

SE 491 - sdmay20-54

# Enabling Repeatable Graph-based Experimentation and Education

## Week 2 Report

10/23-10/30

Client: Kothari

Faculty Advisor: 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

- Researched Cytoscape - Austin, Kyle, Matthew
  - Investigated Layout Formats which could be better suited for our project— Found that DAGRE (current layout) is the best offered layout, but that a custom layout will be needed.
  - Found that there are countless colors/shapes provided by cytoscape that can be used for our project
  - Tested layouts, node-types, line types using cytoscape API
- Fix 404 Jupyter Error - Peter
  - Solved the problem where a 404 Error appeared when attempting to visualize graphs.
  - Now, the graph appears when run, so that the user doesn't have to go into their file system to see the graph.
- Solve Code Modification Issue - Blake
  - Discovered the problem with the modified JAR not being considered—now we can test modifications to code
- Cleaned up existing code - Blake
  - Reformatted code/removed duplicated code

## Pending Issues

- Alter layout to better replicate Atlas
- 404 Error in Jupyter adds steps to graph visualization

## Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Austin Gregory	Researched Cytoscape/Status Report Creation	5	11
Peter Marasco	Fixed 404 Jupyter Error	7	15
Blake Mulnix	Solve Code Modification Error/Cleaned up existing code	8	15
Matthew Schaffer	Researched Cytoscape	5	11
Kyle Ferguson	Researched Cytoscape	5	11

## Plans for Coming Week

- Fix Node Styling - Kyle
  - Make text within nodes fit properly
- Create Menu Options for nodes - Peter
  - Allow on-click menu options for nodes to provide additional information
- Alter Edge Style For Better Looking Graphs - Austin
  - Implement a custom layout which has edges that do not overlap
- Add Colors to the Graph - Matthew
  - Improve design of graph by adding colors when appropriate
- Alter Node Shape Depending on Node Type - Blake

- Change shape of conditional nodes to diamond instead of rectangle
- Look into other possible node shape changes