

Group 4

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Module 2 Assignment

Technical Design Document

1. Introduction

1.1 Purpose

The purpose of this document is to develop a web-based reservation system for the Moffat Bay Lodge. Prior to booking, the system will allow users to explore the lodge offerings. Once ready to book, users will be able to register a free account to secure their reservation to which they can go back to when logged into the system.

1.2 Terminology

Reservation – booking made by the user to stay the Moffat Bay Lodge

Guest User – user who browses the system prior to making an account

Registered User – user who has created an account with the system

Confirmation – Action of reservation being confirmed

1.3 User Personas

Creating at least three User Personas, 9 User Stories (three stories per persona) with associated story points.

1. Morgan

Background: Weekend getaway traveler who books a cabin at Moffat Bay Lodge for a family retreat

Goals: Wants to view available cabins, check-in/check-out times, and reserve extra amenities (kayak rental, breakfast) online

Pain Points: Unclear cabin availability, having to call the lodge office to arrange extras, and paper-based check-in process

2. Miko

Background: Retired sightseer who reserves a room at the Moffat Bay Lodge for a vacation after officially retiring from her career.

Goals: Wants a straightforward booking process that has no technical complications for her to completely unwind post-retirement.

Pain Points: Small text makes it difficult to read, making it harder to book. Multiple pages that lead instead of a straightforward process add on to more things that Miko does not want in her stay.

3. Emily

Background: Adventurous traveler who is seeking a nature filled vacation to explore the outdoors.

Goals: Wants to book a cabin in a scenic location surrounded by nature, schedule outdoors activities (guided hiking and snorkeling tours), have the flexibility to modify or cancel reservations easily through the website, and view availability for cabins.

Pain Points: Limited details make it difficult to choose lodging, with unclear description of amenities, views, excursions, and availability. The booking process needs to be easy to navigate and should provide an option to modify or cancel reservations.

4. Laura

Background: Busy parent looking to book a family vacation at Moffat Bay Lodge. She works full-time and needs the booking process to be quick and frustration-free during her limited downtime in the evening.

Goals: Wants a fast, efficient reservation process with clear instructions and immediate confirmation, so she can book confidently without needing to call for help.

Pain Points:

- Small or cluttered text makes forms hard to read.

- Having to go through too many pages to finalize the booking.
- Unclear whether a reservation was saved or not.

1.4 User Stories

Fibonacci Story Points: 1, 2, 3, 5, 8, 13

Morgan

1. As Morgan, I want to see which cabins are available for my dates, so I can book the right size lodging for my family. – 3 points
2. As Morgan, *I want to select my preferred check-in time and basic room preferences (e.g., bed configuration), so I can be sure the cabin fits my family's needs.* — 2 points
3. As Morgan, I want a single “Confirm Reservation” action that clearly saves my booking, so I know I don’t need to call or visit in person. – **5 points**

Miko

1. As Miko, I want something with a large text and simple instructions so I can navigate the booking process easily. – 2 points
2. As Miko, I want to save my reservation without needing to pay online. – 3 points
3. As Miko, I want to be able to access assistance with a contact number or help section that is clearly visible to me. – 1 point

Emily

1. As Emily, I want to browse detailed information and images of cabins, so I can select the best option for my outdoor focused vacation. - 5 points
2. As Emily, I want a clear summary of my reservation details before finalizing my booking, so I can confirm that everything is correct. - 3 points
3. As Emily, I want an easy way to modify or cancel my booking through the website, so I do not have to call customer service for changes. - 8 points

Laura

1. As Laura, I want the room booking process to be simple, clear, and quick so I can complete it without feeling overwhelmed. – 5 points

2. As Laura, I want to receive a clear summary after submitting my reservation, so I know it was saved successfully. – 2 points

3. As Laura, I want large, readable text and well-organized pages so I don't waste time figuring out what to do next. – 3 points

4. As Laura, I want a contact section that's easy to find in case I need help with my reservation. – 2 points

1.5 Work Estimations

To-Do tasks

- Develop a marketing landing page
- Develop a cabin selection interface with filters for room size, amenities, and pricing.
- Create an About Us and Contact Page with a contact number
- Develop an Attractions page
- Build cabin availability calendar UI with filters for cabin size and dates
- Create a way to view existing reservations when logged-in
- Create prototypes for each page
- Create a modification and cancellation system for users to easily manage reservations online.
- Create backend endpoint to handle bookings and store reservation details in the database

2. Design

2.1 Prototypes

2.2 ERD

3. QA Testing

3.1 QA Test Plan