Part A

sddec23-14

Team Initiation

Senior Design I

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 Required Skill Sets

Skills	Requirement
Frontend Development	The project must feature an interactive component where users can submit data sets and visualize graphs.
Backend Development	The project must store and process algorithms and data sets for use on command.
Project Management	--
Domain Knowledge	The project must be a capable educational tool to represent an algorithm's strengths and weaknesses.

2 Teammate Proficiencies

Name	Proficiencies	
Alex Blomquist	**Full-stack Development (preference: Backend)**	Git, CI/CD Java, C, SQL, HTML Linux/Unix, Bash
Samuel Caldwell	**Full-stack Development (preference: Frontend)**	Git Java, Kotlin, C, C++ JavaScript
Selma Saric	**Project Management**	Project/product management experience, good scheduling, coordination, communication, organization skills
	Frontend Development	Git Java, C HTML, CSS, and JavaScript
Yadiel Johnson	**Server Management**	Linux/Unix, Bash, server maintenance & provisioning
	Backend Development	Git, Docker, CI/CD, website deployment Java, C, C++, SQL

3 Initial Project Management Roles

Name	Initial Roles
Alex Blomquist	• Setup & coordination of design documentation • Backend Development, Continuous integration
Samuel Caldwell	• Component Design/Architecture • Frontend Development
Selma Saric	• Project Manager • Meeting Coordinator • Meeting Minutes Recorder • Frontend Development
Yadiel Johnson	• Design Document Specification, Formatting and Review • Backend Development, CI/CD

Part B

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Team Contract

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

4 Team Procedures

Regular Team Meeting Schedule

Day	Time	Location and Details
Tuesday	4pm – 5pm	Face-to-face, Parks Library
Thursday	2pm – 3pm (subject to change)	Client meeting, Zoom
Thursday	3pm – 4pm	Team meeting, Discord

Preferred Methods of Communication

For updates, reminders, issues, scheduling, etc.:

- Discord (for informal team communication)
- Zoom (for client meetings)
- Email (for formal communication)
- Face-to-face meetings (for additional collaboration)

Decision-making Policy

Decisions will be decided via group consensus. For time-sensitive decisions, a majority vote will take precedence. Members absent from the decision-making process shall be notified immediately.

Procedures for Record-keeping

Minutes will be written after each meeting in an online document, recorded by Selma Saric. All documents produced for this project will be collected into a portfolio at the end of the semester.

5 Participation Expectations

The goal for weekly meetings is to gain a deeper understanding of the project, our assignments, and the client's expectations. As a result, they are extremely important and must be taken seriously. It is for that reason that each team member will be expected to attend all scheduled meetings unless an extenuating circumstance occurs. For conflicts, the team member is responsible for giving a 2-hour notice (where possible) so that the team is able to work around it.

Furthermore, each team member is expected to remain in active contact with teammates between the weekly group meetings and distribution of work. Tasks that have a defined deadline must have progress shared with the team the day prior to the following client meeting. In the face of difficulties, they are expected to keep in contact and seek assistance to ensure the punctual submission of work.

In short, each team member is expected to follow through on decisions the team as a whole make, complete their agreed-upon tasks, and communicate regularly for the benefit of the project.

6 Leadership

Designated Roles

Name	Roles
Alex Blomquist	Setup & coordination of design documentation
Samuel Caldwell	Component design & testing
Selma Saric	Project management, minutes recorder, meeting coordinator
Yadiel Johnson	Document organization, review, & submission,

All team members are expected to contribute to client interactions, design documentation, and other team-centric tasks.

Assistance & Recognition

Team members will make themselves available to help the other team members if they are stuck or struggling with a certain task, to the extent that they are able. The team should seek to help each other when they have the means to do so and when given sufficient time.

Each member is incentivized to highlight their accomplishments and contributions in each weekly report. Their work will be attributed to them when communicating with staff, faculty, and third parties if the discussion warrants it. Likewise, work done in tandem with other team members should be credited to all participating members. The project should be a highlight of each member's contribution and how they resulted in the grand outcome.

7 Skills, Collaboration & Inclusion

Skills & Experiences

Name	Roles
Alex Blomquist	Software development experience, operating systems, shell scripting, software project management, embedded systems, and full stack development utilizing Java (Spring Boot and Android Studio)
Samuel Caldwell	Software development experience (Java, C/++, Python), software project management, software architecture design, frontend development (JavaScript, HTML, Kotlin)
Selma Saric	Software development experience, project/product management experience, web development experience, software architecture design experience, frontend development experience
Yadiel Johnson	Software development experience (Java, C++), server deployment & provisioning, databases (relational & graph-based), Docker CLI, backend w/ Spring Boot, Linux/Unix management, network communications & APIs

Inclusion

The team is responsible of ensuring a respectful and safe working environment for all team members to share their ideas and insights freely. When deemed necessary, each team member should provide constructive criticism for the team and suggest solutions for the problems they identify. That said, there must be clear communication by *all* team members. By seeking each member's participation in discussions, we will keep the flow of ideas going while also keeping every member in the conversation. We will avoid, to the extent possible, that a singular member overtakes or single-handedly manages the conversation points or decision-making process.

8 Goal Setting, Planning, & Execution

Goals for Senior Design I

Complete the requirements specification and technical documents (e.g., System Requirements Specification (SRS), Conceptual and Detailed Designs, Work Breakdown Structure (WBS), etc.)

Use the aforementioned documents to strategize Senior Design II's semester outlook with expected task completion deadlines and client approval.

Work Distribution & Management (Individual and Teamwork)

The team will try to assign each assignment or tasks according to what strengths and preferences are listed in the Team Initiation document. These tasks will be recorded and tracked with a project-centric calendar service (e.g.., Trello) to stay on top of our assignments and their due dates.

9 Violations to the Team Contract

1. How will you handle infractions of any of the obligations of this team contract?

   - The severity of each infraction will be weighed independently, but each member reserves the right to directly communicate with the offending member.

2. What will your team do if the infractions continue?

   - The team will look at the situation that prompts the infraction and determine a meeting time where it will be discussed.

   - Continued negligence regarding the project may see escalation to the active Senior Design I instructor or other relevant parties.

I hereby state that:

   a) *I participated in formulating the standards, roles, and procedures as stated in this contract.*
   b) *I understand that I am obligated to abide by these terms and conditions.*
   c) *I understand that if I do not abide by these terms and conditions, I will suffer the consequences as stated in this contract.*

Signatures:

1)	Alex Blomquist	Date:	2/16/2023
2)	Selma Saric	Date:	2/16/2023
3)	Sam Caldwell	Date:	2/16/2023
4)	Yadiel Johnson	Date:	2/16/2023