported master medications list is being implemented now. We presented this product to both our advisor and client this week with overall very positive feedback. Slowly but surely we are beginning to understand iOS development.

Past Week Accomplishments

- Jacob: Spent a lot of time getting ready for our alpha build demo. This included many hours of more focused research and a lot of time spent trial-and-error coding to get our alpha build ready. I think I have a much better understanding of iOS development at this point. Overall, the learning curve I think we have all experienced was far steeper than we anticipated.

- Jeffrey: Spent time working through proper xml parsing in swift. This wound up being a bit trickier than I had anticipated because I wasn't familiar with handling web responses in swift. Additionally worked with AR overlays for the camera screen to be able to overlay the camera input and indicate where the barcode is to be placed and scanned.

- Michael: Looked into creating a web service to go along with an sql database to work with an iOS application. We obtained a copy of a demo database given to us by the client to start converting our database from Firebase to a SQL database linked web service.

- Rachel: Spent time working through implementations of other login options that don't involve firebase. Work on troubleshooting a navigation error we were having. Redid a navigation demo

of our application to make sure things were working the correct way. Set up a template for our final presentation and filled in some of it.

- Ken: Updated the website with all documents since the client said everything could be released. Also did research on and worked to reintegrate table view of database back into the current project build

Pending Issues (if applicable)

- Jacob: I think there are some fundamental navigation errors in our master branch that might begin to pester us down the road. We should likely fix these issues before moving on to larger features. I think this will make our code safer as well as give us a better foundation to build from and help ensure that we all understand the best practices of iOS development.

- Jeffrey: Currently still playing around with the AR overlays to prevent capture of barcodes outside of the specified region. Additionally need to actually look into the feasibility of these barcodes being present on medications and whether this is a feature that we can actually realistically rely on.

- Michael: I need to find a free sql hosted or get it hosted at ISU. Also need to look into integrating personal client medications into the iOS demo app.

- Rachel: Troubleshooting why our prepare method is messing our ability to navigate between view controllers. Work on implementing our view controllers the same way for readability.

- Ken: There's been trouble reintegrating the table view of the database. I'll be working on this and adding a search bar to the list once it's back in. Also a chunk of this will be making the data selectable and sending it to another screen to be processed.

Individual Contributions

Name	Contributions	Weekly Hours	Cumulative Hours
Jacob	Alpha research, development, commenting, polishing, and presentations.	18	63
Jeffrey	Barcode response handling and AR overlay work.	5	38.5
Michael	Researched how to link an SQL database to an iOS app through a web service.	5	38
Rachel	Troubleshooting, Navigation research, commenting, making presentation,	5	37.5

	Researching best navigation practices		
Ken	Research, troubleshooting, website updating, having never ending dreams of solutions that don't work when I wake up.	6	39

Comments

Jacob's hours seem to be out of sync with everyone else's. In no way should this reflect poorly on anyone. I simply had a good amount of time available this past week and decided to do a deep dive into iOS to try to get a firmer macro-level perspective on things.

Plan for Coming Week

- Jacob: Help other teams understand the current code base and empower them to start adding their own features. Will also start on preparations for our final presentation.

- Jeffrey: Learn current code base and work on addition of the barcode scanner to the application. Also intend to spend time looking into both the feasibility of using the barcode scanner or whether it is going to wind up being an unusable feature for our purposes. If this doesn't seem like a possibility, I may look into potential other options for allowing camera inputted medicines.

- Michael: My plan is to link our Firebase database to local stores of clients data to pull personal lists from the database instead of having them stored locally. I also want to look into the possibility of finishing a phpSQL web service to use.

- Rachel: Work on final presentation and help clean up the release branch in terms of navigation.

- Ken: Keep website updated. Hopefully work with team to create final presentation. Work on reintegrating uitableview with search bar and persisting data to other views.

Summary of Advisor Meeting (if applicable)

Went through the alpha build, talked about final presentation goals, and discussed next steps for development as well as class assignments. In short, getting ready for the conclusion of the semester.