Software Project Management Plan

1. Team structure

- Product Manager: @My Nguyen
- UI/UX Designer and Tester: @Fengyun Chen
- Front-end Developers: @Yutong Feng @Junyi Ma @Xinyue Chen
- Back-end Developer: @Xinyue Chen
- Documents maintained by: @My Nguyen

2. Software Project Management and Configuration Management Plan Summary

Below is a summary of tools and platforms we are using to store documentations and code files, with links:

Code files version control repository	Github
Automated unit tests and linters	Github
CI/CD	Github Action
Integration test plans / End-to-end test plans	Confluence
UI Design and mockups	Figma
Architecture and UML design	Confluence (We'll store the finalized version in Github Wiki for each release)
Project documentation (meeting minutes, project status, design docs, and development artifacts)	Confluence
User Manual and Demo	Confluence
Developer instructions	Github README
Project management (stories, tasks, delivery timeline)	Jira
Meeting and communication platform	Discord
IDE	Visual Studio Code / WebStorm

3. Risk Management

Currently our biggest risk for 1.0 release is developer up-skilling. To address this issue we have broken down front-end development into smaller tasks that can be assigned to each developer, while also allowing larger estimation time-to-completion for each task to cover time needed to level up skillset. For release 1.0. We will focus on delivering the client-side application portion of our software. The tasks we have identified for this release are listed in the figure below. For more up-to-date version and detail, please check out our Jira Board.

Sprints

🔽 ⚡	ALGOSHADOW-2	Release 1.0 Development FrontEnd Algorithm Visualizer View		
📗	ALGOSHADOW-45	UI/UX design plan	IN PROGRESS	FC
📗	ALGOSHADOW-46	POC wireframe	TO DO	
📗	ALGOSHADOW-38	Implementation for Dijkstra & unit test	IN PROGRESS	XC
📗	ALGOSHADOW-37	Implementation for Bellman & unit test	TO DO	JM
📗	ALGOSHADOW-39	Implementation for BST & unit test	TO DO	YF
📗	ALGOSHADOW-40	Implementation for Hash & unit test	TO DO	JM
📗	ALGOSHADOW-41	Implementation for Heap & unit test	TO DO	YF
📗	~~ALGOSHADOW-42~~	Implementation for Homepage	DONE	XC
📗	ALGOSHADOW-44	Implementation for Algorithm page(s)	TO DO	
📗	~~ALGOSHADOW-48~~	Initialize framework and push to Git	DONE	XC
📗	ALGOSHADOW-51	Implement Interface for Algorithm to be called by Graph rendering	TO DO	

4. Project Timeline

4.1 Scheduling

Our development work and delivery cycle are organized into Sprint. Each sprint lasts for 2-weeks. At the start of the sprint we will pull tasks and items from the backlog to be scheduled for the sprint. Items with higher priority are scheduled first. During the sprint if there is a need for a higher priority task, we'll push lower priority tasks to backlog and resume after higher priority item is completed.

4.2 Releases

Our releases are scheduled each ~6 weeks (1.5 month) to align with project delivery schedule set in class. Currently 2 major releases are scheduled for mid-October, and for beginning of December 2024.

Below is the current project timeline (subject to change)