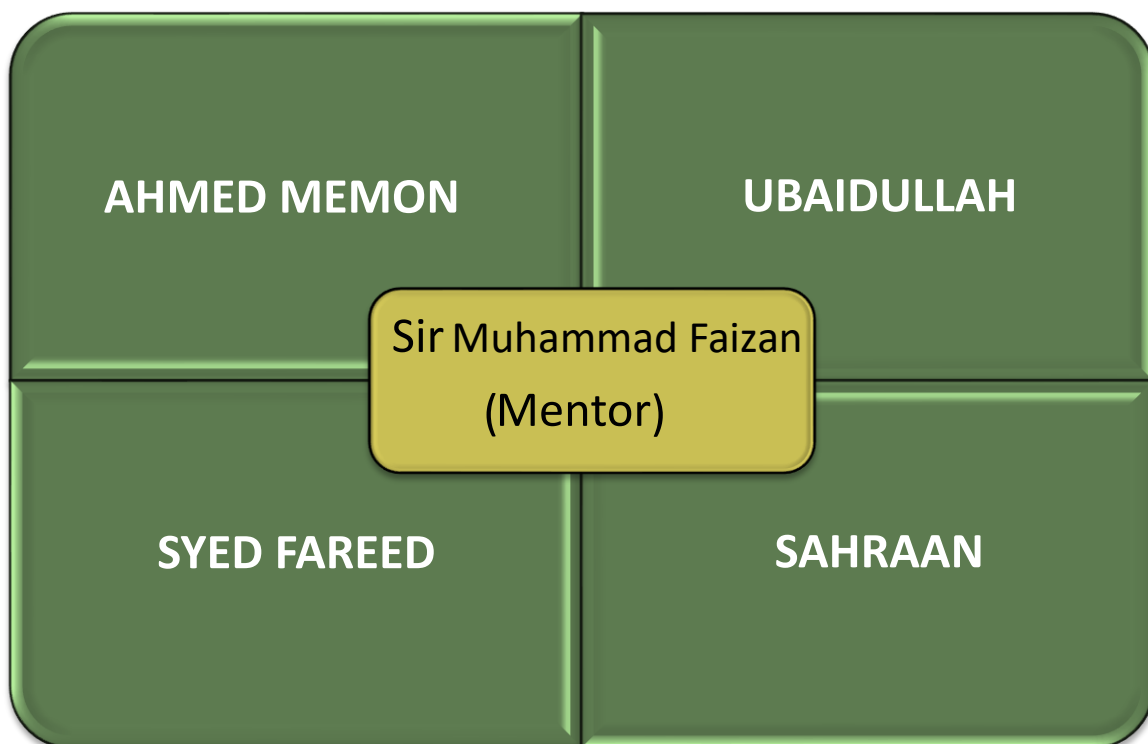


# ExpenseVoyage

(Web Application Development)

## *TechWiz-5 Project Report*



**Submitted By: Aptech Defence Branch**

**“A Contest-Azm I.T Competition 2024.**

**Center Academic Head**

**ACE-Hyderabad”**



## “Acknowledgement”

We would like to extend our heartfelt gratitude to everyone who contributed to the successful development of the **Expense Voyage** web application. First and foremost, we are deeply thankful to **Aptech Defence Center, Pakistan** for providing the platform and resources that facilitated this project. Their continuous support and access to necessary tools made this Endeavor possible.

We are also immensely grateful to the **Faculty** at Aptech, whose guidance and encouragement played a pivotal role throughout the development process. Their expertise, constructive feedback, and unwavering support helped us overcome challenges and achieve our project goals.

Furthermore, we appreciate the contributions of our peers, who stood by us with constant support and valuable insights. Their feedback allowed us to refine our ideas and improve the application’s design and functionality.

Lastly, we would like to express our sincere appreciation to our families and friends for their patience and understanding, which provided us with the motivation to persevere during this journey. Together, with everyone's contributions, **Expense Voyage** has come to life, and we are proud to present it as a product of collective effort and dedication.

# CERTIFICATE

*This is to certify that*

**Ahmed Memon.**

**Ubaidullah.**

**Syed Fareed.**

**Sahraan.**

*Has Successfully Designed & Developed*

**EXPENSE VOYAGE  
WEB APPLICATION**

**Submitted by:**

***Center Academic Head***

***ACE Hyderabad.***

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# 1. Introduction:

The **Expense Voyage** web application is designed to address the common challenges faced by travelers when managing their travel expenses. Whether traveling individually or in a group, keeping track of multiple expenditures—such as accommodation, food, transportation, and leisure activities—can be daunting. Moreover, traditional methods of expense tracking, such as manual entries in spreadsheets or keeping physical receipts, are cumbersome and error-prone.

**Expense Voyage** provides a streamlined, automated solution that simplifies expense tracking and budget management for users. The application enables users to create and manage trips, log expenses in real-time, and receive notifications and alerts when their spending approaches predefined limits. In addition to individual use, the system supports collaborative tracking for group trips, making it easier for all participants to contribute to and manage shared expenses.

The goal of this project is to offer a comprehensive, user-friendly platform that enhances the travel experience by allowing users to focus on their trips without worrying about financial disorganization.

## ❖ Project Background:

Traveling, whether for leisure or business, often involves numerous expenses such as transportation, accommodation, food, and entertainment. Keeping track of these expenses manually can be a challenging and time-consuming task. Many travelers rely on spreadsheets or physical receipts, which are prone to errors, mismanagement, and loss. This creates a significant challenge, especially when there is a need to stay within a budget or file for reimbursement.

With the rise of digital transformation, there is a growing demand for automated tools that simplify expense tracking and management.

**Expense Voyage** was conceived to address this need, providing users with a streamlined and efficient solution to track their travel expenses in real-time, set budgets, and ensure they remain on top of their financial planning during their trips. The platform is designed to cater to both individual travelers and groups, allowing for collaborative tracking of shared expenses.

The idea behind **Expense Voyage** is to make expense management a seamless process, offering users the ability to log expenses on the go, manage multiple trips, and generate detailed expense reports. With its user-friendly interface, integrated budget tracking, and support for multiple currencies, the application eliminates the hassle of manual calculations and ensures users have a clear understanding of their spending.

This web application also addresses the need for accessibility and convenience, allowing travelers to manage their expenses from anywhere, at any time, using any device. Whether it's a business trip or a family vacation, **Expense Voyage** ensures that users stay organized, save time, and avoid financial surprises at the end of their journey.

## ❖ Purpose of the Document:

The purpose of this document is to provide a detailed and comprehensive guide to the **Expense Voyage** web application. It outlines the design, functionality, and technical aspects of the system to ensure that all involved parties, including developers, stakeholders, and project managers, have a clear understanding of the project's scope and deliverables. This document is intended to serve as both a blueprint for building the application and a reference for its maintenance and future updates. It includes information about the system's architecture, database design, user interface, and functional requirements, as well as providing a user manual for end-users. Ultimately, it ensures that all project components are well-documented for current and future use.

### Key Points:

- Defines the project scope and objectives.
- Describes system architecture and component interaction.
- Details functional and non-functional requirements.
- Outlines database design and system implementation.
- Provides a user manual for navigating the application.
- Serves as a reference for ongoing development and maintenance.

## ❖ Scope of the Project:

The **Expense Voyage** project focuses on developing a web application that streamlines expense tracking for travelers. It allows users to register, create and manage trips, log expenses in real-time, and set both overall and category-specific budgets. The system supports multi-currency conversion, enabling users to track expenses in their preferred currency. Additionally, the application generates detailed reports, giving users an overview of their spending. Admins have the capability to manage destinations, trips, and monitor user activity through a dedicated dashboard. The scope of the project excludes payment processing or integration with payment gateways, as the primary focus is on expense tracking and budget management rather than financial transactions. The system is designed to be responsive, ensuring usability across multiple devices.

## 2. System Overview:

The **Expense Voyage** web application is designed to provide travelers with an efficient and user-friendly platform to track and manage their travel expenses. The system is built to cater to both individual users and groups, offering real-time tracking, budget management, and detailed reporting. It ensures that users can log expenses, set budgets, and monitor their spending without the need for manual calculations or paperwork.

The system consists of several modules, including user registration and authentication, trip planning, expense logging, and reporting. Users can create trips, log expenses under various categories (such as accommodation, food, or transportation), and receive notifications when approaching their budget limits. The application supports multiple currencies, allowing users to convert expenses into their preferred currency.

Administrators have access to additional features that allow them to manage destinations, trip information, currency exchange rates, and user activity through an admin dashboard. The system is designed to be responsive, ensuring a seamless experience across different devices, including desktops, tablets, and smartphones.

## ❖ Proposed Solution:

The proposed solution is a web-based application that allows users to input their travel-related expenses and categorize them for easy tracking and reporting. The application will include features for data visualization, enabling users to analyze their spending patterns and make informed financial decisions.

## ❖ Main Features Include:

- **User Authentication:**

- Secure registration and login functionality.
- Role-based access for administrators and users.

- **Expense Tracking:**

- Ability to add, edit, and delete expenses.
- Categorization of expenses (e.g., transportation, accommodation, meals).

- **Data Visualization:**

- Graphs and charts to visualize spending trends over time.
- Summary reports for specific trips or time periods.

- **Budget Management:**

- Set budget limits for different categories.
- Alerts for exceeding budget limits.

- **Export Options:**

- Export expense reports in various formats (PDF, CSV).
- Email reports directly from the application.

- **Multi-Currency Support:**

- Ability to input expenses in different currencies.
- Automatic conversion to a base currency.



## ❖ Functional Requirements:

- **User Account Management:**
  - Users should be able to create and manage their accounts.
  - Password recovery options should be available.
- **Expense Entry:**
  - Users must be able to enter expenses with details (amount, date, category).
  - Users can edit or delete previously entered expenses.
- **Reporting:**
  - The system should generate summary reports based on user-defined criteria (e.g., by date, category).
  - Reports should include visual representations of data.
- **Notifications:**
  - Users should receive notifications for budget limits and important updates.
- **Mobile Responsiveness:**
  - The application must be accessible and functional on various devices (desktops, tablets, smartphones).

## ❖ Non-Functional Requirements:

- **Performance:**
  - The system should load pages within 3 seconds.
  - Efficient database queries to handle large datasets.
- **Security:**
  - Implement encryption for sensitive user data (e.g., passwords).
  - Regular security audits to identify vulnerabilities.
- **Usability:**
  - Intuitive user interface that is easy to navigate.
  - Accessibility features to support users with disabilities.
- **Scalability:**
  - The system should accommodate a growing number of users and transactions without performance degradation.
- **Availability:**
  - The application should have a 99.9% uptime guarantee.
  - Regular backups to prevent data loss.

## 3. System Architecture:

### Overview:

The Expense Voyage application uses a client-server architecture to separate the user interface from data processing and storage.

### Architectural Components:

#### 1. Client Side:

- **Web Application:** Built with HTML, CSS, and JavaScript for a responsive user interface.

#### 2. Server Side:

- **Application Server:** Developed using PHP to handle requests and business logic.
- **Database Server:** MySQL is used to store user accounts, expenses, and reports.

#### 3. Third-party Integrations:

- **Currency Converter API:** For real-time currency conversion.

### Architecture Design:

#### 1. Client-Server Interaction:

- Uses HTTP/HTTPS protocols for communication.
- Data is exchanged in JSON format.

#### 2. Database Schema:

- **Users Table:** Stores user information (user\_id, username, password\_hash, email).
- **Expenses Table:** Stores expense details (expense\_id, user\_id, amount, date, category).
- **Categories Table:** Contains predefined categories.

#### 3. Security:

- **Authentication:** Secure password hashing and session management.
- **Authorization:** Role-based access control for user permissions.

## Data Flow:

### 1. User Registration/Login:

- Clients send user credentials to the server for validation.

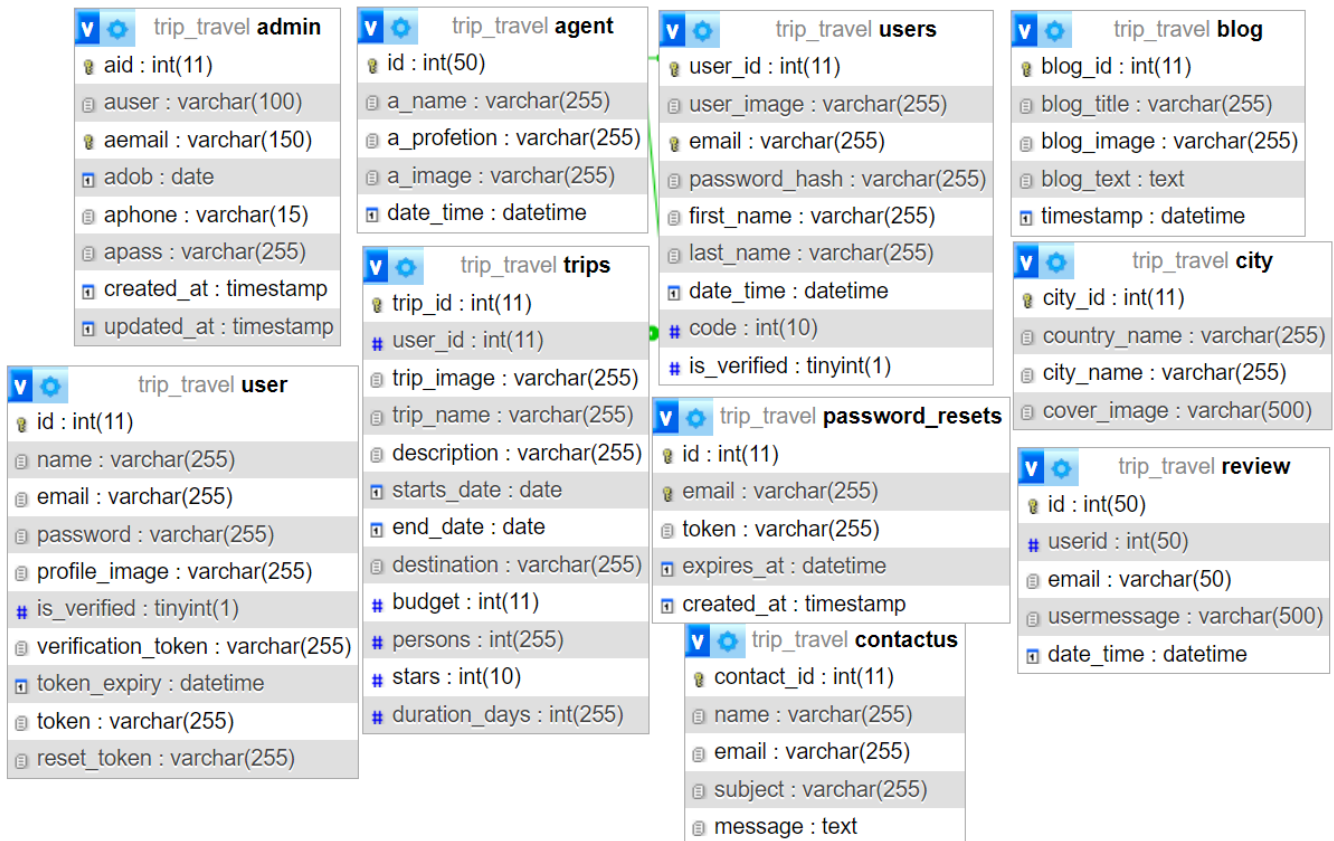
### 2. Expense Management:

- Users can add, edit, or delete expenses through the client interface.

### 3. Reporting:

- Clients request expense reports from the server, which aggregates data from the database.

## 4. Database Design:



# 5. Implementation Details:

## Development Environment:

- **Local Development:**
  - XAMPP for local server setup (Apache, PHP, MySQL).
  - Code Editor: Visual Studio Code for writing code.
- **Version Control:**
  - Git for source control management, with GitHub for repository hosting.
- **Testing:**
  - PHPUnit for unit testing PHP code.
  - Browser testing tools (e.g., Chrome DevTools) for front-end debugging.

## Technology Stack:

### 1. Front-End:

- **HTML:** Structure of the web application.
- **CSS:** Styling the application using frameworks like Bootstrap for responsiveness.
- **JavaScript:** For dynamic content and interactivity.
- **Frameworks:** React, Angular, or Vue.js for building the user interface (optional).

### 2. Back-End:

- **PHP:** Server-side scripting language for handling application logic.
- **MySQL:** Relational database management system for data storage.

### 3. Third-Party Services:

- **Currency Converter API:** For converting expenses into different currencies.

#### 4. Deployment:

- **Web Hosting:** Cloud services like AWS, DigitalOcean, or shared hosting platforms for application deployment.

#### Security Measures:

- Use HTTPS for secure communication.
- Implement input validation and sanitization to prevent SQL injection.
- Secure password storage using hashing (e.g., bcrypt).

## 6. User Manual:

### 1. Introduction:

The Expense Voyage application helps users track and manage their travel expenses efficiently. It offers a user-friendly interface for logging expenses, categorizing them, and generating reports to facilitate better budgeting.

### 2. System Requirements:

- **Web Browser:** Latest versions of Chrome, Firefox, Safari, or Edge.
- **Internet Connection:** Required for accessing the application.
- **Device:** Desktop, laptop, tablet, or smartphone.

### 3. Installation:

#### 1. Download the Application:

- Obtain the source code from the GitHub repository.

#### 2. Set Up Local Environment:

- Install XAMPP or WAMP for PHP and MySQL support.

- Place the application files in the htdocs directory of XAMPP or WAMP.

### 3. Database Setup:

- Open phpMyAdmin and create a new database (e.g., expense\_voyage).
- Import the provided SQL file to set up the required tables.

### 4. Configuration:

- Update the database connection details in the configuration file (config.php).

## 4. User Registration

1. Navigate to the registration page.
2. Fill out the registration form with the following details:
  - Username
  - Email Address
  - Password
3. Click the **Register** button.
4. Check your email for a confirmation link (if email verification is enabled) and follow the instructions.

## 5. Logging In

1. Go to the login page.
2. Enter your username and password.
3. Click the **Login** button.
4. If you forget your password, use the "Forgot Password?" link to reset it.

## 6. Dashboard Overview

- The dashboard displays a summary of your expenses, budget status, and quick links to add expenses or view reports.
- Navigation menu for easy access to different sections of the application.

## 7. Managing Expenses

### **Adding Expenses**

1. Click on the **Add Expense** button.
2. Fill out the form with the following details:
  - Amount
  - Date
  - Category (select from dropdown)
  - Description (optional)
3. Click the **Save** button to add the expense.

### **Editing Expenses**

1. Navigate to the **Expenses** section.
2. Locate the expense you want to edit and click the **Edit** button.
3. Update the necessary fields.
4. Click the **Save** button to apply changes.

### **Deleting Expenses**

1. In the **Expenses** section, find the expense you wish to delete.
2. Click the **Delete** button next to the expense.
3. Confirm the deletion when prompted.

## **8. Budget Management**

1. Navigate to the **Budget** section.
2. Set budget limits for different categories by clicking the **Add Budget** button.
3. Fill out the form with category and budget amount.
4. Click **Save** to apply the budget.

## **9. Generating Reports**

1. Go to the **Reports** section from the navigation menu.
2. Select the criteria for the report (e.g., date range, category).
3. Click the **Generate Report** button.
4. View the report on-screen or export it in PDF or CSV format.

## **10. Settings**

1. Navigate to the **Settings** section.

2. Update your profile information or change your password.
3. Save any changes by clicking the **Save** button.

### **11. Logging Out**

- Click on the **Logout** button located in the navigation menu to securely end your session.

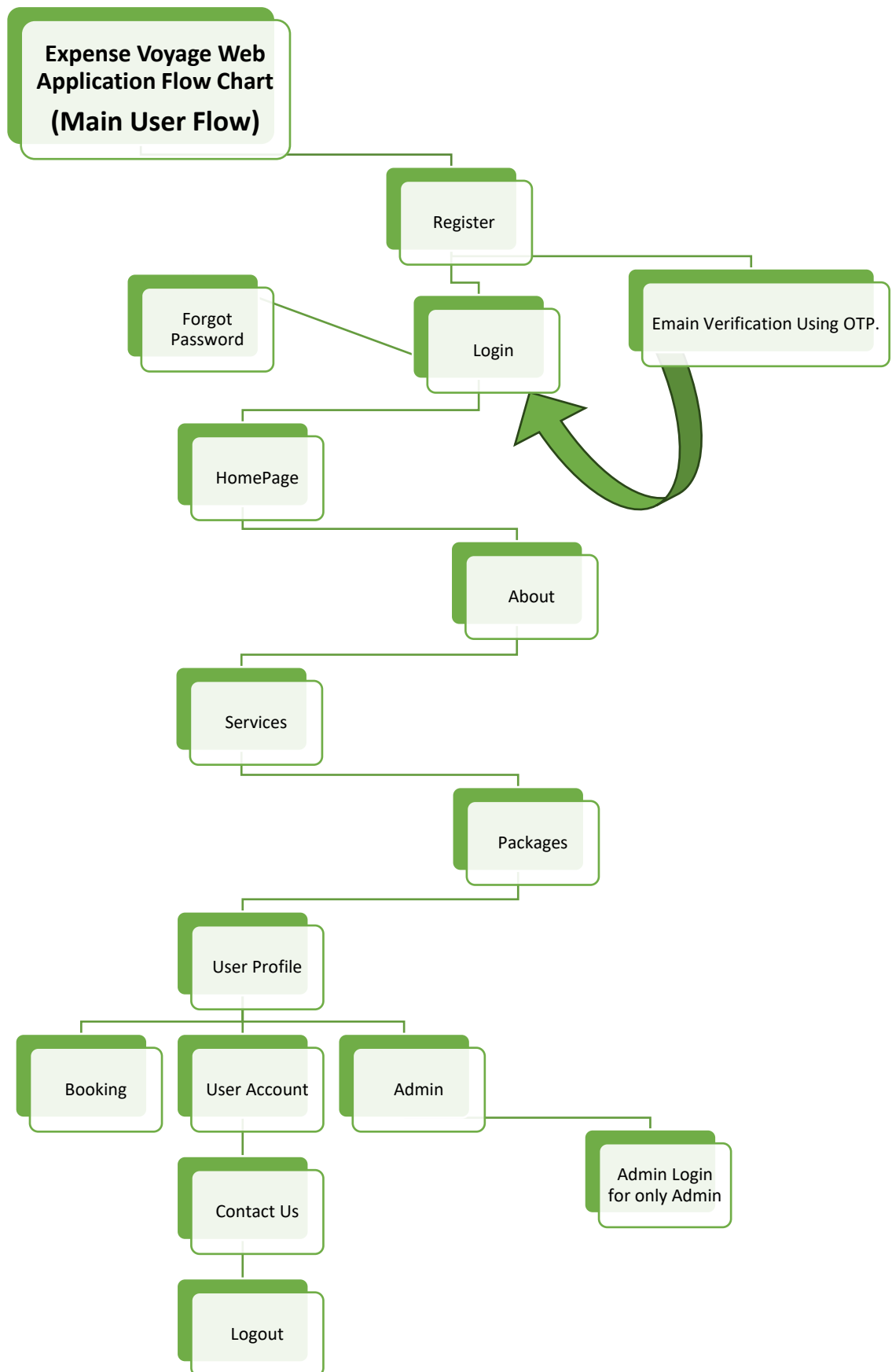
### **12. Support**

For any issues or questions:

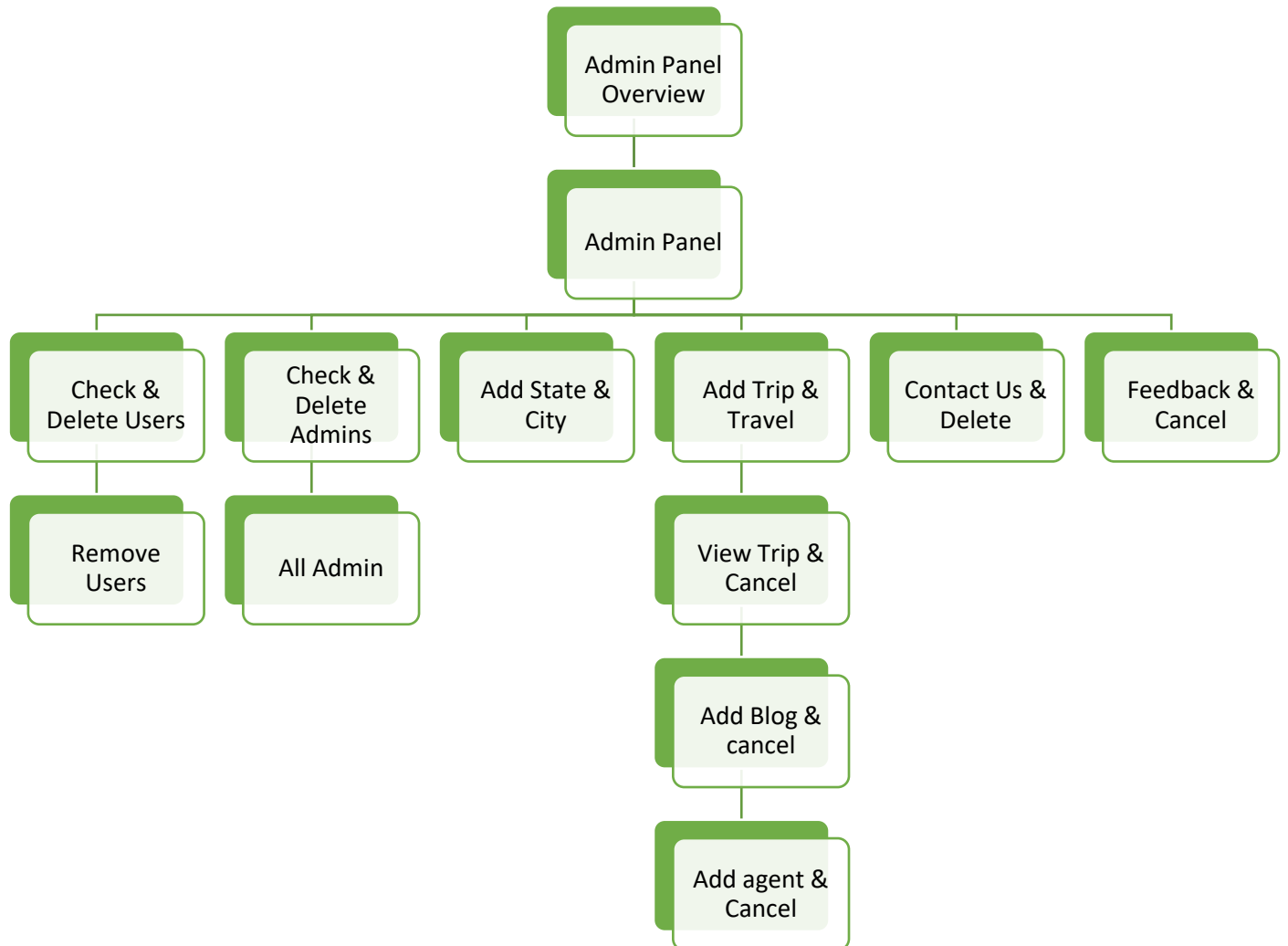
- Refer to the FAQ section in the application.
- Contact support via the contact form or email provided on the website.



## 7. Flowchart:



# Admin Panel Flowchart:



## 8. Project Details

**Database name: “trip\_travel”,  
host: “Local host”**

**Php my Admin:**

[http://localhost/phpmyadmin/index.php?route=/database/structure&db=trip\\_travel](http://localhost/phpmyadmin/index.php?route=/database/structure&db=trip_travel)

### **Login details:**

**Login Email: ubaidsoomro505@gmail.com**

**Password: 123**

**Login url:**

<http://localhost/travel/login/account.php>

### **Admin Login details:**

**Login Username: Ubaid Soomro**

**Password: 123**

**Admin:**

<http://localhost/travel/admin/index.php>

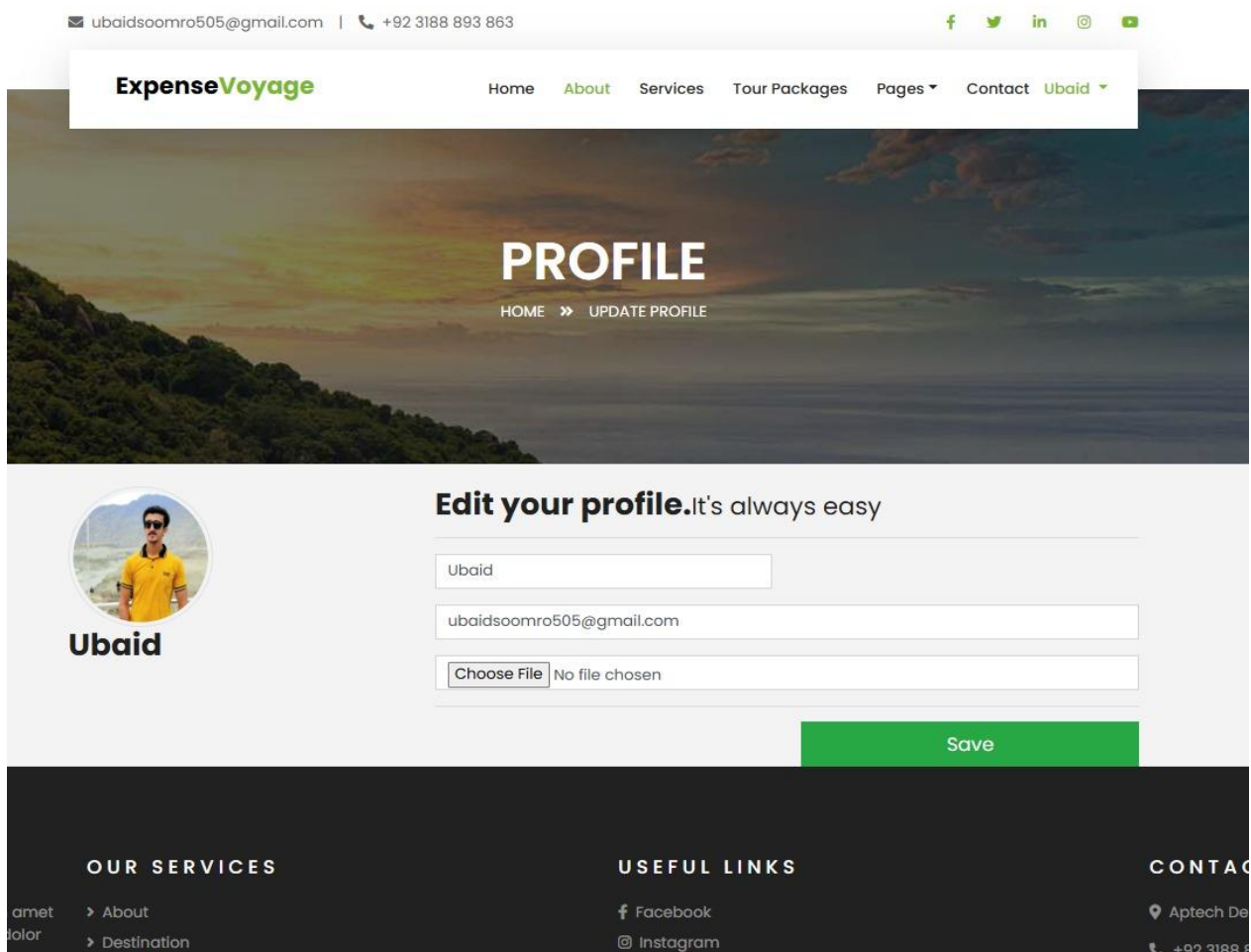
**Home Page url:**

<http://localhost/travel/index.php>

## 9. Website Screenshots.



### Profile:



# About:

✉ ubaldsoomro505@gmail.com | ☎ +92 3188 893 863



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Client Name  
Profession



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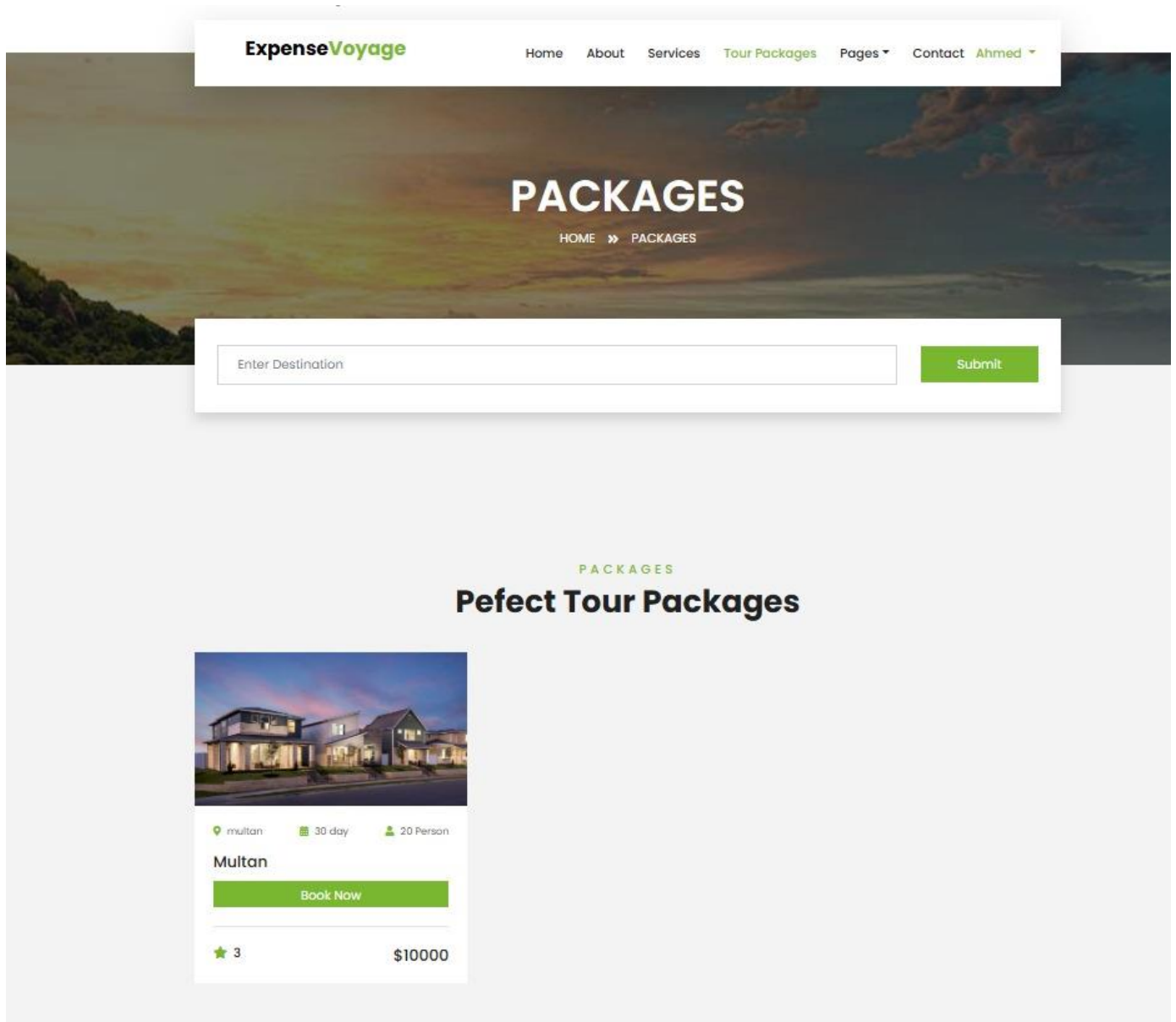
Client Name  
Profession



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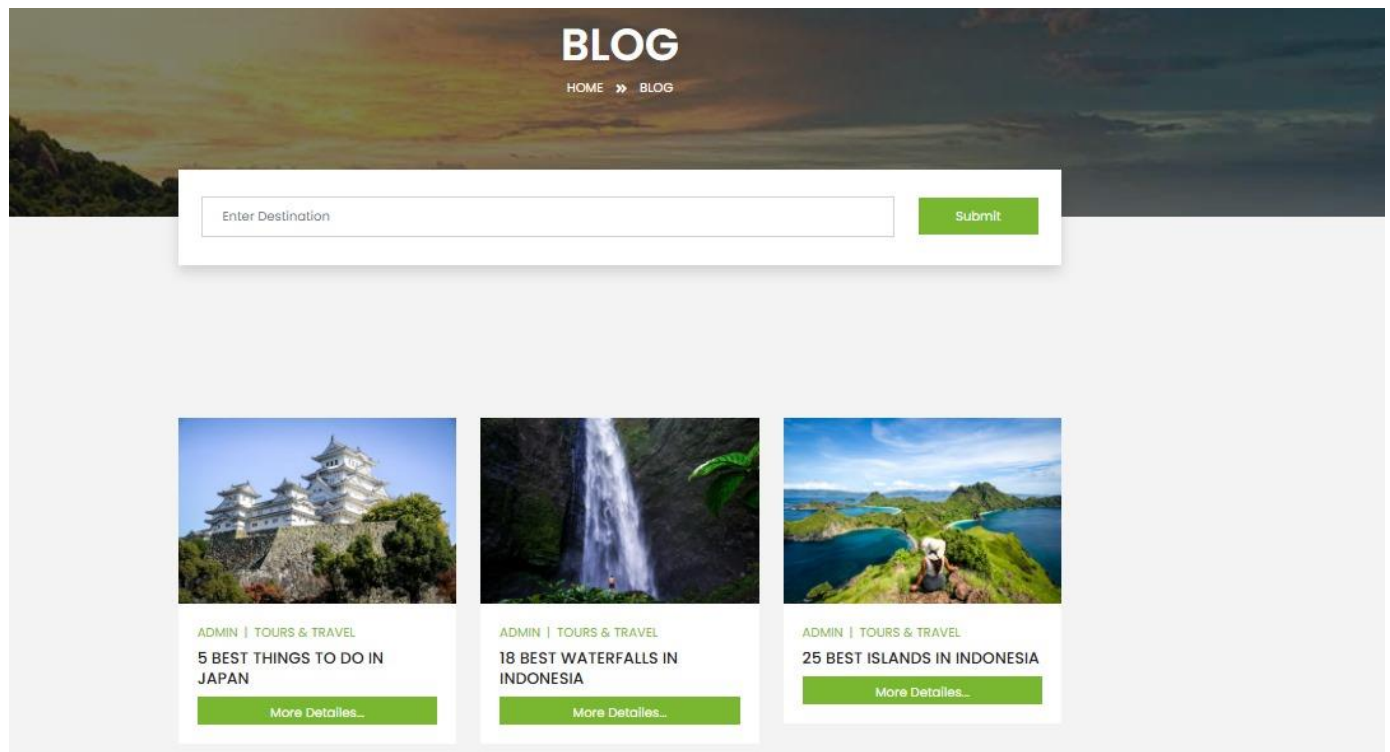
Client Name  
Profession

## Packages Page:

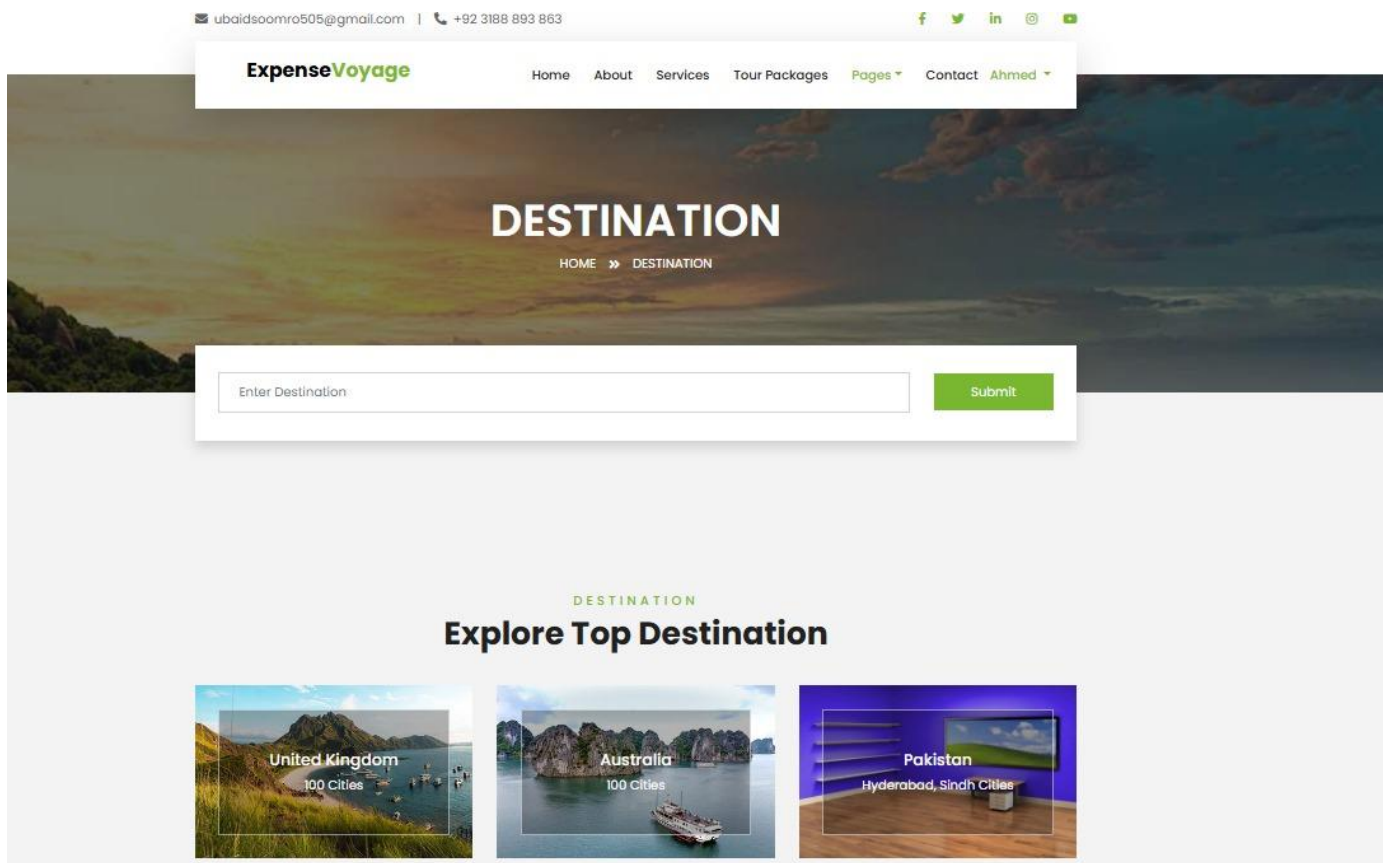




## Blog Page:

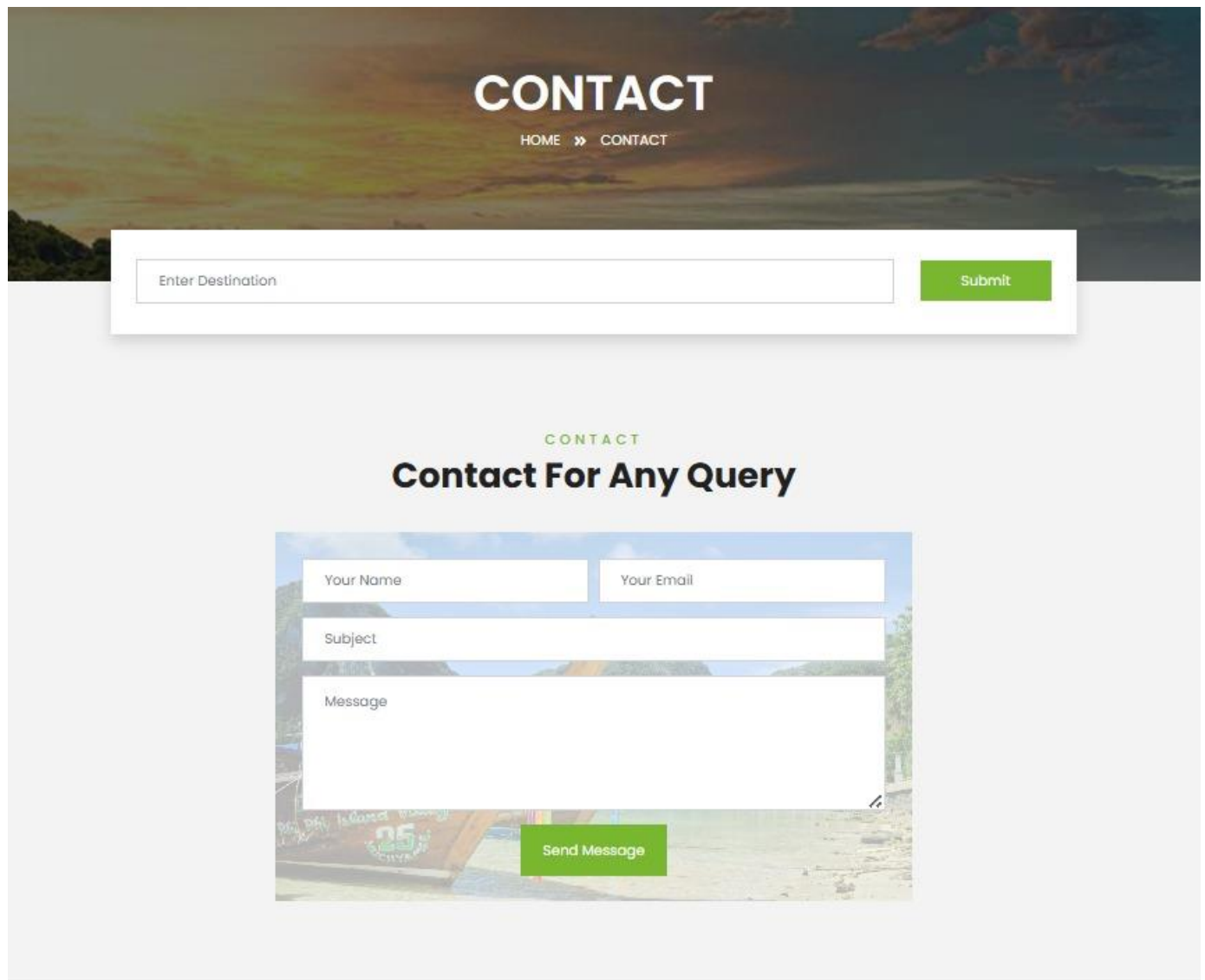


## Destination Page:





## Contact Page:



The screenshot shows a contact page with a header image of a sunset over a body of water. The word "CONTACT" is prominently displayed in the center. Below it, a breadcrumb trail reads "HOME » CONTACT". A search bar with the placeholder text "Enter Destination" and a green "Submit" button is positioned below the header. The main content area features the word "CONTACT" in green, followed by the heading "Contact For Any Query". Below this is a form with four input fields: "Your Name", "Your Email", "Subject", and "Message". A green "Send Message" button is located at the bottom right of the form.

CONTACT

HOME » CONTACT

Enter Destination

Submit

CONTACT

Contact For Any Query

Your Name

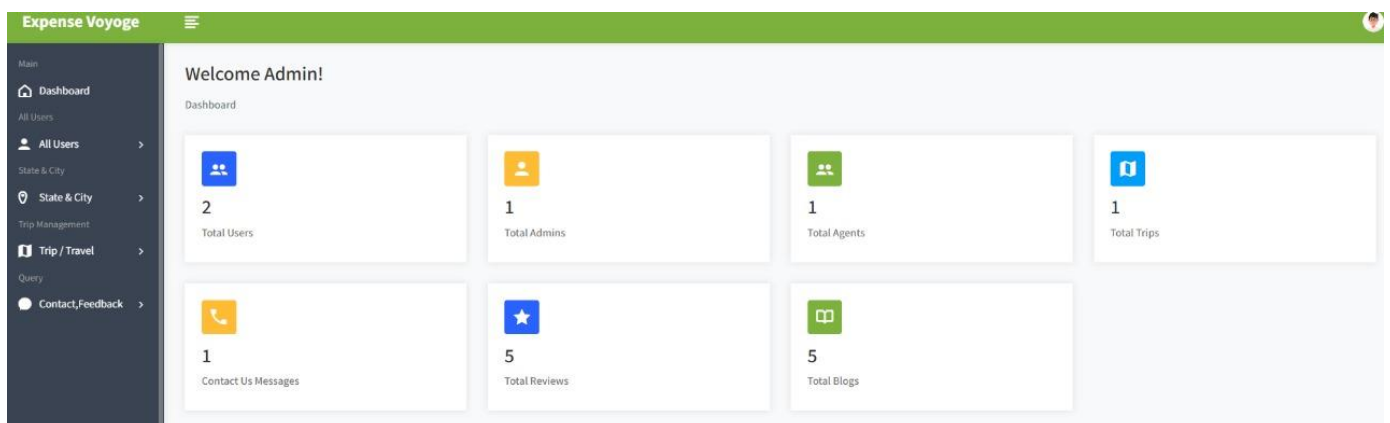
Your Email

Subject

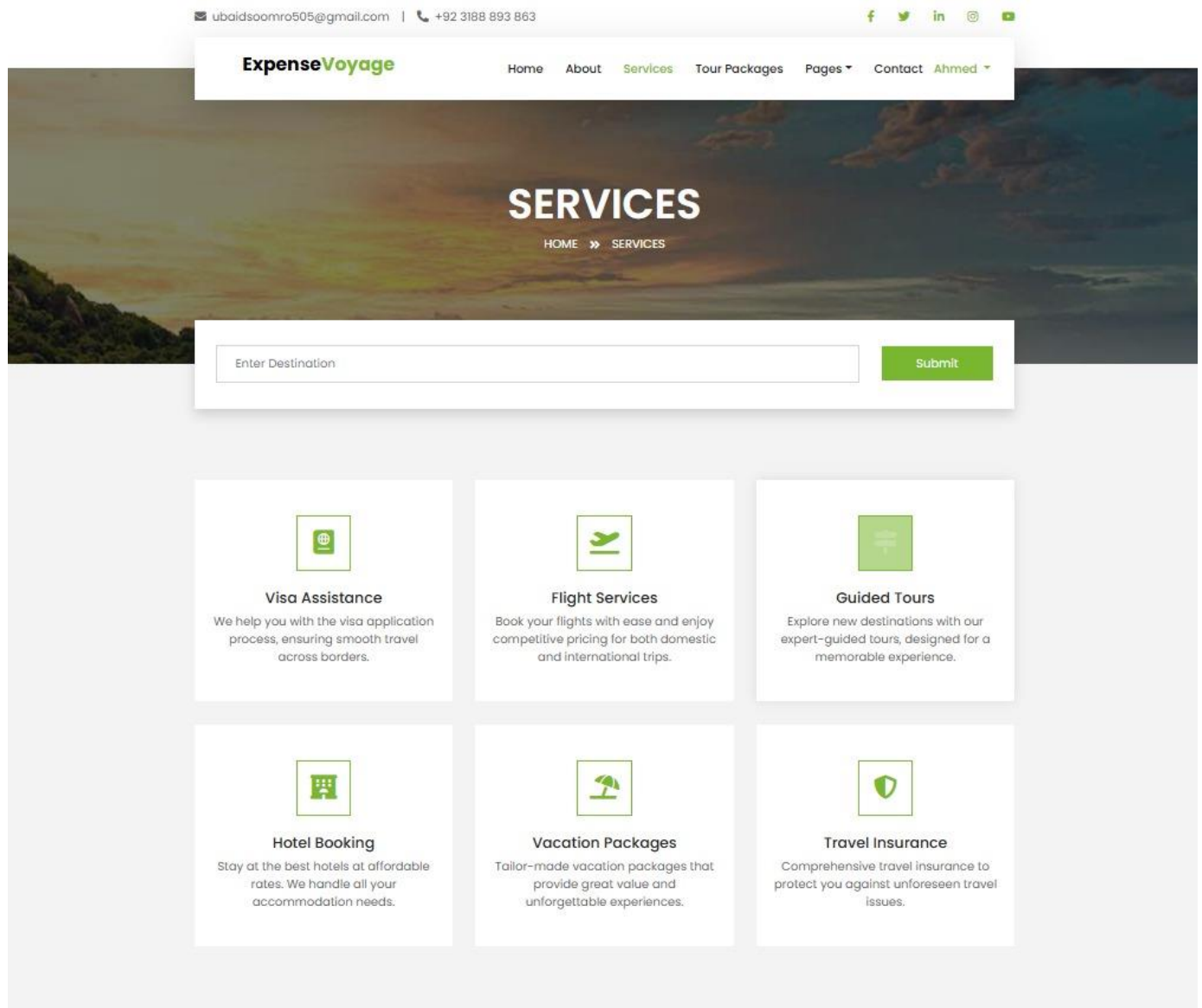
Message

Send Message

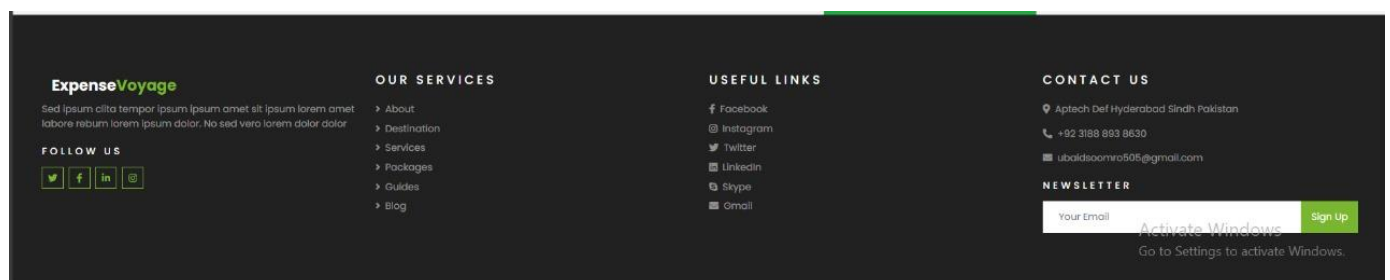
## Main Admin Dashboard Page:



# Services Page:




## Footer:




# Explore Top Destination Page:

DESTINATION


Explore Top Destination



United Kingdom  
100 Cities




Australia  
100 Cities



South Africa  
100 Cities


SERVICES

Tours & Travel Services




Travel Guide

Justo sit justo eos amet tempor amet  
clita amet ipsum eos elitr. Amet  
lorem est amet labore



Ticket Booking

Justo sit justo eos amet tempor amet  
clita amet ipsum eos elitr. Amet  
lorem est amet labore



Hotel Booking

Justo sit justo eos amet tempor amet  
clita amet ipsum eos elitr. Amet  
lorem est amet labore

# Booking Page:

ubaldscomro505@gmail.com | +62 3188 993 883

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Return Date

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