

# EE/CprE/SE 491 BI-WEEKLY REPORT 6

10/26/2020 - 11/9/2020

**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

These last two weeks we focused on wrapping up development of the application as well as polishing our product and beginning to work on the final report. We were able to add in new features to our application such as graph dimensions, x-axis naming, y-axis naming, and customization into the graphing process itself. We also changed how we stored data to allow for the graphing objects to only hold the names of the data to be graphed, not the actual data itself. This allowed us to speed up processing time and keep file sizes down when saving the project. We also added the ability to package the project up into a Python zip file for the client to use without having to download the source code.

## Past week accomplishments

*Brittany McPeek — Report/Documentation Manager*

- Helped create the PIRM Meeting 2 presentation
- Began working on the User Guide and Final Poster
- Found a solution to display our code documentation in a readable format (we will be using Docstrings and pydoc to create html files of our code documentation)
- Implemented exportation to the local machine and added this functionality to the GUI

*Benjamin Vogel — Team Manager*

- Packaging the entire application into a single file
- Created most of PIRM Meeting 2 presentation
- Organized weekly meeting

- Wrote first draft of the final report

*Rob Reinhard — Meeting facilitator*

- Updated application data-frame for better organization between sheets and editions
- Updated application to follow new packaging guidelines
- Updated application file import, select system, revisions to accommodate new data-frame
- Worked with Kyle on merging editing options with above revisions

*Kyle Gansen — Meeting Scribe*

- Made progress on cleaning up project structure to better match design doc.
- Dataframes no longer saved into graph pickle files.
- Implemented some basic graph editing options.
- Worked with Sam on getting ttest/correlation in UI as well as getting basic data filtering integrated.

*Ben Alexander — Progress Manager*

- PIRM Presentation
- Added template creation and application functionality

*Samuel Jungman — Chief Engineer*

- Worked with Kyle on integration of data filtering and ttest/correlation into the UI
- Corresponded and verified documentation engine with Brittany
- Created in-application help feature

**Pending issues**

*Brittany McPeck — Report/Documentation Manager*

- No pending issues

*Benjamin Vogel — Team Manager*

- Packaging the application does not work on current master, but does on older versions. Needs a fix

*Rob Reinhard — Meeting facilitator*

- No pending issues

*Kyle Gansen — Meeting Scribe*

- File paths are currently hard-coded in most places. Will be working on putting file paths in a global variables module.

*Ben Alexander — Progress Manager*

- No pending issues

*Samuel Jungman — Chief Engineer*

- No pending issues

### Individual contributions

Team Member	Contribution	Weekly Hours	Total Hours
Brittany McPeck	Local export, User Guide, Final Poster, code documentation, PIRM presentation	18	80
Benjamin Vogel	Packaging into single file, PIRM presentation, final report	15	68
Ben Alexander	Presented UI changes in PRIM, added template functionality	10	62
Kyle Gansen	Cleaning project structure, dataframes no longer saved in graph files, basic graph editing, and helping Sam integrate a couple features	15	68
Samuel Jungman	Worked with Kyle on integration of data filtering and ttest/correlation into the UI, Corresponded and verified documentation engine with Brittany, Created in-application help feature	18	60

Rob Reinhard	Updated application data-frame for better organization between sheets and editions, updated application to follow new packaging guidelines, updated application file import, select system, revisions to accommodate new data-frame, worked with Kyle on merging editing options with above revisions	15	68
--------------	---	----	----

### Plans for the upcoming week

*Brittany McPeck — Report/Documentation Manager*

- Finish User Guide
- Review Final Report
- Final Presentation
- Final Poster
- After code completion, generate the code documentation html files

*Benjamin Vogel — Team Manager*

- Final Presentation
- Final Poster

*Rob Reinhard — Meeting facilitator*

- Work with Kyle on edit graph options
- Document existing code, cleanup
- Cleanup project page so UI does what the user thinks it will do.

*Kyle Gansen — Meeting Scribe*

- Give UI options for image size in inches and dpi
- File paths in global variables
- Range of axis in graph editing
- Error bars for bar graphs
- Help with final docs/poster/presentation

*Ben Alexander — Progress Manager*

- Work on final poster
- Contribute to documentation and user guide as needed
- Final presentation

*Samuel Jungman — Chief Engineer*

- Final poster
- Final presentation
- Contribute to the user guide and documentation
- Get feedback from client on help feature and improve as needed

**Summary of weekly advisor meeting**

The main focus of our advisor/client meetings these past few weeks has been on finalizing our application. We demonstrated our application to our client and asked if there was anything we needed to change before finalizing our product. We found that it would be helpful to move our graph dimensions from being based on pixels to dpi. We also found that our client would like to be able to change the font size and type of the axis labels and graph title. Our advisor also advised us to begin on our final presentation, and recommended that our presentation be in a story format that tells the tale of our backend reorganization.