SOFTWARE REQUIREMENTS
SPECIFICATION FOR

TOURISM MANAGEMENT SYSTEM

PROBUILDERS

GROUP ASSIGNMENT
IS2106

Table of Contents

Introduction **2**
Purpose 3
Scope 3
Overall Description **4**
Product Perspective 4
Product Functions 4
User Classes and Characteristics 4
Operating Environment 4
Design and Implementation Constraints 4
User Documentation 4
Assumptions and Dependencies 4
System Features **5**
Signup and Login 5
Holiday Packages 5
Best Deals 5
External Interface Requirements **5**
User Interfaces 5
Hardware Interfaces 5
Software Interfaces 5
Communications Interfaces 5
Other Nonfunctional Requirements **6**
Performance Requirements 6
Security Requirements 6
Quality Attributes 6
Diagrams **7**
User Case Diagram 7
ER Diagram 8
DB Diagram 9

Index No	Name	E-Mail	Phone No
21CIS0234	NKDAI Nanayakkara	nkdainanayakkara@std.foc.sab.ac.lk	0763537981
21CIS0006	RMSC Wijerathne	rmscwijerathna@std.foc.sab.ac.lk	0772174920
21CIS0097	UCM Vijayapala	ucmvijayapala@std.foc.sab.ac.lk	0743575740

Introduction

Purpose

The purpose of this document is to provide a detailed description of the requirements for the TMS. It serves as a guideline for the development team to create a system that meets the needs of its users and adheres to technical standards.

Scope

The TMS will allow users to:

- Register and manage their profiles.
- Browse and select holiday packages.
- Access promotional deals.
- Provide feedback.
- View agency information and contact details.

The system will incorporate cloud technology for scalability, ensure high security for user data, provide flexibility in package selection, and reduce the time needed for planning and booking tours.

Overall Description

Product Perspective

The TMS is a standalone system designed to be used over the Internet. It interfaces with a MySQL database for data storage and runs on a typical LAMP (Linux, Apache, MySQL, PHP) stack environment. The system aims to replace existing manual operations and paperwork with a streamlined, efficient online platform.

Product Functions

- User Registration: Allows new users to register by providing personal details.
- User Login: Authentication mechanism for returning users.
- Holiday Packages: Allows users to select packages based on various parameters.
- Best Deals: Special pricing and offers during festive seasons.
- Feedback System: Collects user inputs for service improvement.
- Information Access: Provides details about the agency and contact information.

User Classes and Characteristics

- End Users: Travelers looking to plan and book tours.
- Administrative Users: Travel agency staff managing content, deals, and feedback.
- System Administrators: Technical staff responsible for system maintenance and data security.

Operating Environment

The system will operate over the web and must be compatible with all major browsers such as Google Chrome, Mozilla Firefox, Safari, and Edge. The backend will run on a PHP-supported server with a MySQL database.

Design and Implementation Constraints

- The system is required to handle multiple users simultaneously without performance degradation.
- Security of personal data must be ensured at all times.
- The interface must be user-friendly and accessible even on mobile devices.

User Documentation

User guides, FAQs, and help videos will be provided. Technical documentation will include system setup, API documentation, and maintenance guides.

Assumptions and Dependencies

- It is assumed that users will have basic internet literacy.
- System performance is dependent on the underlying server capabilities and internet connection.

System Features

Signup and Login

Description: Users can create a new account using personal information, and log into the system using their credentials.

- The system must validate the email format and check for duplicate emails.
- Passwords must be hashed before storing them in the database.

Holiday Packages

Description: Users can browse various holiday packages and make selections based on their preferences.

Functional Requirements:

- The system must display packages with details like cost, itinerary, and availability.
- Users must be able to filter packages by date, type, and price.

Best Deals

- Description: Promotional deals available during the festive season are highlighted.

Functional Requirements:

- Deals must be prominently displayed on the home page during the applicable period.
- The system should automatically apply discounts at checkout during the promotion period.

External Interface Requirements

User Interfaces

- Web-based UI accessible through browsers.
- Responsive design to accommodate various device sizes.

Hardware Interfaces

- No specific hardware interfaces are required.

Software Interfaces

- Web server: Apache
- Database: MySQL
- Backend Scripting: PHP
- Client-side: HTML, CSS, JavaScript

Communications Interfaces

- HTTPS for secure communications.

Other Nonfunctional Requirements

Performance Requirements

- The system should support up to 10,000 concurrent users without significant performance issues.

Security Requirements

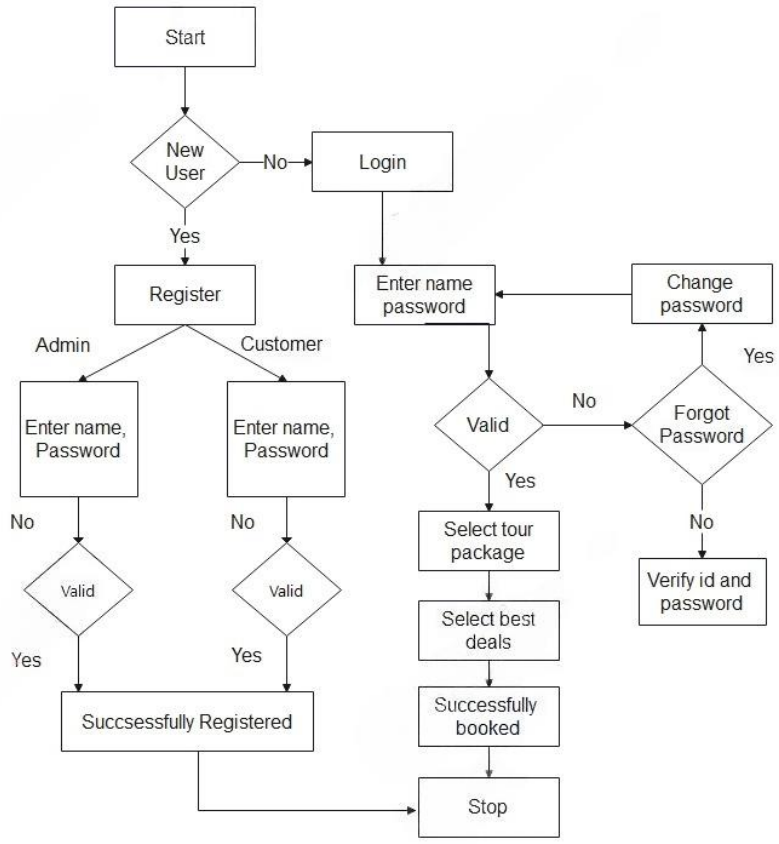
- All data exchanges must be encrypted using SSL/TLS.
- The system must comply with GDPR and other relevant privacy regulations.

Quality Attributes

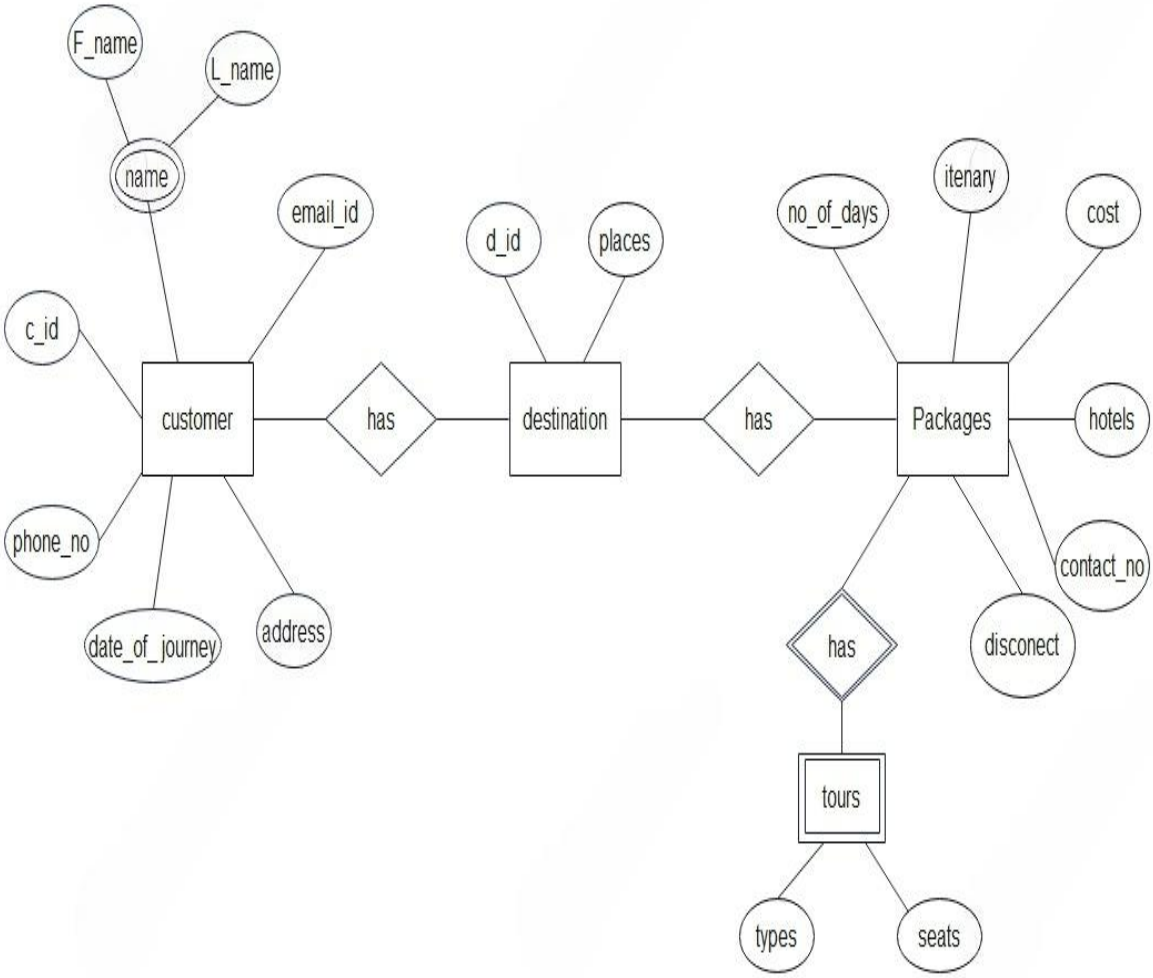
- Scalability: The system should scale with increased load.
- Reliability: The system should have an uptime of 99.9%.
- Maintainability: The code should be well-documented and follow standard design patterns.

Diagrams

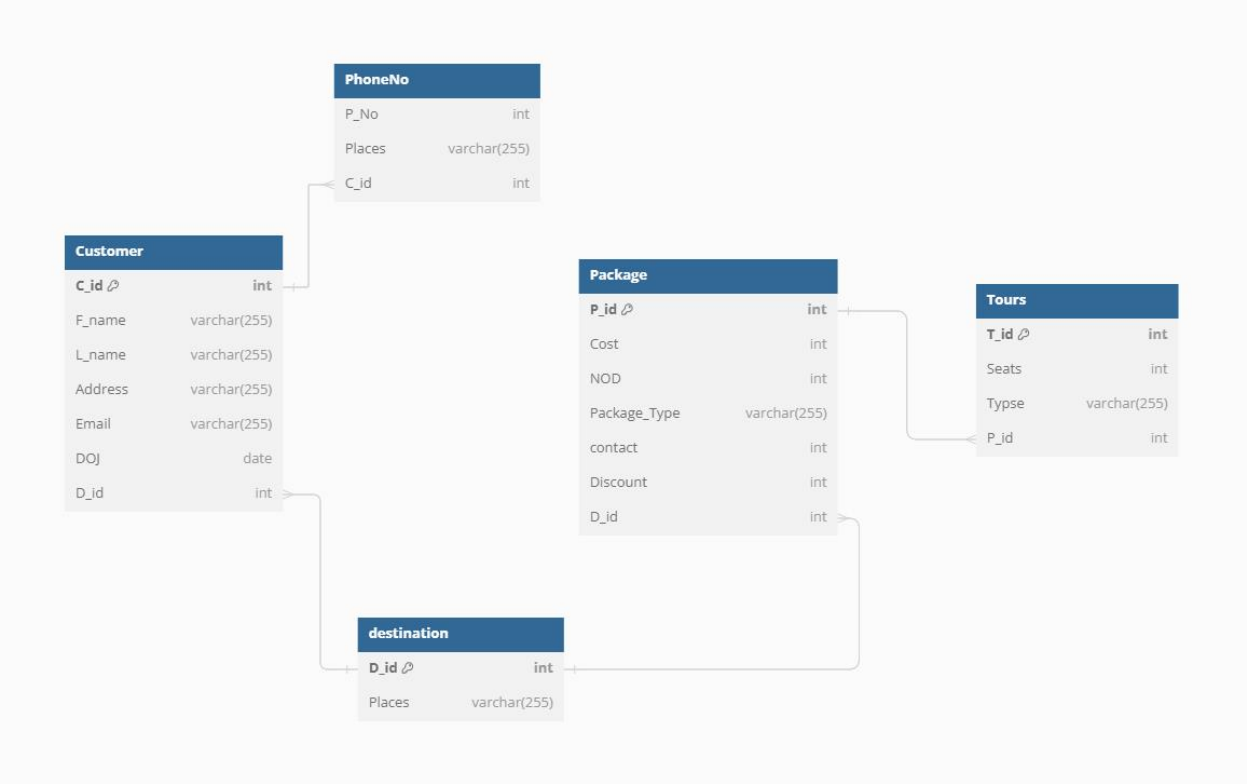
User Case Diagram



ER Diagram


F_name
L_name
name
email_id
c_id
customer
has
destination
has
Packages
d_id
places
no_of_days
itenary
cost
hotels
contact_no
disconect
phone_no
date_of_journey
address
has
tours
types
seats

DB Diagram


PhoneNo
P_No int
Places varchar(255)
C_id int
Customer
C_id int
F_name varchar(255)
L_name varchar(255)
Address varchar(255)
Email varchar(255)
DOJ date
D_id int
Package
P_id int
Cost int
NOD int
Package_Type varchar(255)
contact int
Discount int
D_id int
Tours
T_id int
Seats int
Typse varchar(255)
P_id int
destination
D_id int
Places varchar(255)

UI/UX Design

We used Figma tool to create the design of UI/UX. Here is the link to view our Figma project

https://www.figma.com/file/ODxRuhMY2VL5V1W2Xju3Iq/TOURISM-MANAGEMENT--SYSTEM?type=design&node-id=0%3A1&mode=design&t=V55pnvJPFJYSkgzj-1