EE/CprE/SE 491 BI-WEEKLY REPORT 3

Date - September 27, 2020

Group number:
29

Project title:
Microbiology Lab Information Management and Visualization System

Client &/Advisor:
Karrie Daniels & Thomas Daniels

Team Members/Role:
Brittany McPeek — Report/Documentation Manager
Benjamin Vogel — Team Manager
Rob Reinhard — Meeting facilitator
Kyle Gansen — Meeting Scribe
Ben Alexander — Progress Manager
Samuel Jungman — Chief Engineer

Weekly Summary

This week, we focused on delivering an initial prototype of creating and visualizing groups of data including cross products of different data sets as graphs. We would allow the user to choose which sets of data they wanted, and then a graph for each individual set of data plus the cross product of that data would be generated. This will allow the user to create more than one graph at a time, therefore speeding up the generation of necessary graphs. This week was our first attempt at implementing this, and will be improved over time. We also delivered a much more functional Google Drive integration into the application, allowing the user to create folders and choose the destination for the graphs to be exported to. Lastly, we ended the week by getting together and making sure the project is a cohesive unit in the master branch and not a jumble of different prototypes.

Past week accomplishments

Brittany McPeek — Report/Documentation Manager
- Worked on the PIRM Presentation
- Completed linking the Google Drive functionalities to the GUI
  - Generates a file explorer for the user's Google Drive
  - On the file explorer view, the user can create new folders in their Google Drive and/or select where they want to save their graph file(s)
  - Merged this functionality into update_gui

Benjamin Vogel — Team Manager
- Worked on the PIRM Presentation
- Started working on multi-graph generation for scatter plot
- Lead effort to consolidate individual work into master

Rob Reinhard — Meeting facilitator
- Worked on PIRM Presentation
- Fixed import statements of various components, redid file structures to start process of dependency elimination of various components
- Moved box plot demo into GUI.

Kyle Gansen — Meeting Scribe
- Worked on PIRM presentation
- Implemented group filtering
- Began research on filtering of imported data to avoid errors

Ben Alexander — Progress Manager
- Worked on PIRM presentation
- Created scatter plot graphing tool
- Worked on merging different components of the project

Samuel Jungman — Chief Engineer
- Worked on PRIM presentation
- Helped merging of coding components and clean code base
- Worked on test cases and integration of stats analysis

Pending issues
Brittany McPeek — Report/Documentation Manager
- The file explorer for Google Drive takes a long time to generate
- Current comments and documentation needs to be cleaned up

Benjamin Vogel — Team Manager
- Depends on how smoothly the integration of all the projects go
- Continuing work on scatter plot graph generation

Rob Reinhard — Meeting facilitator
- Issue with test cases failing in main component
- Slowed down progress on vertical box and whisker to work on cleanup

Kyle Gansen — Meeting Scribe
- Determining the groups has errors occur when there is string data mixed in with numerical data

- The GUI I'm working in freezes for a moment when data is imported. Will have to see if multi-threading could help with this

Ben Alexander — Progress Manager
- The scatter plot may still have a few issues when trying to plot data not formatted correctly
- Not quite sure how we are going to integrate everyone's part into a single app

Samuel Jungman — Chief Engineer
- Needing to finish integration for codebase

Individual contributions

Team Member	Contribution	Weekly Hours	Total Hours
Brittany McPeek	PRIM Meeting, Google Drive File Explorer implementation	15	36
Benjamin Vogel	PIRM Meeting, Multi scatter plot graph generation, unifying code in master	13	29
Ben Alexander	PIRM Meeting, Scatter plot graph, merging with other parts of project	7	14
Samuel Jungman	PIRM Meeting, stats testing, codebase cleanup	6.5	13
Rob Reinhard	PRIM Meeting, Import File Structure fixes	9	19
Kyle Gansen	PIRM Meeting, Group Filtering, Group Coloring	11	27

Plans for the upcoming week
Brittany McPeek — Report/Documentation Manager
- Connect the Google Drive file explorer view to an Export File(s) button on the generated graphs page
- Look into how we can change the appearance of the graphs (the scaling, colors used, etc…)

- ○ And then also look into how we can save a template of the appearance so that it's easier for the user to re-make a certain style of graph
- Clean up comments throughout the code for better documentation

Benjamin Vogel — Team Manager
- Continued effort of cleaning up master
- Multi scatter plot graph generation

Rob Reinhard — Meeting facilitator
- Decouple file importation and graph components, have master
- Finish vertical box and whisker
- Begin implementing GUI interface to use these components

Kyle Gansen — Meeting Scribe
- Work with Brittany on a templating function
- Determine if group filtering is a valuable feature and continue to improve it if it is
- Work on moving the functionality I have implemented into a common group program rather than an individual experimental GUI

Ben Alexander — Progress Manager
- Create the main user interface flow of the app for everyone to work off of

Samuel Jungman — Chief Engineer
- Assist Ben V. on cleaning up codebase
- Finish integrating stats analysis

Summary of weekly advisor meeting
No advisor meeting was held during this time.