

SE 492 - sdmay20-54

Enabling Repeatable Graph-based Experimentation and Education

Bi-Weekly Report 3 - Semester 2

2/14-2/27

Client: Ben Holla

Faculty Advisor: Suresh Kothari/Payas

Team Members:

Austin Gregory - Report Manager

Peter Marasco - Communication Coordinator

Blake Mulnix - Trello Manager

Kyle Ferguson - Meeting Coordinator

Matthew Schaffer - Technical Leader

Past Week Accomplishments

- Refined/Refactored UI for website — Austin
 - Refined/Refactored website HTML/CSS code
 - Created a navigation bar linking to different containers (home, about us, team, project)
 - Description of our project and goals
 - Images/roles of each team member
 - Graphs embedded into the project section showing what we have at the moment
- Fix platform compatibility for Web Sockets — Blake and Matthew
 - Debugged errors causing web sockets to fail on linux and windows
 - Refactored web sockets to not fail occasionally on Mac
- Refined containers for graph visualization — Kyle and Peter
 - Modified containers to access information from the actual CHPG files to inform the container headers with the name of function/class/project

Pending Issues

- Change import/output approach for graph for future scaling (Priority)

- Change the I/O approach of the CHPG files from XML to JSON/Java Objects to allow for scalability of graphs. Currently will run into some issues with massive graphs
- Embed Graph Visualization in website (Priority)
 - Merge the embedded wrapper into the website
- Refine containers to graph visualization (Priority)
 - Clean up the parsing approach to be less fragile
- Add typing to graphs (genetic graphs, statistical data, software)
- Edges in graph crossing (requires overhaul of algorithm)
- Add further context menu options
- Save graphs to notebook
 - Save XML files to the notebook rather than importing each time

Individual Contributions

Team Member	Contributions	Bi-Weekly Hours	Total Hours
Austin Gregory	Refined/Refactored UI for website, Status Report	14	31
Peter Marasco	Refined containers for graph visualization	15	32
Blake Mulnix	Fix platform compatibility for Web Sockets	15	33
Matthew Schaffer	Fix platform compatibility for Web Sockets	12	29
Kyle Ferguson	Refined containers for graph visualization	12	29

Plans for Next Week

- Develop Demo Server - Blake/Matthew
 - Begin new eclipse project which holds a server for demoing our graphs independently of the jupyter kernel
 - JavaScript/Spring for frontend/backend
- Clean up container parsing - Kyle & Peter
 - Refactor the method for parsing for information from CHPG files to be less fragile if CHPG files change
- Embed CHPG files into website - Austin
 - Embed graph visualization in website