

SE 491 - sdmay20-54

# Enabling Repeatable Graph-based Experimentation and Education

## Week 4 Report

11/8-11/15

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

- Investigated Additional Features - Kyle
  - Graph Import/Output overhaul
  - Add Typing to Graphs
- Additional Customizations to Graph Layout + Testing - Austin
  - Implemented additional edge style customizations for graph (segmented, curved, taxi, etc)
  - Tested Custom Layout
- Merged Code - Blake
  - Compiled all of our changes and merged to the main branch
- Altered Node Shape Depending on Node Type - Blake
  - Changed Node Shape of loops/conditionals to diamonds
- Added Colors to Graph - Matthew
  - Nodes now change colors from menu option or upon click
- Additional Menu Options for Nodes - Peter
  - Improved menu with additional options

## Pending Issues

- Change import/output approach for graph for future scaling
- Add typing to graphs (genetic graphs, statistical data, software)
- Edges in graph crossing (requires overhaul of algorithm)

## Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Austin Gregory	Additional Customizations to Graph Layout/Status Report Creation	7	24
Peter Marasco	Additional Menu Options	8	29
Blake Mulnix	Merged Code/Changed Node Shape	8	29
Matthew Schaffer	Added Colors to Graph	7	24
Kyle Ferguson	Investigated Future Features	7	24

## Plans for Coming Week

- Even More Changes to Menu Options for nodes - Peter
  - Allow on-click menu options for nodes to provide additional information/utility
- Investigate Additional Graph Algorithms - Austin
  - Test graph algorithms to find one more suitable for our needs
- Investigate Efficiency Changes - Matthew
  - Analyze code for any potential increases in code efficiency
- Overhaul Graph Import/Export Approach - Blake
  - Begin an overhaul of graph import/export for future scalability

- Investigate Graph Typing and How to Approach - Kyle
  - Look into graph typing and what changes will be needed to implement types
- Prepare for meeting with Client — All members
  - Prepare Questions/Make final changes for our meeting with Ben