ECpE 491 – Weekly Report

Jan 24 - Feb 5

Project Title Interactive evaluation of shortest path methods

Client & Advisor Goce Trajcevski, Mengxuan Zhang

Team sddec23-14

Team Members Alex Blomquist, Samuel Caldwell, Selma Saric, Yadiel Johnson

1 Report

1.1 Abstract

The first two weeks of Senior Design 1 were used to properly understand the project so that we can familiarize ourselves with it promptly. First, our team collectively tried to define what was being asked in the project description, found other products online that would roughly match the project's goals, and formulated questions to present our client and advisor about the nature of the project itself. Then, on the second week, we met with them to clarify questions and get an in-depth understanding of what the scope and expected outcome of it would be. This meeting served as our formal introduction to the domain of the project and gave us some good leads on how we will proceed going forward.

1.2 Work Breakdown

Initially, the team worked together to properly understand the project description as given in Senior Design 1. Specifically, we focused on finding parallels between it and other projects we may have stumbled upon online so that we could relate it to real-world examples. Some of those resources are:

- Pathfinding Visualizer
- Path Finding Visualizer Application for Shortest Path Algorithm
- How to Create a Path-Finding Algorithm Visualizer with React

With these, we formulated our expectations on what this project would be like. From there, we prepared questions to ask our client and advisor, ranging from the domain of the project, to their expectation of what the final result would be, and what our goals would be long term.

Before that meeting, we also collaborated to create and populate a mind map that described what our ideas for this project were. You can find this image here: <u>Team 14 – Preliminary Mind Map</u>.

Finally, our last action item for this week was meeting with our advisor and client. In that meeting, we clarified our understanding of the project and discussed how the design would look like over the course of both semesters of Senior Design. You can read more about this below: <u>Summary of weekly advisor meeting</u>.

1.2.1 Major accomplishments

• Met with our client & advisor and clarified many preliminary questions we had regarding the project.

1.2.2 Pending issues

• Finding the best time to meet each week with the client given time complications.

1.2.3 Individual contributions

Name	Individual Contributions	Worked Hours	
		This Week	Cumulative
Alex Blomquist	Met with client and advisor	3	3
	 Coordinated meeting on weekly report 		
Samuel Caldwell	Met with client and advisor	3	3
	Coordinated meeting on weekly report		
Selma Saric	 Met with client and advisor 	3	3
	 Coordinated meeting on weekly report 		
Yadiel Johnson	Met with client and advisor	3	3
	 Coordinated meeting on weekly report 		

2 Comments and extended discussion

2.1 Work planned for next week

- Alex Blomquist
 - Meet with client
 - o Study research that was given to us by the client on shortest-path algorithms
- Samuel Caldwell
 - Meet with client
 - o Study research that was given to us by the client on shortest-path algorithms
- Selma Saric
 - Meet with client
 - o Study research that was given to us by the client on shortest-path algorithms
- Yadiel Johnson
 - Meet with client
 - Study research that was given to us by the client on shortest-path algorithms

2.2 Summary of weekly advisor meeting

We had our onboarding meeting a week late on 01/30 due to unrelated health reasons and conflicting schedules. During the meeting, we were reintroduced to the shortest path algorithm and the tradeoffs involved in its application on large-scope projects. Following this, we expanded on the project description and the goal of creating an expanded shortest-path algorithm simulation that provides runtime feedback. To finish the meeting, we had a series of questions prepared that helped us gauge the overall project scope, like potential platforms.