EE/CprE/SE 491 Weekly Report (10/28 - 11/11)

Group Number 001
Client: Brockman, Nathan - Reiman Gardens
Advisor: Vaswani, Namrata

Project Manager: Jay Amin
Project Planner: Mark O'Meara
Project Organizer: James Lockard
Communications Director: Adrianna Kallis
Documentation Designer: Matthew Markrose
Test Engineer: Manthan

Small Pupae Big Data

11th November 2019

Weekly Summary

This week the team completed version two of the design document. While working through the sections of the design document we were able to determine the tasks to complete and associate a timeframe of completion. As a team, frontend and backend technologies were finalized and demo projects were started to familiarize everyone. Initial project setup has been started and hoping to complete it by next status report.

Past Week Accomplishments

Team Member	Work Done
Jay Amin	- Worked on design document part 2 - Added pros and cons for firebase - General proofing and editing, added stack details - Went to see Advisor Vaswani, she was unavailable immediately, so we prepared a list of questions to ask her - Reflection assignment due on canvas - Started working on final framework setup including firebase account, as well as readme for setup
Mark O'Meara	- Reflection: Engineering Standards - Met with our advisor Namrata Vaswani - Design Document: Part 2 - Finalized what backend technologies we are using - Experimented some with Firebase

James Lockard	- Worked on design document version 2 - Edited parts of document - Added to various sections - Experimented with Vuejs + Firebase application for project.
Adrianna Kallis	- Met with Dr. Vaswani to discuss specifics of logistic regression model for predicting emergence - Reviewed documentation regarding logistic regression from an electrical engineering perspective - Finalized technologies to use throughout the project - Feasibility Assessment for Design Document - Modified and updated entire Design Document for content and grammar
Matthew Markrose	- Worked on NodeJS tutorials locally - Cloned git repository
Manthan	- Worked on reflection engineering standards - Worked on design document v2 - Experimented with various features of frameworks including google's firebase

Pending Issues

Team Member	Issues Encountered
Jay Amin	Getting everyone setup with the frameworks on their machines
Mark O'Meara	No issues encountered
James Lockard	Determining a project structure where backend, frontend, and analysis can work independently.
Adrianna Kallis	Determining the best way to code categorical and ordinal explanatory variables for use with logistic regression
Matthew Markrose	No issues encountered
Manthan	Figuring out a way to work with google's firebase and implement it to our project

Individual Contributions

Team Member	Previous Cumulative Hours	Hours Week of 10/28- 11/3	Hours Week of 11/4 - 11/11	Hours Cumulative
Jay Amin	43	6	7	56
Mark O'Meara	36	5	5	46
James Lockard	44	4	3	51
Adrianna Kallis	38	7	6	51
Matthew Markrose	35	3	4	42
Manthan	37	5	5	47

Plans For The Upcoming Week

Team Member	Projected Work
Jay Amin	● Push final readme setup into git ● Coordinate with Manthan on merging/deleting current push ● Have a fully working Vue + Firebase/Node + Data Analytics container running live by the end of Fall Break
Mark O'Meara	● Setup communication between front and back-end with Firebase
James Lockard	● Completing the initial project setup with Vuejs and Firebase. ● Store data in the database from the frontend UI ● Load current data supplied from client
Adrianna Kallis	● Research connecting data analysis with Python to the backend ● Complete preliminary logistic regression model ● Report preliminary results to client and receive feedback
Matthew Markrose	● Contribute to git project ● Work with Mongo DB ● Identify possible libraries and APIs that would help with project
Manthan	● Finalizing the design document ● Working on reflection assignments ● Adding to the project on github

Summary of Weekly Advisor Meeting

Adrianna met with Dr. Vaswani to discuss the data analysis portion of the project. During the meeting, they discussed the regression documentation and training materials provided to the team. They decided that the team should first try a logistic regression model, and reevaluate modeling methods if the logistic regression had poor predictability. They also discussed the impact of categorical and ordinal data on the logistic regression model. Dr. Vaswani hoped to further investigate the question in the future, specifically if it raised additional issues in modeling.