Table 1: Milestone 1 Plan

Milestone 1	Activities	Projected Outputs
Milestone 1: Complete the website's homepage based on the UI/UX design and link the homepage to the degree structure page. • The homepage will display the titles of the six Computer Science degrees*. • By clicking one of the titles, the browser will be directed to a degree structure page. • The degree structure page can be a blank web page.	Collect user stories and create requirement documentation.	Requirement documentation will be created. It will list the detailed client requirements.
	Learn essential skills for web development.	Each member will obtain essential skills, including HTML, CSS, JavaScript, Node.js, Express, and MySQL.
	Design web application architecture to describe the client layer, the API layer, the application layer, and the database layer, showing their relationships, and how they will interact with each other.	A diagram of software architecture design will be created. The diagram will indicate the major services provided by our website.
	UI/UX design for a homepage, a degree structure page, and a course relationships page^.	UI/UX design for these three web pages will be created. This design will determine the appearance of our website.
	Design a database to specify what data will be required and in what structure they will be stored in the database.	A diagram of database design will be created. The diagram will contain two or more tables and show the relationship between tables.
	Collect data of degree structure and course.	A CSV file will be created. The CSV file will contain information about degree titles, core courses and elective courses of each degree, pre-requisite courses and incompatible courses of each course.
	Establish a database to store the collected data.	A database file will be created by using the data in the CSV file. The database will store the data in a way that is specified in the database design.
	Set up APIs to request degree titles from the database.	An app.js file will be created. The app.js file will contain APIs for getting data from the database.
	Create a server that can process the degree titles, making them suitable for browser use.	A server and some new functions will be created in app.js. These new functions will be able to process data.
	Add new APIs to render degree titles to the browser.	New APIs will be added to app.js file so that app.js can render data to the browser.
	Create our website's homepage in the browser, showing the degree titles as specified by the UI/UX design.	An index.ejs file will be created, serving as the website's homepage. Some CSS files and JavaScript files will be created to realize the UI/UX design of the homepage.
	Set up a link from the homepage to the degree structure page.	When the client clicks a degree title on the homepage, the client will be directed to a degree structure page. Also, a new API will be added in the app.js file, which will render a degree structure page to the browser.

*According to the client requirement, the six Computer Science degrees are: Bachelor of Computer Science, Bachelor of Information Technology, Master of Computer Science, Master of Computing and Innovation, Master of Cyber Security, Master of Artificial Intelligence and Machine Learning.

^A homepage will display the title of each academic degree. A degree structure page will display the core courses and elective courses of each academic degree. A course relationship page will display the pre-requisite courses and incompatible courses of each course.