

Project Charter

Team Number: 11

Team Member Names: Chia-Hua Chang; Bin Hu; Zhiqun, Xie;

Team Name: Group 11

Date: 25 May 2024

The project charter represents the first blueprint of the system. It is a statement of intent by your client of their desire to develop a software solution.

Business Purpose

The purpose of this project is to develop a web application for Conestoga Provincial Park to promote sustainability of its three trails. The application will enable backpackers to input information and make campsite reservations, ensuring that outdoor resources are not overused and remain preserved for future generations. This initiative aims to balance recreational use with environmental conservation.

Project Roles/Responsibilities

These represent the roles and names of each member of the team and the responsibilities that each has. Include users who will assist with the project.

Team Member Name	Project Role	Responsibilities
Chia-Hua, Chang	Scrum Master; Web Page Designer; Front-End Developer;	<ul style="list-style-type: none">▪ Help the team maintain their burndown chart and other project management tools to ensure a smooth workflow.▪ Design the layout, color scheme, and graphical elements of the website.▪ Develop the client-side logic and user interfaces for the web application.
Bin Hu	Project Owner Full Stack Developer(mainly BE); Database&SQL Developer;	<ul style="list-style-type: none">▪ Define the project vision and ensure that it aligns with business goals.▪ Make decisions regarding the project's requirements and scope.▪ Develop server-side logic and database integration. Manage API integration and business logic.
Zhiqun Xie	Full Stack Developer(mainly BE); Tester;	<ul style="list-style-type: none">▪ Develop server-side logic and database integration. Manage API integration and business logic.▪ Develop and execute test plans to ensure the application is functional,

		reliable, and meets the quality standards.
--	--	--

Feature List

1. Shows the weather forecast
2. Shows the campsite information for the specific trail, including facility information like water/electricity/shelter/convenience store...etc
3. Shows the gallery of camping location to users
4. Allow users to make reservations for him/herself or his/her group
5. Allow users to cancel reservations
6. Allow users to check the status of their reservations
7. Allow users to update their reservations
8. Shows the remaining available reservations for campsite and parkinglot

System Objectives

1. "Ensure that the web application is intuitive and straightforward, allowing users to complete their reservations and data entries within four clicks."
2. "Maintain data integrity with basic security measures to protect user input and prevent data loss."
3. "Design the application to be compatible with both desktop and mobile platforms, ensuring accessibility for all users."

Project Critical Success Factors

1. User-friendly design that enables backpackers to easily navigate the app for information input and campsite reservations.
2. Robust system architecture that can handle high traffic and data input without compromising performance, especially during peak visitor seasons.
3. Effective integration of real-time data analytics to monitor trail usage and campsite occupancy, allowing for immediate response to preserve the park's resources.
4. Strong community engagement strategies that encourage user feedback and participation in sustainability efforts, fostering a sense of ownership and responsibility among park visitors.

Preliminary Technical Architecture

Front-End: JavaScript, HTML, CSS, AJAX/Axios

Back-End: Node.JS, Express.JS

DataBase: MySQL

Cloud Server: Azure Cloud, Linux(CentOS)

Other Development Tools: Git(Version Control), Jira(Project Management), Maven(Dependencies Importation)

Event Table

Event	Trigger	Source	Use Case #	Use Case	Response	Destination
Backpacker wants to check weather forecast in the provincial park.	Weather Podcast Inquiry	Backpacker	UC01	Shows the weather forecast	Weather forecast for future 7 days displays	Backpacker
Backpacker wants to check campsite information for each trails.	Campsite Queries	Backpacker	UC02	Shows the campsite information for the specific trail	Campsite Information details will display, , including facility information like water/electricity/shlter/convience store...etc	Backpacker
Backpacker wants to look for images for certain campsite.	View the images of the campsite.	Backpacker	UC03	Shows the gallery of camping location to users	The gallery of chosen campsite displays.	Backpacker
Backpacker want to book a campsite for their group.	Campsite Reservation.	Backpacker	UC04	Allow users to make reservations for him/herself or his/her group	The application provides a campsite reservation form page for users booking and send the user booking status after submission.	Backpacker
Backpacker want to cancel a existing campsite reservation for their group.	Campsite Reservation Cancellation.	Backpacker	UC05	Allow users to cancel reservations	The application provides a campsite cancellation page for users cancelling their plan and send the user cancellation status after submission.	Backpacker
Backpacker want to check a existing campsite reservation for their group.	Campsite Reservation Inquiry	Backpacker	UC06	Allow users to check the status of their reservations	The application provides a reservation information page for users reviewing their plan.	Backpacker

<i>Backpacker want to update a existing campsite reservation for their group, e.g. modify the start and end date, or modify the teammates info, etc.</i>	<i>Campsite Modification Inquiry</i>	<i>Backpacker</i>	<i>UC07</i>	<i>Allow users to update their reservations</i>	<i>The application provides a reservation modification page for users changing their plan.</i>	<i>Backpacker</i>
<i>Backpacker want to learn about the campsite and parking lot availability.</i>	<i>campsite and parking lot availability inquiry</i>	<i>Backpacker</i>	<i>UC08</i>	<i>Shows the remaining available reservations for campsite and parkinglot.</i>	<i>The application provides a parking lot and campsite availability page for users changing their plan.</i>	<i>Backpacker</i>

Reference

Satzinger, J., Jackson, R., Burd, S.D. (2008). Systems Analysis and Design in a Changing World (5th ed.). Course Technology. p. 169.