

CprE 492 Bi-Weekly Report 01

3/29/2021 - 4/11/2021

Group #: 50

Project Title: Cy-Sec Game

Advisor: Manimaran Govindarasu

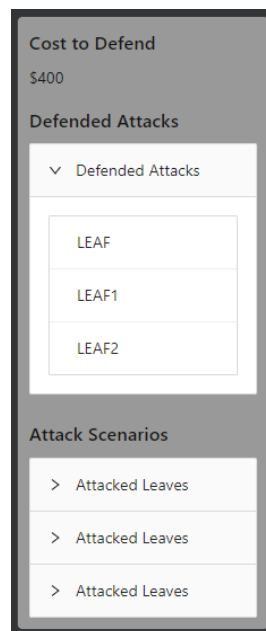
Front End Members: Jon Greazel, Hayden Sellars, Joseph Strobel

Back End Members: Harrison Majerus, Nicholas Battani, Stefan Peng

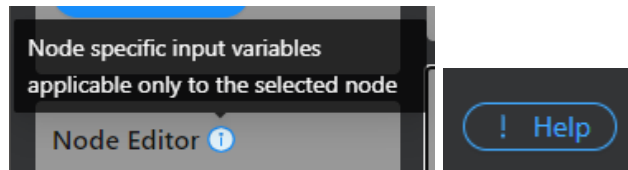
Bi-Weekly Summary: The project is nearly complete and only a few small aspects need finished and tested. The back end analytical engines were wrapped up in the last two weeks. The front end is also nearly completed, the only thing left is to display the results to the user. The front end team is also working on enhancing usability with tips for the user and improved tree validation logic.

Past 2 Weeks Accomplishments:

- Jon:
 - Worked on displaying results in a user friendly manner. The display isn't wired to the back end engines yet, but will be within the next week.



- Added tooltips to form labels and a help section in attempt to prompt confused users



- Hayden:
 - Meet with the front end team to form the output section of the tool.
- Joe:
 - Reworked tree input validation to account for each of the three engines. Now, each engine's respective tree goes through a validation process before sending to the backend.
 - Met with the front end team to begin formatting the output.
- Harry:
 - Finished Attack-Defense Tree algorithm by implementing defined changes, finished json output and helped with frontend integration
 - Tested Attack-Tree algorithm and made changes based on new analysis direction implemented in Attack-Defense Tree algorithm
- Nick:
 - Verified attack-tree algorithm worked with front end correctly.
 - Wrote test cases for the API.
- Stefan:
 - Initial integration of game theory algorithm with front end
 - Improved game theory algorithm output
 - Verified algorithm output matched sample scenario from client

Pending Issues: Our front end isn't quite displaying results how the team would like, but our next week of development will be focused on the data display section.

Individual Contributions:

Team Member	Contribution	Weekly Hours	Total Hours
Jon Greazel	Worked with the rest of the front end team on data display. Added tooltips and help section.	5.5/6	56
Hayden Sellars	Front end team meeting for data display.	6/6	54

Joe Strobel	tree input validation and beginning output implementation.	6/6	55
Harry Majerus		6/6	58
Nicholas Battani	API Test cases, verification of attack-tree algorithm success with frontend input.	6/6	54
Stefan Peng		6/6	54

Plans for the Upcoming 2 Weeks:

- Jon:
 - Work with the rest of the front end team to display our results to the user in the most efficient and readable way possible.
 - Implement some component tests
 - Document code to ease next student's learning curve.
- Hayden:
 - Front end meeting to display results more effectively and connect backend api for real results to be displayed.
- Joe:
 - Work with the front end team to finish output.
- Harry:
 - Integration testing
 - Use case testing
- Nick:
 - Ensure that new additions to the engines can still ensure previous functionality with unit test cases for each of the three engines.
- Stefan:
 - Work with front end team to display game theory algorithm output
 - Add game theory tests to unified testing framework

Summary of Weekly Advisor Meetings: Our advisor is happy with the current state of the project and hopes for a full demo in the next two weeks. Our final advisor meeting will be used as a mock panel presentation for us to practice.