Tribhuvan University

Faculty of Humanities and Social Sciences

TRAVELLING MANAGEMENT SYSTEM

A PROJECT REPORT

Submitted to

Department of Computer Application

Bajra International College

Boudha, Kathmandu

In partial fulfillment of the requirements for the Bachelors in Computer Application

Submitted by:

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2080

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Bachelor in Computer Applications (BCA)

SUPERVISOR'S RECOMMENDATION

I hereby recommend that this project prepared under my supervision by **ABINASH SHRESTHA** and **RAKESH THEENG** entitled "**TRAVELLING NEPAL"** in the Partial Fulfillment of requirement for the degree of Bachelor in Computer Application is recommended for that final evaluation.

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LETTER OF APPROVAL

This is to certify that this project prepared by **ABINASH SHRESTHA** and **RAKESH THEENG** entitled "**TRAVELLING NEPAL"** in the Partial Fulfillment of requirement for the degree of Bachelor in Computer Application has been evaluated. In our opinion it is satisfactory in the scope and quality as a project for the required degree.

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ACKNOWLEDGEMENT

This project is specially prepared to get the knowledge at the practical base assignment of Bachelor level BCA syllabus, during the preparation of this dissertation for "**TRAVELLING NEPAL**". The project work has been performed under the Department of Humanities Bajra International College Kathmandu, Nepal. We also thank all team members of my department for giving us support.

We would like to thank our supervisor **Mr. TIKA DAHAL** without his help and suggestion this project could not have been done. He has advised us on the relevant track to follow on our research. He has shown good patience and high level of experience to guide us through and we have gained valuable knowledge with him as a result. We would always be grateful for his guidance and support.

Yours sincerely,

Abinash Shrestha

Rakesh Theeng

ABSTRACT

This website is revealed to provide the best traveling assistance to customers and travel agencies. We have developed travel and tour management systems to render a found stage where tourist can find their tour places according to their likes. This system also helps to promote tourism places so that people can enjoy their vacations at their favorite places. We develop this system to create and improve forms of tourism that provide better cooperation opportunities for tourists and locals and increase a better opinion of different cultures, customs, lifestyles, traditional knowledge, and beliefs.

Tourists can also get the Map and exploration system and can also see other tourist reviews. Tourists can also book tours through our tours with packages and a travels management system.

Keywords: *[Packages, Tourism, travel management, tour management system, visitors]*

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LIST OF ABBREVIATIONS

CRUD	Create, Read, Update and Delete
DFD	Data Flow Diagram
ERD	Entity Relationship Diagram
MS	Microsoft Office
OTP	One Time Password
SMS	Short Message Service.
SOS	Save Our Souls
SQLite	Structured Query Language
UI	User Interface
URL	Uniform Resource Locator

CHAPTER: 1

INTRODUCTION

1.1 Introduction

Nepal is a landlocked country in South Asia and is bordered by China and India. Nepal is considered ideal for mountain trekking, with eight out of ten highest mountains on earth. There are numerous trekking destinations; however, Annapurna Base Camp, Everest Base Camp Trek, Lang tang, and Manaslu Circuit trek are some of the most popular trekking location.

At Present Condition, Traveling is the second job which they have to complete it. Most of the people like to enjoy their holiday (or vacation) by trekking, camping, and traveling the new places. We can see that traveling can increase their happiness and confidence level towards the new world. Much research shows that traveling can provide perfect environment of fun and enjoyment for a large gathering. Traveling helps to build the connection between the anonymous people. With years of experience in the travel industry, we have established strong relationships with local suppliers, guides, and accommodations, allowing us to unique and authentic itineraries for our clients. We offer a wide range of travel services, including trekking, hiking, mountaineering, cultural tours, wildlife safaris, adventure sports, and more.

At our travel agency, we prioritize safety, sustainability, and responsible tourism practices. We are committed to providing our clients with safe and enjoyable travel experiences while minimizing our impact on the environment and supporting local communities. Our team ensures that all our trips follow ethical and sustainable practices, including proper waste management, supporting local initiatives, and respecting local cultures and traditions. Customer satisfaction is our top priority, and we strive to provide personalized and exceptional service to our clients. From the moment you contact us to the completion of your trip, our team will take care of all the details, including transportation, accommodation, permits, guides, and more, to ensure a hassle-free and memorable travel experience. Come and explore the breathtaking landscapes, unique culture, and warm hospitality of Nepal with our travel agency. Whether you are a solo traveler, a group of friends, a family, or a corporate team, we can tailor-make a trip that suits your interests,

budget, and preferences. Let us be your trusted travel partner for an unforgettable adventure in Nepal.

1.2 Problem Statement

The limited availability of certain services or resources in the context of tour and travel management in Nepal can create difficulties and constraints for the travel management system to fulfill the demands of travelers.

- The availability of different prices and costs for particular packages in Nepal.
- The complex booking process makes it difficult for travelers to make easily reservations.
- Ensuring quality and safety is a critical aspect of travel management in Nepal.
- Taking additional fees and charges during the tour and travel can lead to dissatisfaction among travelers and negatively affect their experience.

1.3 Objectives

Traveling Nepal is a website, which provides a platform for the customer to book their favorite tour and packages. Also, the customer can create a profile a where they can see the history of their tour. Traveling Nepal can provides a better itinerary and routes of the tour from arrival location to departure location. It also provides the platform to the user to give their reviews (or feedback) of their packages and choose their favorite tour and packages. In case of emergency, we can contact to the customer friends or family members by collecting the information from the customer in the early periods of time through information.

The main objectives are listed below:

- To Providing exceptional customer service
- To Prices will be displayed in the package sector and informed the customer before the bookings.
- To Booking system will be made user-friendly
- To Emergency Contact to the customer friends and family.

1.4 Scope and Limitation

1.4.1 Scope

The main aim of this project is to help the tourism companies to manage their customer. It makes all operation of the tour/package company easy and accurate. The standalone platform makes tourism management east by handling agencies requests and providing service for the customers located at different parts of the various cities. Different modules have been incorporated in this project to handle different parts and sector of the tour management field.

1.4.2 Limitations

The limitations of travelling management system in Nepal may include:

- Limited Internet accessibility especially in remote areas.
- Language barriers may effect communication and cause difficulties in providing accurate information and support to customers.
- Infrastructure facilities in remote regions are not well-developed.
- Seasonal variations and unpredictable weather conditions, especially in mountainous areas.

1.5 Development Methodology

We are going to use Waterfall methodology to develop this website. This project have fixed requirements, enough time, known technology, specific documentation to build this system water fall methodology can be used.

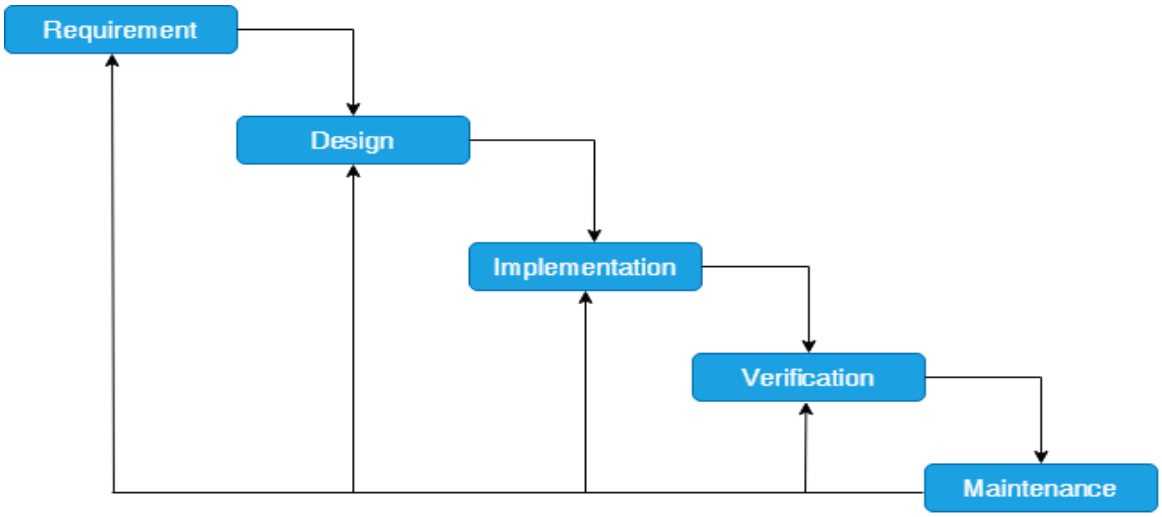

Figure: Waterfall Model

The Waterfall methodology also known as the Waterfall model is a sequential development process that flows like a waterfall through all phases of a project (analysis, design, development and testing) with each phase completely wrapping up before the next phase begins. It is easy to arrange task and clearly define stages in this methodology.

1.6 Report Organization

Chapter1: Deals with the basic requirement for developing the project and gives the general information of the system that is developed.

Chapter2: Reviews related works under literature reviews, functional and non-functional requirement analysis, data modeling and process modeling by the use of ER-Diagram and DFDs.

Chapter3: specifies the system design. It describes the basic process modeling using different kinds of diagram.

Chapter4: Deals with the implementation and testing of the developed system.

Chapter5: Discuss the maintenance and support that may be necessary to be carried out in the future and conclude the project.

CHAPTER: 2

BACKGROUND STUDY AND LITERATURE REVIEW

2.1 Background Study

The travel management system project is about creating a software solution that helps manage travel tasks like bookings, reservations and schedules. It involves organizing and planning travel activities for individuals or groups. The system allows users to book packages, view, and other travel services. It also helps create travel schedules and keeps track of important details like cost and all the information related tour and packages.

In the Travel management system, users can log in securely and access the system based on their roles or permissions. They can search for travel options based on their preferences, like destination, dates, or budget. The system handles payments and generates invoices for travel expenses. It provides reports and analytics to help organizations understand travel patterns and make informed decisions. It can be accessed through web browsers or mobile devices for convenience. Data security is a priority, ensuring that personal information and payment details are protected.

In simple terms, the travel management system project is all about creating a user-friendly software that helps with travel planning, bookings and schedules. It keeps information safe and offers useful insights for better decision-making.

2.2 Literature Review

This literature review explores the current trends and future directions in travel management systems. Travelling management system refers to technology and software applications that automate travel planning, booking and management. The review outlines the key components and benefits of travelling management system, discusses challenges in implementation and highlights emerging trends. This review serves as a resource for researchers and practitioners seeking to enhance travel management processes.

Nepal nestled in the Himalayas [1], is a land of diverse cultures, breathtaking landscapes, and ancient traditions. Over the years, it has emerged as a popular destination for travelers seeking adventure, spiritual enlightenment, and cultural immersion. This literature review

aims to explore the various aspects of travelling to Nepal, including the experiences of tourists, the impact of tourism on local communities, and the sustainability challenges faced by the country [2].

- It involves technology for efficient travel planning and management
- Travelling management plays a crucial role in the travel and tourism industry
- Online booking platforms simplify reservations
- Itinerary planning tools offer customization options
- Risk management systems prioritize traveler safety

CHAPTER: 3

SYSTEM ANALYSIS AND DESIGN

3.1 System Analysis

3.1.1 Requirement Analysis

i. Functional Requirement

A functional requirement of travelling management system typically refers to the specific features and capabilities that the system must have in order to meet the needs of its users. Here are some common functional requirements for travelling management system:

- User registration and Authentication
- Travel booking
- Itinerary management
- Reviews and ratings
- Enquiry about the features packages

USE CASE DIAGRAM

Use case illustrates a unit of functionality provided by the system. Typically used to communicate the high-level functions of the system and the system's scope (i.e., diagram shows what the system doesn't do). It helps development teams visualize the functional requirements of a system, including the relationship of "actors". Stakeholders can easily see if needed functionality is present or not present in the system. Generally, shows groups of use-cases:

- either all use cases for the complete system, or
- a breakout of a particular group of use cases with related functionality (e.g., all security administration related use cases)

Figure 3.1.1: Example of the Use Case Diagram

ii. Non Functional Requirement

Non- functional requirements for a travelling management system typically focus on aspects other than the system's core functionality. These requirements ensure that the system operates smoothly, efficiently, and reliably. Here are some non-functional requirements commonly associated with travelling management systems:

- The travel management system should work quickly and efficiently, even when many people are using it The connection and service must be reliable
- The system should be able to handle more users and data as it grows.
- The system should rarely have problems and be able to recover quickly if something goes wrong.
- User data should be kept safe and private through strong security measures.
- The system should be easy to use, with clear instructions and helpful feedback.
- It should be easy to maintain and update the system.

3.1.2 Feasibility Analysis

Depending on the results of the initial investigation, the survey is expected to a more detailed study. A feasibility study is a system proposal according to its workability, impact on the organization, ability to meet user needs, and effective use of resources. The feasibility study is undertaken to determine the possibility of either improving the present system or developing a completely new system. It helps to obtain an overview of the problem and get an idea whether a feasible solution exists.

i. Technical Feasibility Study

During the development of website there can be several project risks and threats so, Contingency plans are a vital part of a risk management strategy. It is a process that revolves around avoiding, mitigating, identifying, and accepting risk.

ii. Operational Feasibility Study

The current system is manual. Thus processing large amount of data becomes a cumbersome activity. Reports that are generated are difficult to prepare manually and are also error prone. Operationally the Proposed system is feasibility because there are sufficient supports for projects from management. It will be running smoother and faster that of existing system.

iii. Economic Feasibility Study

The users do not need to buy the additional software to access the service as they can simply use their mobile phones and computers. Hence the project is feasible economically for now.

iv. Schedule Feasibility Study

In scheduling feasibility, an organization estimates how much time the project will take to complete. When these areas have all been examined, the feasibility analysis helps identify any constraints the proposed project may face.

The following Gantt chart shows the overall scheduling of the project:

Table 3.1: Example of Gantt chart Table for travelling management System

Task Name	Duration
Project Initiation	15days
Planning	7 days
Designing	20 days
Implementation (Frontend)	20 days
Implementation (Backend)	2 month
Testing	7 days
Documentation	10 days

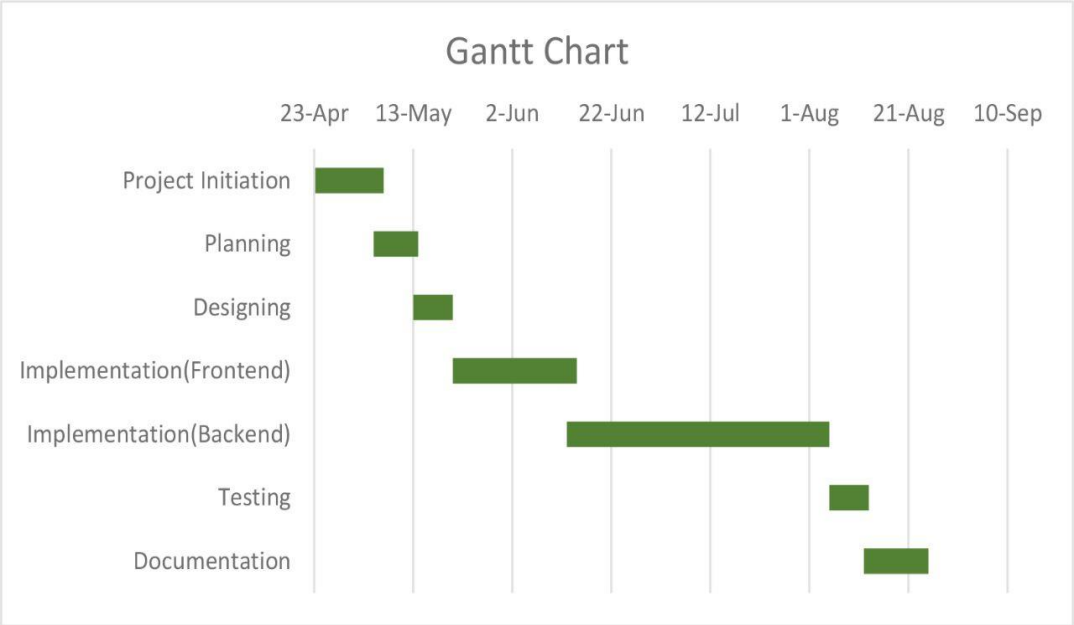

Figure 3.1: Typical example of Gantt chart

3.1.3 Data Modeling ER-Diagram

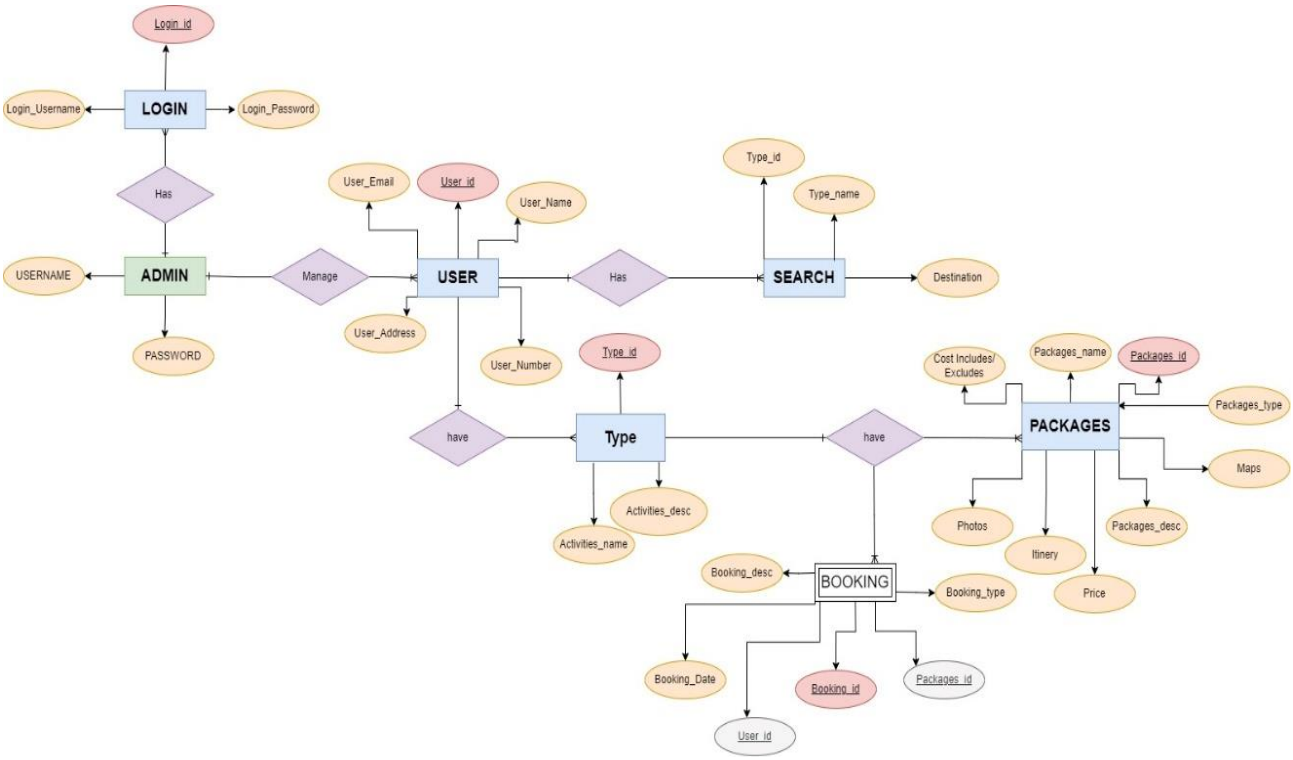

Figure 3.2: ER Diagram for Traveling Management system

3.1.4 Process Modeling (DFD)

Context Diagram:

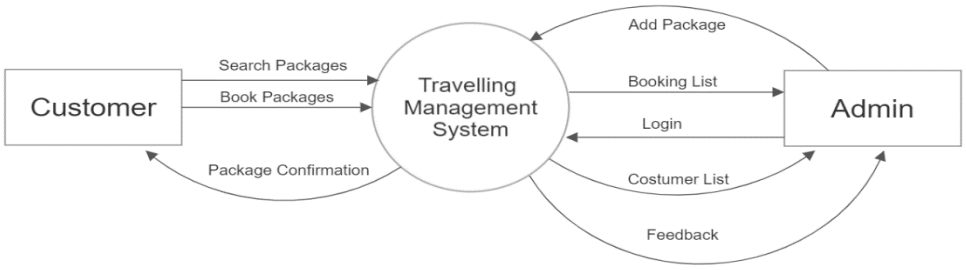

Figure 3.3: Level 0 DFD

Level 1 DFD:

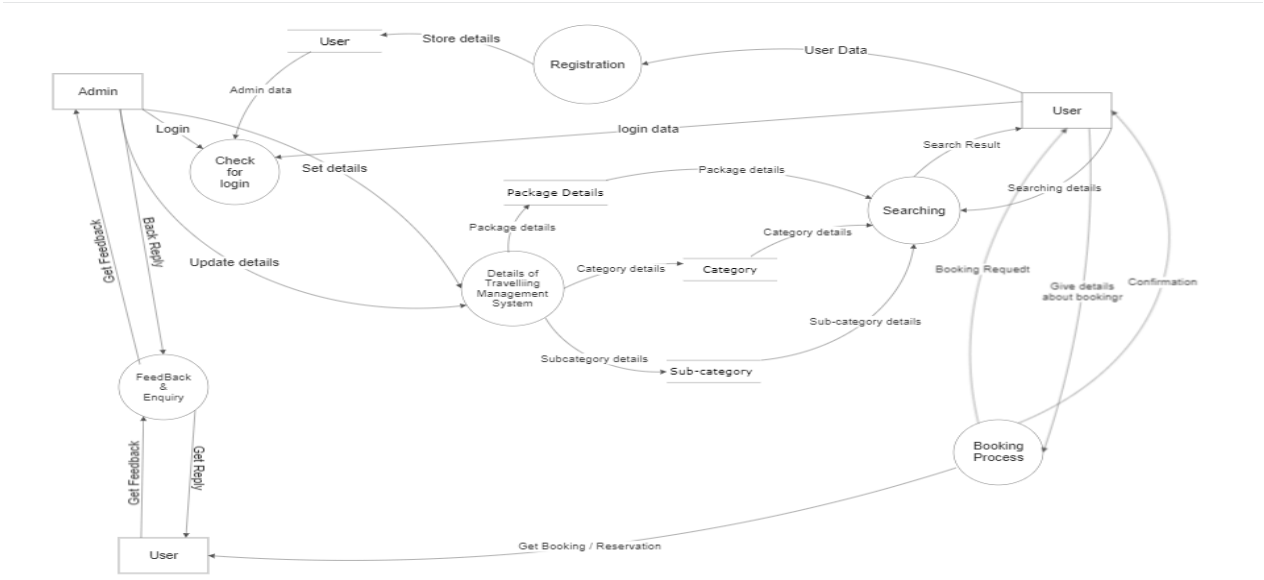

Figure 3.4: Level 1 DFD

3.2. System Design

3.2.1. Architectural Design

In the Travelling website, users interact with the system through a simple user interface. The Travelling website uses three architecture. The data is collected from the user and stored in the database through which the server provides cart detail to the user. In order to perform transaction to the user, the system uses different database tables including database table including different attribute for each entity user has a unique account number which makes them different from other users. In this way out system architecture is designed which is an abstract view of the system.

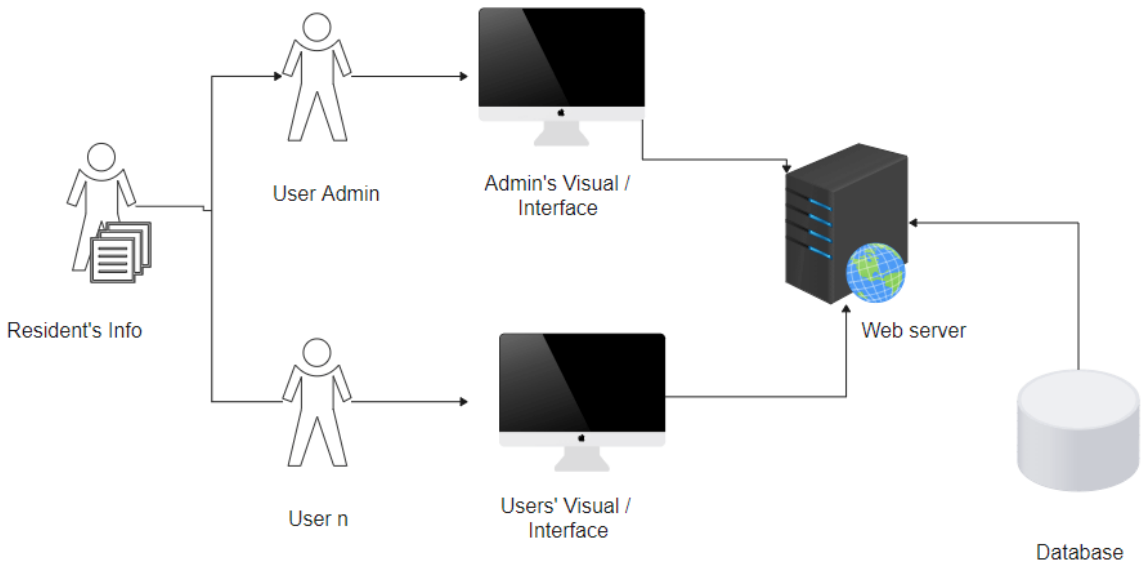

Figure 3.5: Architectural Design for Traveling management System

3.2.2. System Flowchart

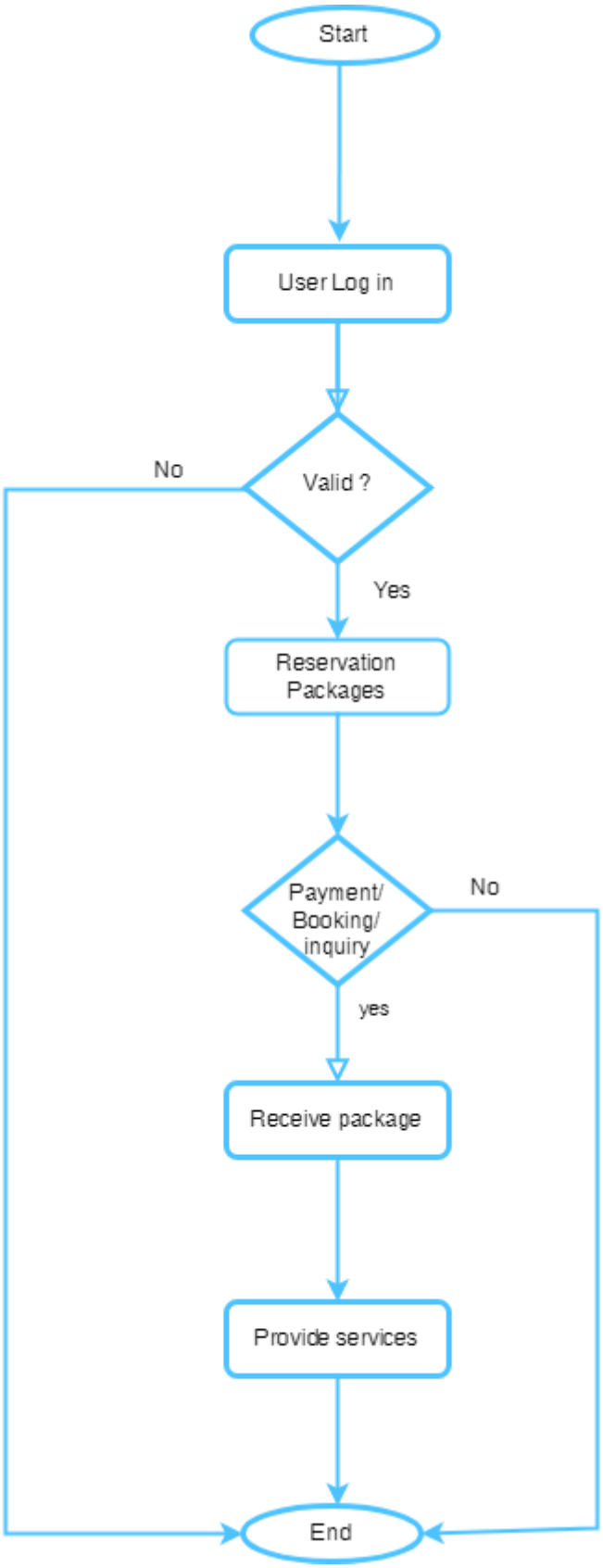

Figure 3.8: Flow Chart of Traveling management System

3.2.3. Database Schema Design

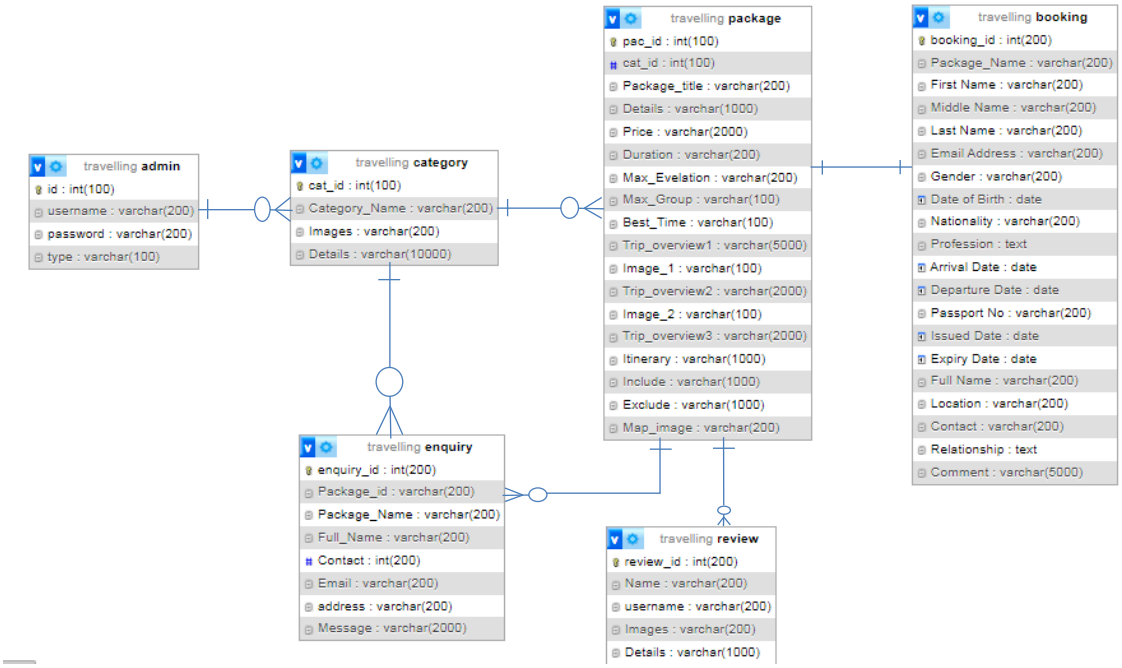

Figure 3.6: Example of Database Schema design

3.2.4. Interface Design (Interface Structure Diagrams)

Welcome to the home page, login page and dashboard of the figma design for the traveling management system.

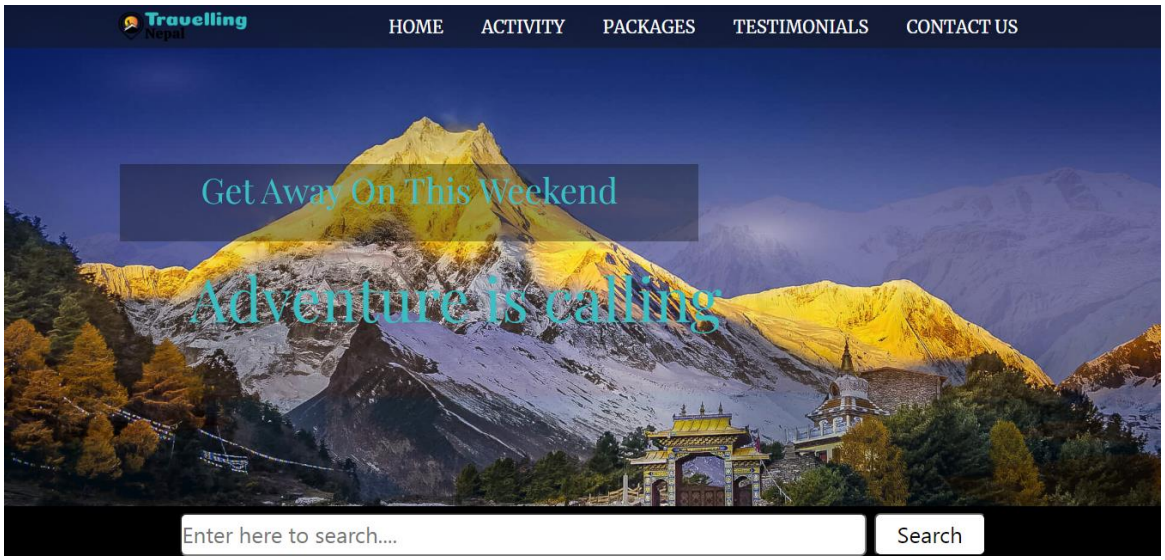

Figure 3.7: Example of Home page

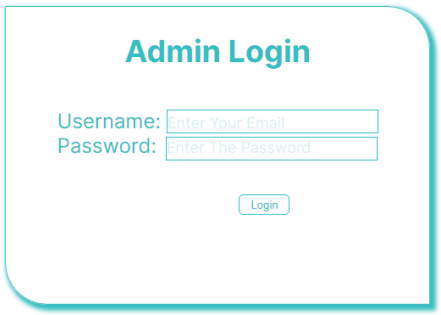

Figure 3.8: Example of Login Page

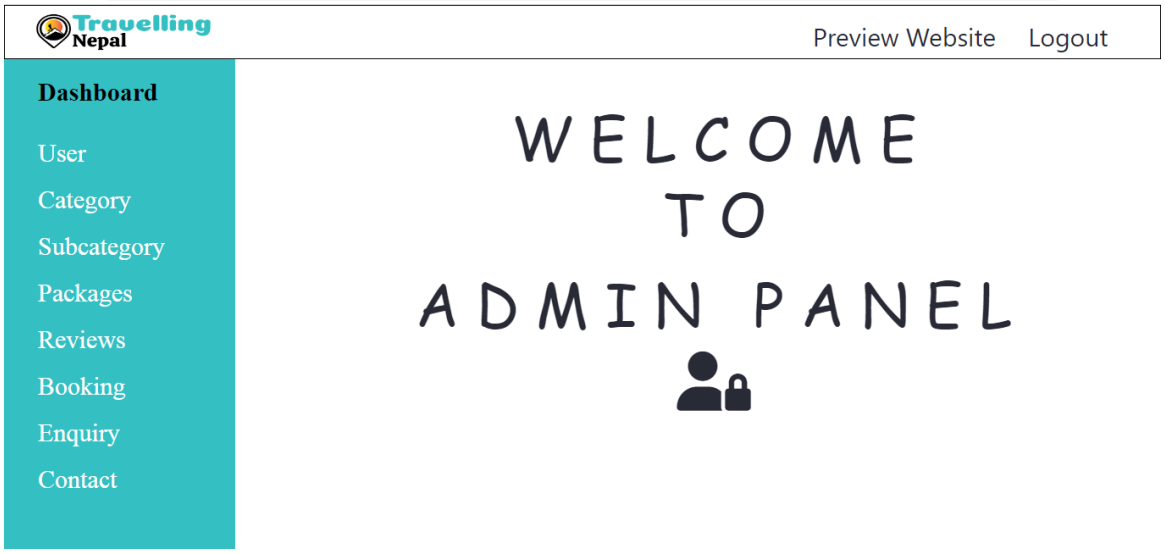

Figure 3.9: Example of Dashboard

3.2.5. Physical DFD

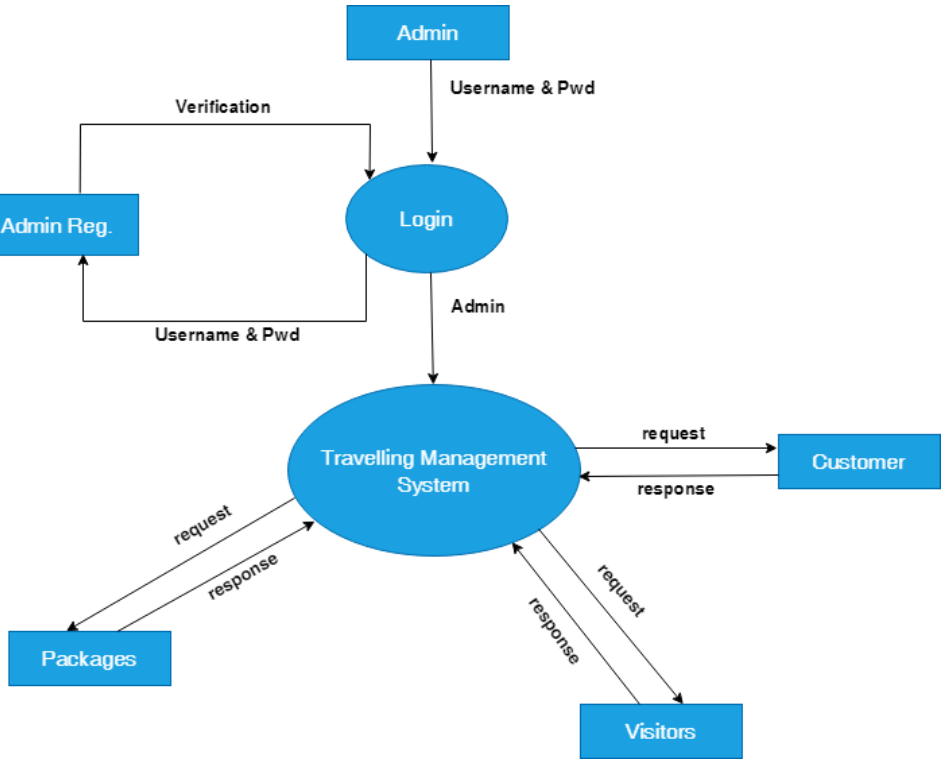

Figure 3.10: Example of Physical DFD

CHAPTER: 4

IMPLEMENTATION AND TESTING

4.1. Implementation

4.1.1. Tools Used (CASE tools, Programming language, Database platforms)

HTML: HTML (Hypertext Markup Language) is the most basic building block of the Web. It defines the meaning and structure of web content. HTML determines the structure of web pages. We used HTML to create the basic layout of the web pages in the project.

CSS: Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language such as HTML. We used CSS to make the document more interactive by adding hovers, bright color sand to align test.

JAVASCRIPT: JavaScript often abbreviated JS, is a programming language that is one of the core technologies of the World Wide Web, alongside HTML and CSS. Over 97% of websites use JavaScript on the client side for web page behavior, often incorporating third-party libraries. As per JavaScript, we used it to make the webpage more dynamic by adding events, animations and page brakes.

PHP: PHP is a general-purpose scripting language geared toward web development. PHP code is usually processed on a web server by a PHP interpreter implemented as a module, a daemon or as a Common Gateway Interface (CGI) executable. In the project we used this tool to connect the frontend with backend.

MySQL: MySQL is an Oracle-backed open source relational database management system (RDBMS) based on Structured Query Language (SQL).Tis tool was used to create database for website.

Bootstrap: Bootstrap is a potent front-end framework used to create modern websites and web apps. It's open-source and free to use, yet features numerous HTML and CSS templates for UI interface elements such as buttons and forms. We imported some of the templet in our project as per need.

4.1.2. Implementation details of modules

In the Travelling Management system (TMS), there are two main modules: the Admin Module and user Module. The admin module allows the admin to log in and access the dashboard, where they can perform actions like adding, editing and deleting users as well as creating new travel packages. On the other hand the user module enables visitors to search for packages, make booking and send inquiries.

Here are the implementation details for both modules:

1. **Admin Module:**

    a. Admin login: Implement a secure login system for the admin using username and password authentication. Store admin records in a secure manner, such as hashing and salting passwords before storing them in the database.
    b. Admin Dashboard: Create a dashboard with a user-friendly interface for the admin to manage users and travel packages. Use HTML, CSS and JavaScript to design and implement the dashboard.
    c. User management: In the admin section of the Travelling Management System (TMS) you can easily see a list of all users. You the option to edit or delete their details. You can also add new users using simple forms and if you need to update any existing user information you can do that too. To keep everything secure and accurate, the system checks and verifies the data on the server side making sure no unauthorized access occurs.
    d. Package Management: In the Travelling Management system (TMS) the admin dashboard makes it easy to view all the available travel packages in a list format. You can effortlessly edit or delete any of the existing packages as needed. Additionally, user-friendly forms are provided, enabling you to add brand new travel packages or make edits to the details of the existing ones. To ensure accuracy and consistency, the system performs through data validation making sure that all package information is correct and error-free before it is saved. This helps in maintaining reliable and up-to-date travel package records.

2. **User Module:**

    a. User Interface: Our user-friendly website interface for the Travelling Management system (TMS) allows users to easily explore a wide range of travel packages. You can view all available packages complete with essential details such as destination, duration and cost. To make your search even more convenient. We have included a handy search function that lets you filter packages based on criteria like destination, duration or cost range. This way you can quickly find the perfect travel package that suits you preferences and make hassle-free bookings for you dream vacation.
    b. Package Details: When a user click on a package to view its detailed information, including itinerary, inclusions, exclusions and captivating images. Make informed travel decisions with confidence and excitement.
    c. Booking: It allows users to select a package and provide booking details (travel date, number of travelers, contact information). Server-side validation ensures accurate and complete information for a smooth travel experience.
    d. Enquiry: It features a user-friendly contact form and messaging system, enabling users to easily send inquiries about specific packages or ask general travel-related questions. All inquiries are stored in the database, ensuring that no communication is lost. For swift responses, the system automatically sends notifications to the admin, ensuring prompt attention to user queries and enhancing customer satisfaction.

4.2 Testing

Software Testing is the process of evaluation of a software items to detect differences between given input and expected output. It also assesses the features and quality of a software product.

4.2.1 Test Cases for Unit Testing

Table 1 Login

Test case	Test case Description	Test Data	Expected Result	Actual Result	Pass/Fail
1	Check conditions when admin enters valid information for login	Username: admin Password: admin	Should login and redirect to dashboard	Login successfully and redirected for verified admin	Pass
2	Check results on entering invalid username and password	Username: admin Password: admin	Should not login in	Invalid	Pass

4.2.2 Test Cases for System Testing

Table 2 Add User

Test case	Test case Description	Test Data	Expected Result	Actual Result	Pass/Fail
1	Check conditions when admin add new admin or user	Username: Password: Choose admin or General	Should add successfully	Login successfully and added successfully	Pass
2	Check condition when admin update user details	Change or update Username: Password: Choose admin or General	Should update successfully	Updated successfully	pass

Table 3 Add Category

Test case	Test case Description	Test Data	Expected Result	Actual Result	Pass/Fail
1	Check conditions when admin add category	Category name: Everest Base Camp Image upload: Image Details: details about base camp	Save button should save category successfully and cancel button should cancel	Category should save successfully	Pass

Table 4 Add packages

Test case	Test case Description	Test Data	Expected Result	Actual Result	Pass/Fail
1	Check conditions when admin add new packages	Package name: Upper Mustang Trek Select category: Upper Mustang Trek Details: Price: $1615 Duration: 14 days Image upload: Itinerary: Include: Exclude:	Save button should save category successfully and cancel button should cancel	Package should save successfully	Pass

Table 5 user Contact

Test case	Test case Description	Test Data	Expected Result	Actual Result	Pass/Fail
1	Check conditions when user want to contact the agency	Full name: Rakesh Theeng Phone: 9803650653 Email: theengrakesh55@gmail.com Message:	should get email in respective email address	Email sent successfully	Pass
2	Check results on entering Invalid Email		Invalid email	Message should not send	pass

Table 6 user feedback/reviews

Test case	Test case Description	Test Data	Expected Result	Actual Result	Pass/Fail
1	Check conditions when user want to give any feedback/reviews	Full name: Debika Dangal Username: @dangaldebika Image: can add image Details: feedback details	submit button should save review successfully and cancel button should cancel	Review should save successfully	pass

Table 7 Booking

Test case	Test case Description	Test Data	Expected Result	Actual Result	Pass/Fail
1	Check conditions when user want to book packages	Select package: upper mustang trek Personal details Full name: Ramesh lama Email: rameshtmg44@gmail.com Gender: male Date of birth: 2045/04/3 Arrival date: 2080/05/20 Departure date:2080/06/10 Contact: 9804567824 Nationality: Nepali	should get details in respective email address	Should sent successfully	Pass
2	Check conditions when user select invalid packages		Invalid details	Should not sent details	Pass

CHAPTER: 5

CONCLUSION AND FUTURE RECOMMENDATIONS

5.1. Lesson Learnt / Outcome

The expected outcomes of a travelling management system include providing users with a user-friendly interface to easily view and book travel packages, the ability to make inquiries and seek clarification on packages, access to comprehensive package details and the convenience of searching for packages based on specific criteria. These outcomes enhance the user experience, save time and increase the chances of finding the perfect travel package.

5.2 Conclusion

In summary, a travelling management system is a helpful tool for managing travel. It makes planning, booking and keeping track of trips easier. It saves time and reduces stress for both travelers and travel providers. With features like managing schedules, tracking expenses and getting real-time updates, it improves the travel experience. By bringing everything together in one place, it helps with communication, coordination and keeping costs under control. Using a travelling management system makes travel smoother, more enjoyable for everyone involved.

5.3 Future Recommendations

In the future, there are some ways to make the travelling management system even better. They can create a mobile app so people can use it on their phones easily. It would be helpful to suggest travel packages base on what each person likes. Connecting the system with smart devices, like watches or voice assistants, would make it more convenient. They can also work with local experts, like tour guides to give people inside tips. It would be useful to have travel insurance options right in the system. Adding social media features would let people share their travel plans with friends. Using smart technology like AI would make the system smarter and more helpful. Lastly, focusing on sustainability and promoting eco-

friendly choices would be a great idea. These improvement would make the system even more user-friendly and personalized for travelers.

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APPENDICES

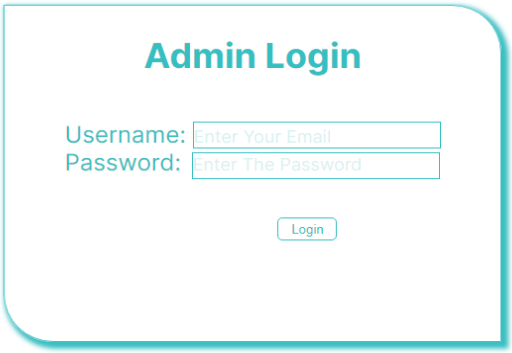

Fig: Login page

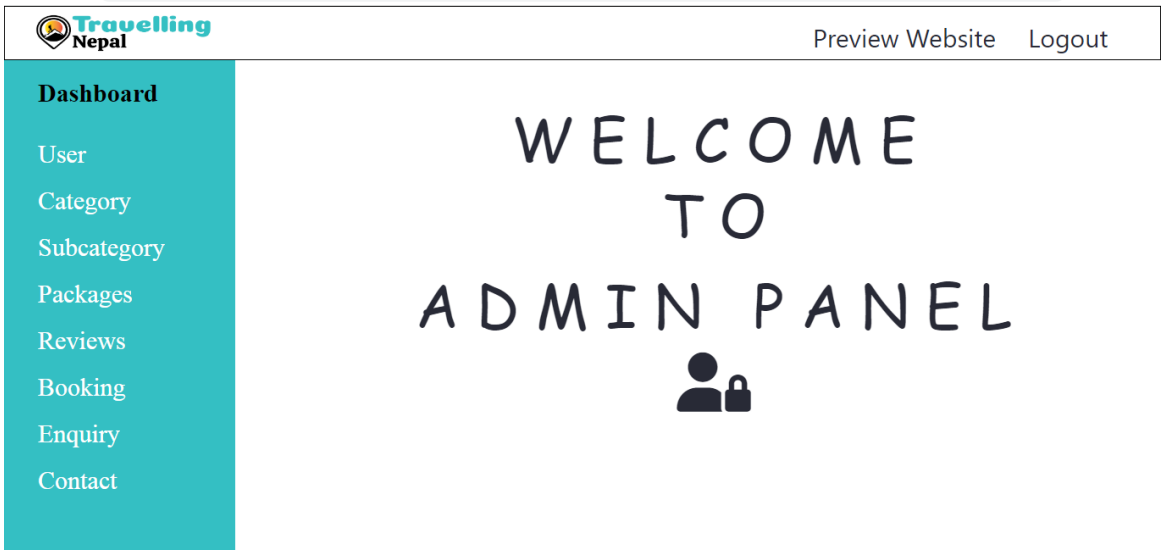

Fig: Dashboard

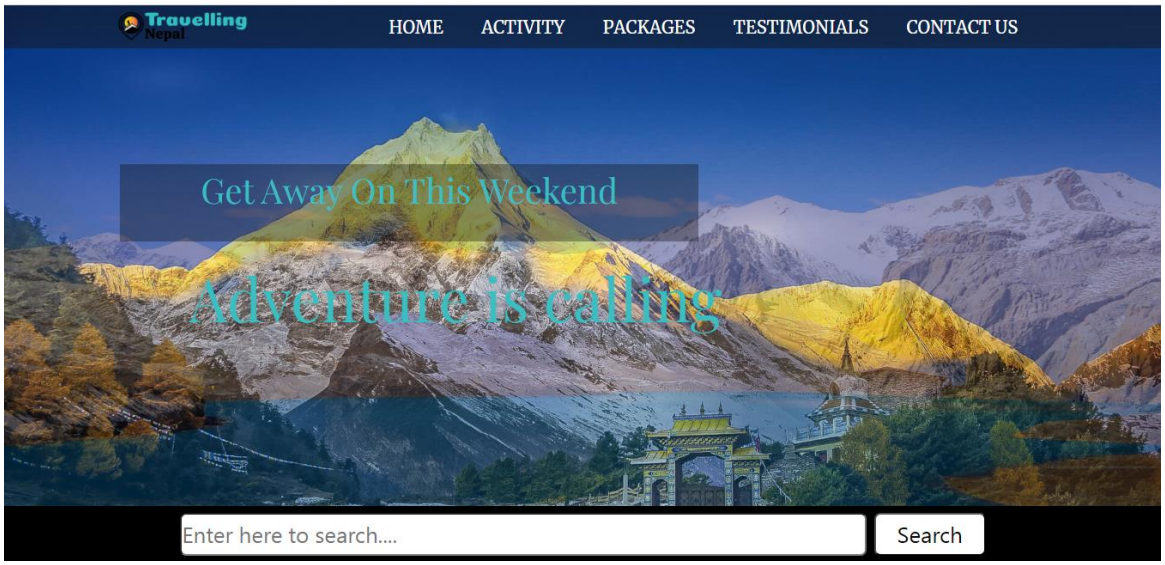

Fig: Home page

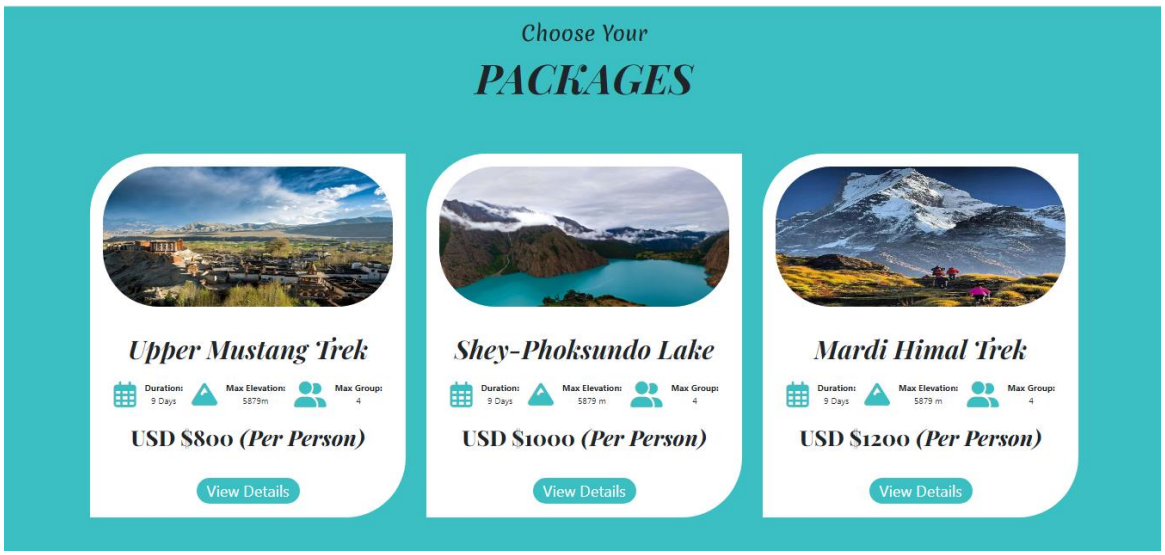

Fig: Packages

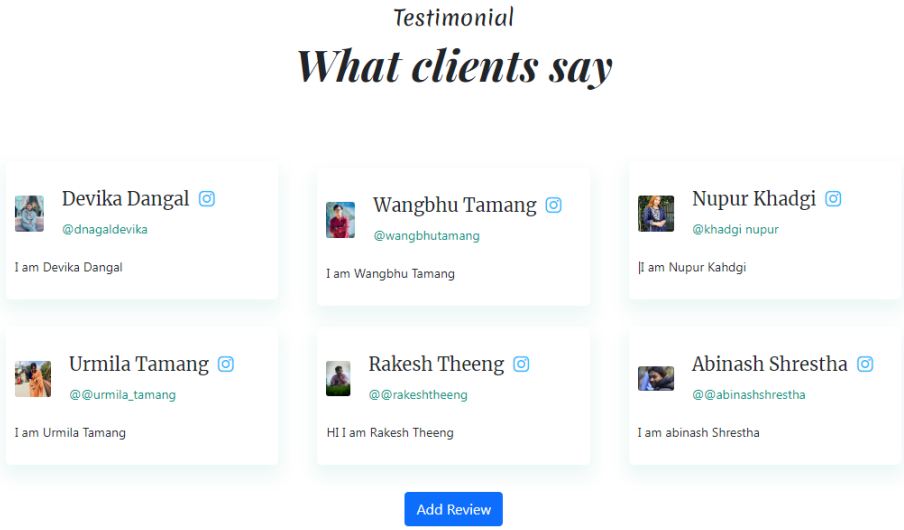

Fig: User Review

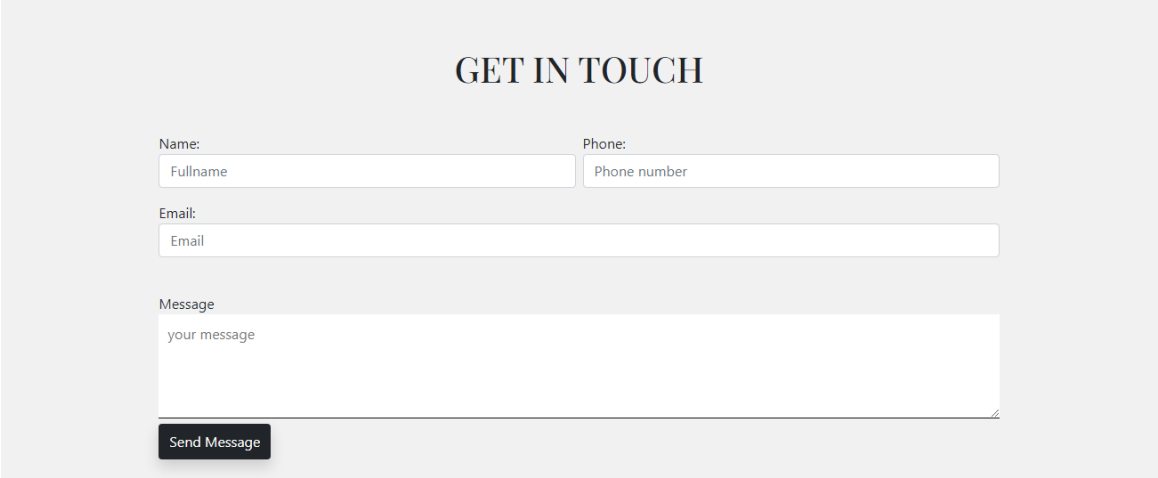

Fig: User contact

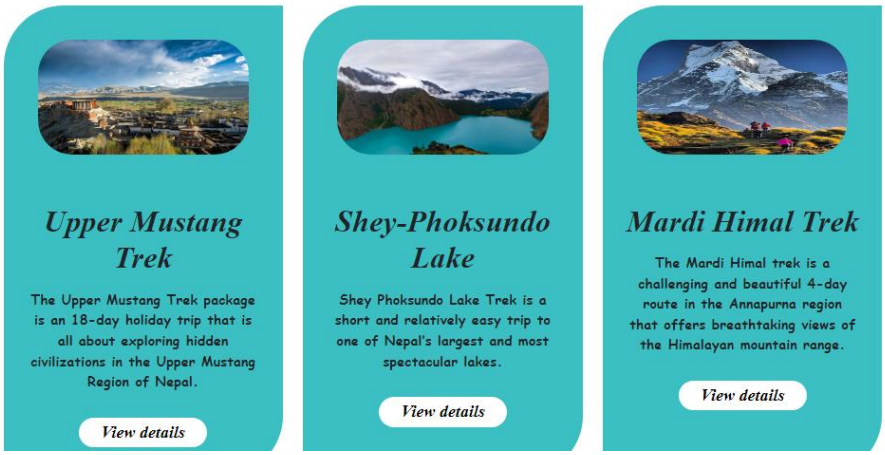

Fig: Category page

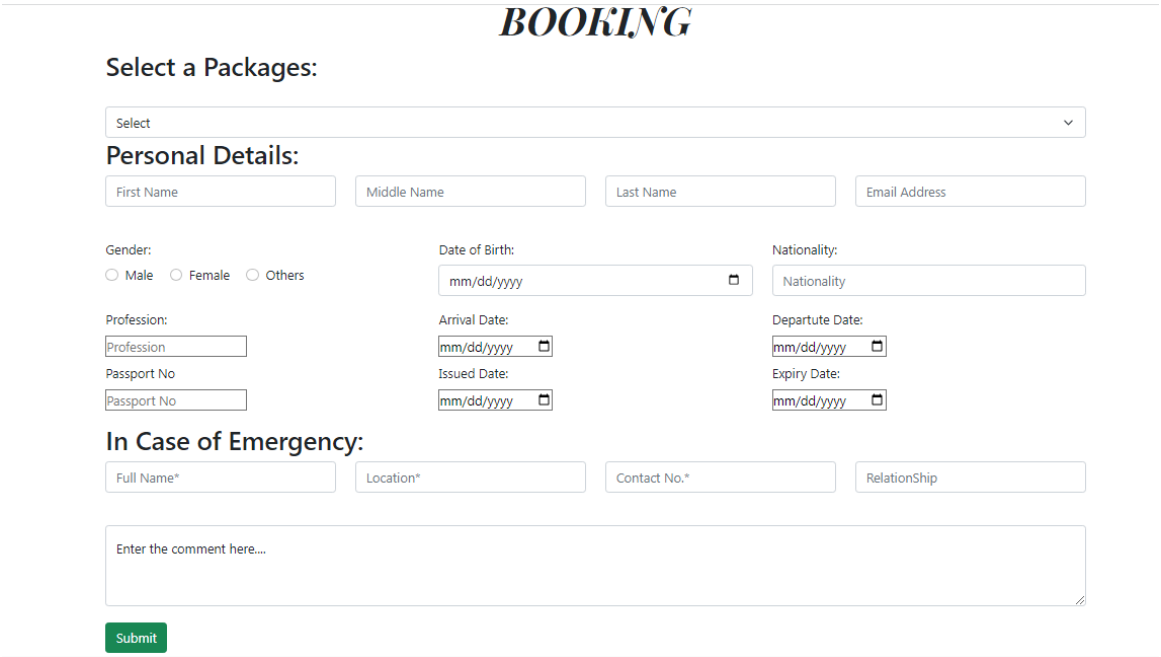

Fig: Booking page