

# **HOTEL RESERVATION WEBSITE**

**A PROPOSAL PRESENTED BY**

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# TABLE OF CONTENTS

LIST OF FIGURES	iii
LIST OF TABLES	iv
LIST OF ABBREVIATIONS	v
CHAPTER 1	1
INTRODUCTION	1
1.1 PROBLEM STATEMENT	2
FUNCTIONAL REQUIREMENT	2
CHAPTER 2	4
LITERATURE REVIEW AND STUDY OF SIMILAR APPLICATIONS	5
2.1 LITERATURE REVIEW	5
2.2. STUDY OF SIMILAR APPLICATION	7
2.3 MOTIVATION	9
2.4 OBJECTIVES	9
CHAPTER 3	10
3.1 MATERIALS	10
3.1.1 Hardware Requirements	10
3.1.2 Software Requirements	11
3.2. METHODS	11
CHAPTER 4	12
TECHNOLOGIES	12
CHAPTER 5	13
TIME PLAN	13
5.1 GANT CHART	13
5.2. SCHEDULE	14
REFERENCES	15

## LIST OF FIGURES

Figure 1 reservation	4
Figure 2 booking	4
Figure 3 Gantt Chart	13

## LIST OF TABLES

Table 1:Time Plan

14

## **LIST OF ABBREVIATIONS**

SQL - Structured Query Language

PHP - Hypertext Preprocessor.

CSS – Cascading Style Sheets

HTML – HyperText Markup Language

# CHAPTER 1

## INTRODUCTION

Pearl Stay is a visionary hotel reservation platform dedicated to redefining how travelers discover, select, and book accommodation across the beautiful island of Sri Lanka known globally as the Pearl of the Indian Ocean. Rooted in local knowledge and powered by modern digital solutions, Pearl Stay emerges as a comprehensive, reliable, and user-centric travel companion that addresses the evolving needs of both domestic and international tourists.

With Sri Lanka's tourism industry experiencing consistent growth, driven by its ancient heritage sites, tropical coastlines, vibrant wildlife, and diverse cultural tapestry, there is an increasing need for a centralized digital platform that not only simplifies accommodation booking but also adds genuine value to the traveler's journey. Pearl Stay rises to meet this challenge by offering a platform that is not only functionally robust but also culturally connected and intuitively designed.

Pearl Stay will host a broad inventory of lodging options from affordable homestays and boutique villas to premium resorts and heritage hotels covering all regions of the country, including coastal hubs, mountain retreats, and off-the-beaten-path gems. Travelers will benefit from advanced search filters, transparent pricing, user reviews, multilingual support, and secure payment gateways, ensuring peace of mind at every stage of the booking process.

In addition to facilitating easy reservations, Pearl Stay seeks to become a hub for smart travel planning. The platform will feature curated itineraries, destination insights, local recommendations, and a personalized concierge experience. Special attention will be given to sustainable tourism, with a dedicated segment showcasing eco-friendly stays and properties that practice ethical hospitality, support local communities, and minimize environmental impact. Future updates will include loyalty programs, AI-driven suggestions based on traveler behavior, and integration with transport and experience providers, offering a complete travel ecosystem.

At its core, Pearl Stay represents more than just a hotel booking engine; it is a bridge between travelers and authentic Sri Lankan experiences. Through a commitment to technology, trust, transparency, and tourism excellence, Pearl Stay aspires to become Sri Lanka's most trusted and loved digital hospitality brand, contributing to the nation's vision of becoming a leading travel destination in Asia.

## **1.1 PROBLEM STATEMENT**

Despite Sri Lanka's rapid growth as a sought-after global travel destination, the local hotel booking ecosystem remains fragmented, outdated, and often difficult to navigate especially for international travelers. Many existing hotel reservation platforms lack comprehensive coverage of accommodations across the island, especially in rural or less-commercialized areas. Moreover, there is limited integration of locally rooted hospitality providers, eco-conscious lodging options, and community-based accommodations into digital booking systems.

Travelers often face issues such as:

Lack of centralized information about accommodation availability, pricing, and amenities.

Inconsistent customer service and communication gaps between booking platforms and local hotels.

Poor user experience on outdated or non-mobile-friendly websites.

Limited trust and transparency, especially for foreign visitors unfamiliar with local service standards.

Absence of value-added features like real-time availability, verified guest reviews, or personalized travel support. At the same time, small and mid-sized hospitality providers across Sri Lanka struggle to gain visibility in the digital marketplace and lack the technological tools to manage bookings efficiently. Pearl Stay seeks to bridge this critical gap by offering a modern, user-friendly, and trustworthy hotel reservation platform tailored specifically for Sri Lanka. It aims to empower travelers with reliable booking options, improve access to a wider range of accommodations, and support the growth of local hospitality businesses through digital transformation.

## **FUNCTIONAL REQUIREMENT**

### **1. Search Functionality:**

User can search for hotels by

- Location
- Check-in and check-out dates
- Preferences (e.g., price range, star rating, amenities)

### **2. Hotels & Room Details:**

Users can view:

- Hotel descriptions
- Room types, photos, amenities

- Pricing and availability

### **3. Secure Booking Process:**

- Multiple secure payment options (credit/debit cards, online wallets, bank transfers)
- Real-time booking confirmation

### **4. User Account Management:**

Registered users can

- Manage upcoming bookings
- View and track past reservations
- Cancel or modify bookings
- Leave reviews and ratings for hotels

### **5. Mobile-Friendly Design:**

- Fully responsive website optimized for smartphones and tablets.

### **6. Booking Confirmation:**

- Automatic email confirmations and optional SMS alerts for all successful bookings.

### **7. Hotel Reviews & Ratings:**

- Users can read and submit reviews to help other travelers make informed decisions

### **8. For Admins:**

Hotel Listing Management

- Add, edit, or remove hotel listings
- Update room availability, pricing, and hotel information

### **9. Review Moderation:**

- Admins can monitor and manage submitted reviews to ensure quality and authenticity. The system must allow hotel staff to manage room availability, assign rooms to guests, and update room status



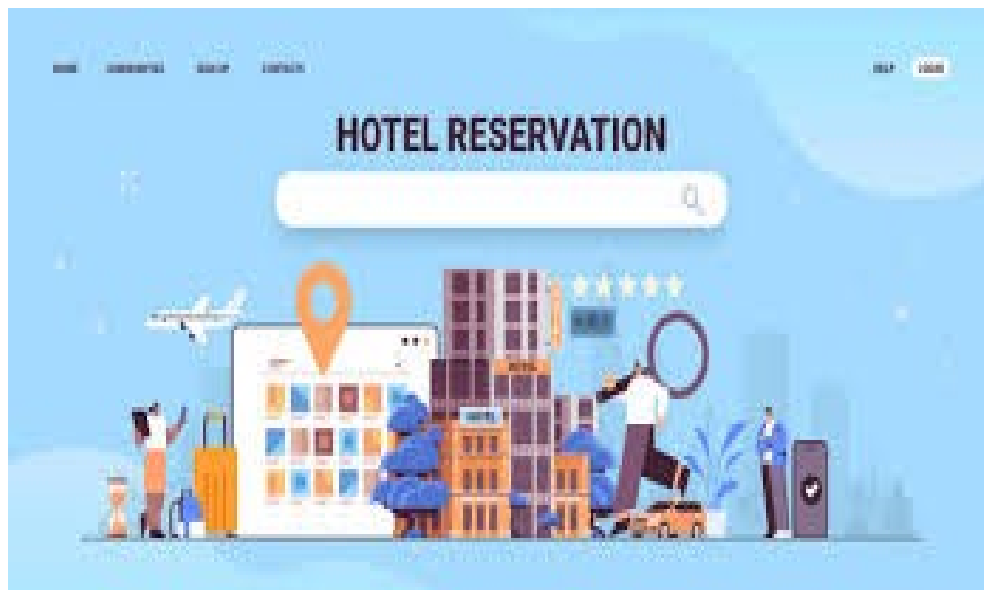


Figure 1 reservation



Figure 2 booking

## **CHAPTER 2**

### **LITERATURE REVIEW AND STUDY OF SIMILAR APPLICATIONS**

#### **2.1 LITERATURE REVIEW**

##### **2.1.1 Travel Lanka Stay**

Travel Lanka Stay is a well-established hotel reservation platform in Sri Lanka offering a wide selection of accommodations ranging from budget guesthouses to luxury resorts. Their website features a clean interface and advanced search filters, making it easier for users to find suitable lodging options. Travel Lanka Stay also emphasizes sustainable tourism, partnering with eco-friendly hotels and offering travel tips to reduce environmental impact.

##### **2.1.2 Paradise Booking**

Paradise Booking is an online booking platform catering to both domestic and international travelers. In addition to hotel reservations, it provides bundled travel services including airport transfers, guided tours, and car rentals. One of its standout features is the “first-time traveler kit,” which includes travel guides, local maps, emergency contact lists, and local etiquette tips helping newcomers feel comfortable in Sri Lanka.

##### **2.1.3 Ceylon Rooms**

Ceylon Rooms is a family-operated hotel aggregator platform that has been serving tourists for over 40 years. It specializes in promoting local guesthouses, boutique hotels, and homestays, aiming to offer authentic Sri Lankan hospitality experiences. Their personalized customer service and focus on quality control have earned them a solid reputation both locally and internationally. Ceylon Rooms also supports tourism development by collaborating with local tourism boards and hosting community-based tourism initiatives.

##### **2.1.4 Island Nest**

Island Nest is one of the largest digital accommodation providers in Sri Lanka. With a network of over 1,200 properties across the island, they serve a wide demographic — from solo backpackers to corporate clients. Operating a 24/7 call center and mobile app, Island Nest ensures real-time availability updates and booking confirmations. Their scalable platform and investment in technology infrastructure enable them to manage bulk bookings and seasonal spikes efficiently.

## Key Takeaways for Pearl Stay

- The findings from these Sri Lankan hotel reservation platforms highlight several key strategies that would be valuable for the development and growth of Pearl Stay:
- **Diverse Accommodation Options:** Offering a wide range of lodging choices — from budget hostels to luxury resorts — can help appeal to a broader audience and meet various traveler needs.
- **Easy Online Navigation:** Developing a user-friendly and intuitive website or mobile app with advanced filtering and booking features will enhance the customer experience and drive higher conversion rates.
- **Sustainable Tourism Initiatives:** Partnering with eco-friendly hotels and promoting responsible travel will resonate with environmentally conscious travelers and improve the platform's public image.
- **Value-Added Services:** Providing extra services such as local travel guides, transport arrangements, curated tour packages, or first-time visitor support can significantly increase customer satisfaction and loyalty.
- **Scalability and Technical Infrastructure:** Investing in robust backend systems, 24/7 customer support, and real-time booking management tools will ensure that the platform can scale efficiently and handle large volumes of bookings, especially during peak seasons.

## **2.2. STUDY OF SIMILAR APPLICATION**

### **2.2.1. LankaStay – Online Hotel Booking Platform**

LankaStay is a well-known hotel reservation platform in Sri Lanka that offers a wide selection of accommodations across the island. The platform is designed to simplify hotel bookings for both local and international travelers.

**Simple Registration:** Users can create personal accounts to manage bookings, receive exclusive discounts, and save favorite hotels.

**Hotel Catalog:** A wide database of hotels, guesthouses, villas, and resorts, organized by location, star rating, and user reviews for easy browsing.

**Real-Time Booking & Support:** Provides instant booking confirmation and live customer support to address user concerns.

**Travel Guides & Itineraries:** Offers curated travel content including destination guides, local attraction highlights, and trip ideas. LankaStay enhances the user's travel planning experience by offering a convenient, all-in-one hotel booking solution tailored to Sri Lankan tourism.

### **2.2.2 EcoVoyage – Sustainable Travel Booking Platform**

EcoVoyage is a platform that emphasizes eco-friendly travel experiences across Sri Lanka, supporting green tourism and ethical travel practices.

**Community Engagement:** Allows users to leave reviews, ask questions, and exchange tips with fellow travelers and hosts.

**Eco-Hotel Listings:** Features certified eco-friendly accommodations with detailed information on their sustainability practices.

**Secure Booking Engine:** Enables safe online transactions with real-time room availability and secure payment options.

**Workshops & Events:** Promotes eco-tourism through online events, webinars, and workshops related to sustainable travel. EcoVoyage focuses on promoting mindful tourism while helping environmentally conscious travelers discover responsible lodging options.

### **2.2.3 VillaMap – Custom Villa Booking & Travel Concierge**

VillaMap is an advanced digital service specializing in the booking of private villas and boutique stays in Sri Lanka. It caters to premium travelers seeking privacy and personalized service.

Custom Travel Planning: Users can receive customized accommodation and itinerary planning based on their preferences and trip goals.

Virtual Concierge Services: Offers live chat with travel consultants to assist with booking, transfers, and exclusive experiences.

Instant Pricing Tool: Provides automated cost estimation for different trip components such as accommodation, activities, and transport.

Portfolio & Testimonials: Showcases a visual gallery of villas, past guest reviews, and before-after transformation stories of upgraded properties. VillaMap leverages technology and personalized support to simplify luxury travel arrangements, enhancing convenience for high-end clients.

## 2.3 MOTIVATION

Sri Lanka, often called the Pearl of the Indian Ocean, is a paradise of pristine beaches, lush tea hills, ancient heritage, and vibrant culture. Yet, travelers often struggle to find a platform that truly captures the heart of Sri Lankan hospitality, while offering a seamless, trustworthy booking experience. Pearl Stay is more than just a hotel reservation website — it's a mission to connect the world with Sri Lanka's warmest welcomes.

- Why Pearl Stay?
  - Tailored for Sri Lanka – Highlighting local gems from luxury resorts to hidden homestays.
  - Empowering Local Hospitality – Supporting independent hoteliers, eco-lodges, and family-run stays.
  - Authentic Experiences – Curated stays, cultural add-ons, and insider tips from locals.
  - Seamless Booking – Easy-to-use interface, transparent pricing, and secure reservations.
  - Sustainable Travel – Promoting eco-friendly stays and responsible tourism.

Whether you seek the serenity of a southern beach, the misty charm of Ella, or the cultural richness of Kandy, Pearl Stay is your trusted companion in discovering Sri Lanka, one unforgettable stay at a time.

## 2.4 OBJECTIVES

1. Provide a centralized platform for booking hotels and accommodations across Sri Lanka.
2. Promote authentic Sri Lankan hospitality by featuring locally owned hotels, guesthouses, homestays, and eco-lodges.
3. Enhance user experience with a simple, secure, and responsive booking interface.
4. Support local tourism businesses by offering them increased visibility and direct access to global travelers.
5. Offer curated travel experiences by recommending stays based on location, theme (beach, culture, adventure), and traveler preferences.
6. Encourage sustainable and responsible tourism by prioritizing eco-friendly properties and ethical travel practices.

## CHAPTER 3

### 3.1 MATERIALS

#### 1. Web Development Environment.

- Visual Studio Code

#### 2. Web Development Languages

- HTML- for structuring web pages.
- CSS -for styling and layout.
- JavaScript -for dynamic content and client-side interactivity.
- PHP (optional backend choices depending on your stack).

#### 3. Database Management System

- MySQL for storing hotel room details, user information, bookings.

#### 4. Backend Server

- Apache Server (XAMPP)

#### 5. Database Tool

- MySQL or phpMyAdmin for database management and query execution.

#### 6. Frameworks

- Bootstrap for responsive UI design.

#### 7. Web Hosting

- XAMPP

#### 3.1.1 Hardware Requirements

##### 1. Computer (PC or Laptop):

- Processor
- RAM
- Storage
- Display

##### 2. Internet Connection

##### 3. Database Server

- Processor
- RAM
- Storage

- Network
- 4. External Devices (Optional but Recommended):
  - External Monitor
  - Keyboard & Mouse

### **3.1.2 Software Requirements**

1. PHP.
2. MySQL Database
3. HTML, CSS, JavaScript
4. Bootstrap
5. Apache server (Xampp)
6. Visual Studio

### **3.2. METHODS**

1. Design Frontend with HTML & CSS.
  - Create pages: Home, Room List, Booking Form, Contact.
  - Style layout using CSS .
2. Add Booking Form (HTML).
  - Use <form> with input fields: name, email, room type, check-in/out.
  - Include a submit button to send form data.
3. Create a Backend Script .
  - To receive form data and connect to the database.
4. Set Up a Database.
  - Create tables.
  - Store data like room availability and customer info.
5. Connect Frontend to Backend.
6. Display Data from Database.
7. Add Confirmation Page.
  - After booking, show a static/dynamic confirmation message.
8. Optional Features.
  - Login system.
  - Email notifications.



## **CHAPTER 4**

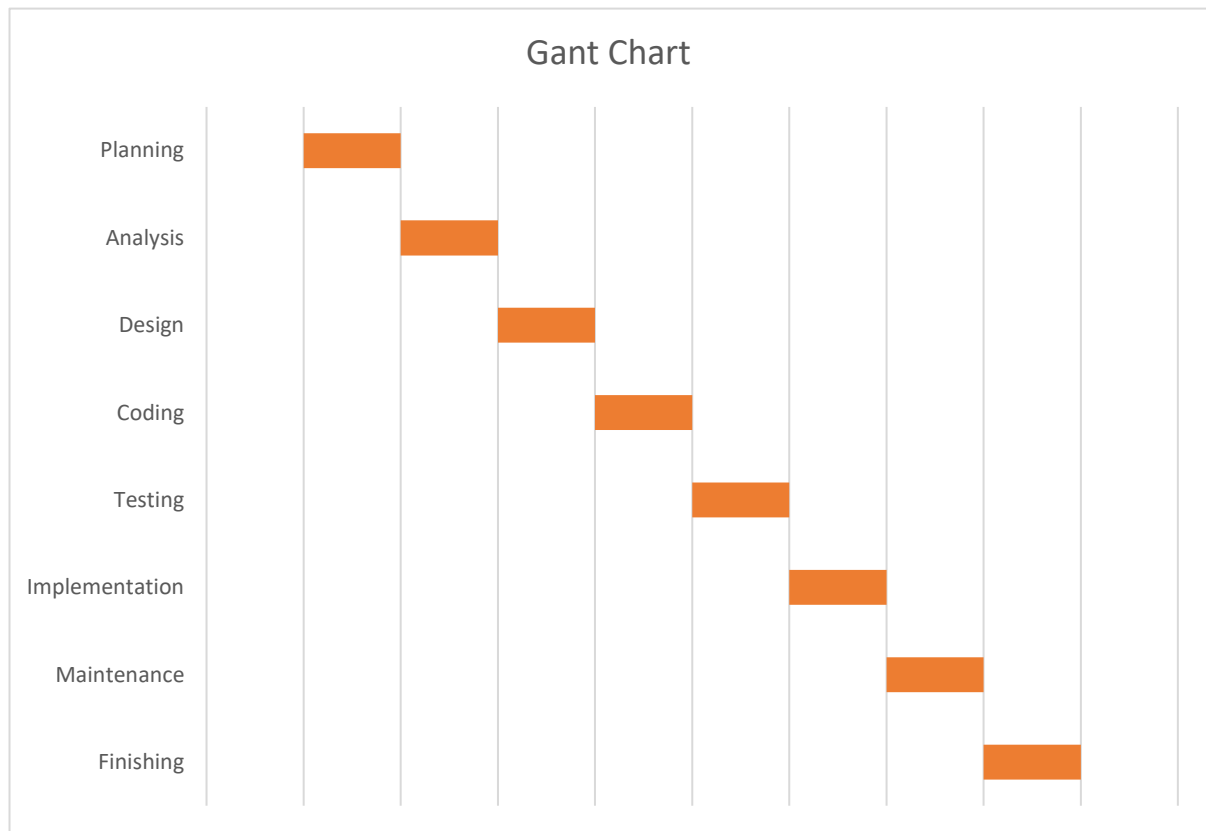
### **TECHNOLOGIES**

1. **HTML** – To create the structure of web pages.
2. **CSS** – To style and layout the pages.
3. **JavaScript**– For form validation and interactivity.
4. **Backend Language**
  - PHP– To process bookings and connect to the database.
5. **Database:**
  - MySQL– To store users, rooms, and bookings.
6. **Web Server:**
  - Apache (for PHP) – To run your website on the internet.
7. **Hosting Platform**
  - XAMPP

## CHAPTER 5

### TIME PLAN

#### 5.1 GANTT CHART



*Figure 3 Gantt Chart*

## 5.2. SCHEDULE

*Table 1: Time Plan*

Item	Date
Plan	10/02/2025-15/02/2025
Analysis	16/02/2025-26/10/2025
Design	27/02/2025-15/03/2025
Coding	16/03/2025-09/04/2025
Testing	10/04/2025-18/04/2025
Implementation	19/04/2025-30/04/2025
Maintenance	01/05/2025-28/05/2025
Finishing	29/05/2025-3/06/2025

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