

EE/CprE/SE 492 Status Report 2

Sept. 6 - 19

Group number: 10

Project title: “Visualizing Probabilistic Whereabouts of Moving Objects”

Client &/Advisor: Goce Trajcevski

Team Members/Role:

Nathan Thoms - Team Lead & Frontend Developer

Mara Prochaska - Backend Developer

Eric Jorgensen - Documentation

Ryan Cook - Fullstack Developer

Report Summary

During the last two weeks, we have delved into implementation for our whereabouts location application and server. We have a working frontend and backend with some communication implemented. Now we are working on clarifying a software architecture and defining the format for sending and receiving our data sets. No major changes have been made to our plans and design documentation thus far.

Accomplishments

For frontend, Nate has been working to allow data sets to be uploaded by users. This includes both the UI and methods to create a JSON object and send it to the backend.

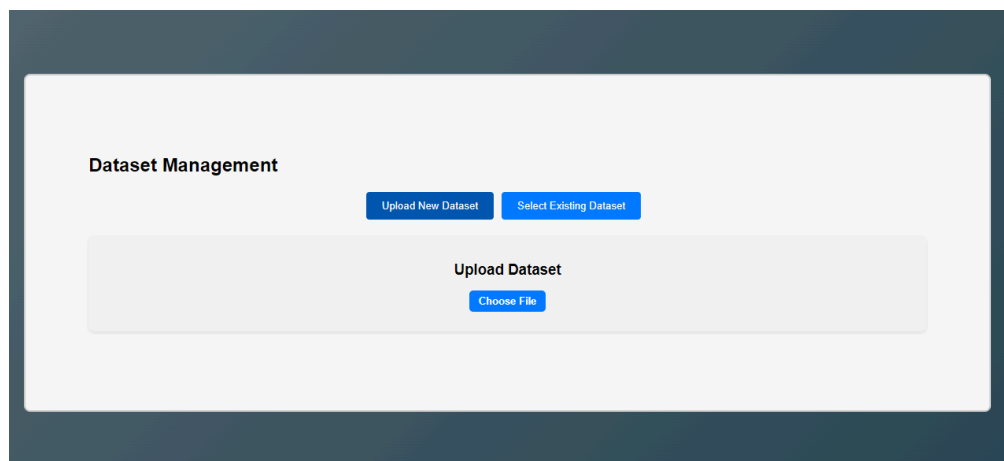


Figure 1 - *Dataset Manager UI Component*

Parsed Dataset Preview (Rows and Columns):

ANIMALID	DATE	LONGITUDE	LATITUDE
283	19:15.0	152.191791	-27.303391
283	49:14.0	152.193716	-27.301783
283	17:57.0	152.195641	-27.298041
283	49:06.0	152.201325	-27.292233
283	48:54.0	152.198883	-27.298291
283	20:07.0	152.191208	-27.3037

Position and Space Specification

Select Space:

2D

Coordinate System:

Cartesian

X Column:

LONGITUDE

Y Column:

LATITUDE

Figure 2 - Dataset parsing options.

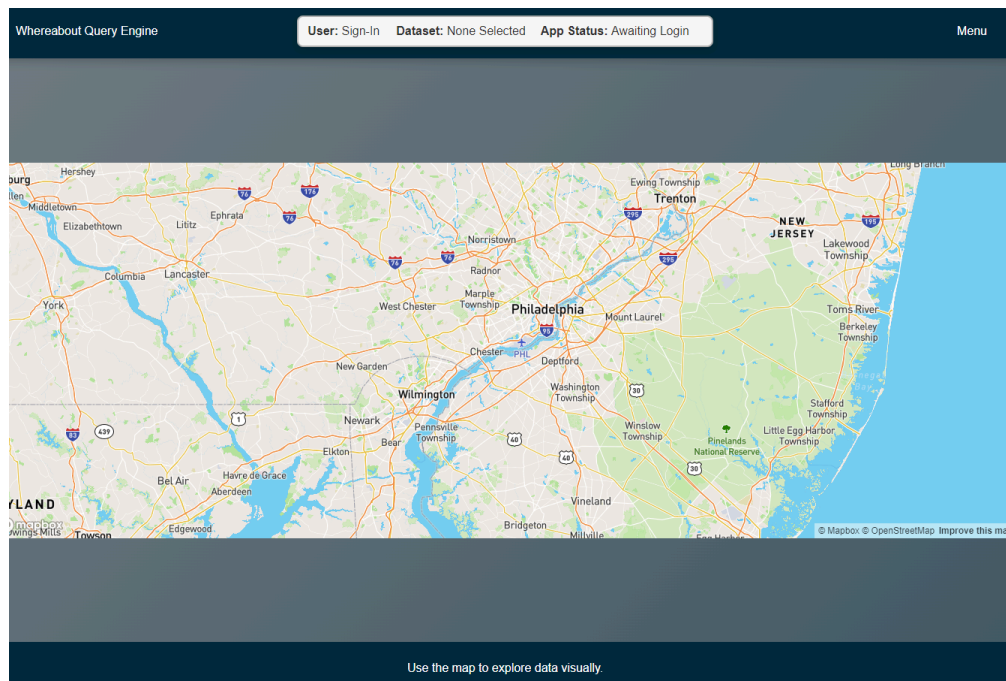


Figure 3 - Mapbox Library Inclusion & Preliminary Functionality

Backend implementation has also progressed with building out RESTful system communication and beginning to build objects that will store application data. We have also gotten our backend running on the server and have mainly been focused on updating backend code as additional features are needed by the frontend. Our MySQL database is also running and synced to our server.

Pending Issues

No current pending issues.

Individual Contributions

Team Member	Individual Contribution	Hours this Period	Hours Cumulative
Nathan Thoms	Frontend work, data set input, testing	10	62.5
Mara Prochaska	Team Meeting, backend work	5	54.5
Eric Jorgensen	Sick	0	35
Ryan Cook	Reboot server, backend work, data set format	6	50

Upcoming Plans

We plan to continue software development for our project and aim to get a significant amount of work done early on in the semester. Specifically, we are working on how to store large data sets in our server and send it from the frontend to the backend. For future weeks, we plan to implement algorithm calculations on the backend and visualization on the frontend. Our team will have another meeting with our advisor this week.

Action Items

Team Member	Individual Goals	Estimated Hours
Nathan Thoms	Finish data set input on frontend and formatting.	5
Mara Prochaska	Look into algorithm backend implementation and assist with backend classes.	5
Eric Jorgensen	Attend team meeting, get access to source code.	1
Ryan Cook	Continue backend configuration, determine how to parse data sets and store to server.	5