### EE/CprE/SE 491 WEEKLY REPORT #5 - 4/7/23 - 4/21/23

Group number: sd-may 23 50

**Project title:** Collaborative Surveillance of Large Geographic Area by Fleet of Drones

Client &/Advisor: Goce Trajcevski

Team Members/Roles:

Rowan Collins - Backend and Testing
Joseph Edeker - UI/UX, Frontend Management
Jaden Forde - Client Interaction, Frontend and Backend
Thomas Glass - Backend with Security Emphasis
Jacob Houts - Backend Developer
Marcus Jakubowsky - Team Lead, Project Management and Backend

#### o Weekly Summary

The past two weeks our group has made considerable progress. We've begun to add round trip functionality to almost all aspects of our application. We've removed mocked input and outputs, and moved to using our APIs. We can now log in, review simulation data, preview requested data, and more.

#### o Past week accomplishments

**Rowan Collins** - I finished the test cases for the remaining services apart of our backend. Created a rough draft for the final report to show our client and advisor Professor Goce Trajcevski. Read through the final deliverables creating a list of what is required for our group's success.

**Joseph Edeker -** Updated File Menu component. Worked on the new Grid page, added features: pan, zoom, events, drones, drone paths.

**Jaden Forde -** Continued work on python output generation, adding support for drone positions over time in data formats which are easy for frontend to use.

**Thomas Glass** - Continued work on frontend development to add simulation status functionality to the dashboard. After that was completed, I switched to working on a draft for our presentation.

**Jacob Houts** - Working on the frontend visualization to compare the results of running different algorithms. Part of this process is making the bar graph dynamic so I can show zero to many results. As well as fine tuning the endpoint to make it as easy as possible for the frontend to parse and create calculations for.

**Marcus Jakubowsky** - Created Register and Login pages for authentication as well as storing the returned auth token in the browser. Began updating existing requests to use the bearer token in an authentication header. Deployed frontend updates to the remote server and fixed bugs that arose. Coordinated with team to begin work on the final submission documents.

# o Pending issues

**Rowan Collins -** Drafts of the final deliverables aren't finished. Working alongside Thomas we will ensure there at least the final report and presentation will have a finished draft to look over for our meeting on monday.

Joseph Edeker - Integrate File Menu component functionality with all 4 pages
Jaden Forde - Test python code, work on poster + presentation
Thomas Glass - Drafts for final presentation, final report, and porter with Rowan.
Jacob Houts - Make sure that the project is finished before we create our final demo and do our final presentation.

**Marcus Jakubowsky** - Finalize fixing endpoint request across the remaining 4 pages.

## o Individual contributions

NAME	Individual Contributions	Hours this week	Hours cumulative
Rowan Collins	<ul> <li>Added test cases for the remaining services</li> <li>Created a rough draft for the final report</li> <li>Read through the final deliverables and drafted a list of necessities</li> </ul>	12	Old: 44 New: 56
Joseph Edeker	<ul> <li>File Menu component logic</li> <li>Grid Page</li> <li>Grid canvas component</li> <li>Drone path algorithm</li> </ul>	15	Old: 55 New: 70

Jaden Forde	<ul> <li>Added support for python drone path calculations</li> <li>Researched means of enshrining python behavior via tests</li> </ul>	13	Old: 53 New: 66
Thomas Glass	<ul> <li>Dashboard simulation status</li> <li>Presentation draft</li> </ul>	14	Old: 50 New: 64
Jacob Houts	<ul> <li>Frontend Visualization page</li> <li>Dynamic Bar Graph</li> <li>Displaying Results</li> <li>Parsing Output files</li> <li>Making calculations based on output data.</li> <li>Preparing for the final presentation and report</li> </ul>	15	Old: 50 New: 65
Marcus Jakubowsky	<ul> <li>Registration page</li> <li>Login page</li> <li>Frontend token authentication</li> <li>Deploy frontend</li> <li>Fix tech stack deployment bugs</li> <li>Coordinate team towards final</li> </ul>	15	Old: 72 New: 87

#### o Comments and extended discussion

None

## o Plans for the upcoming week

**Rowan Collins -** Finalize the final report, presentation, and poster working alongside thomas.

Joseph Edeker - Finalize frontend pages

Jaden Forde - Python testing, work on deliverables

**Thomas Glass -** Work on presentation, final report, and poster with Rowan.

**Jacob Houts -** Finalize the visualization screen to make sure that it is ready for the demo and the final presentation.

Marcus Jakubowsky - Finish fixing endpoints and completing frontend pages.

# o Summary of weekly advisor meeting

Met with Professor Goce and Prabin Giri to discuss our progress in the past weeks. Demoed our progress so far, and got excellent feedback for moving forward in the last week. Went over the final report, presentation, and poster.