Cognizant

Tourism Management System Technical Design Document

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1.0 Introduction

1.1 Purpose of this document

The purpose of this high level design document is to define the detailed design for all the components of the Tourism Management System (TMS) Project specified in the Use case document. All the low-level components, interfaces and integrations are in this document.

1.2 Project Overview

This project aims to build a website and database for managing an organization's Tourism Management System which has three personnel, Admin, Manager and User. The system provides interfaces for all the users, managers and admin to manage and make use of the service.

1.3 Intended Audience

The intended audience for this document are

- Developers, testers, other associates in the project
- Technical lead, Scrum Master
- Product Owner

2.0 Solution Summary

2.1 Scope

This subsection shall state the scope of this detailed design document

- Create and maintain user information.
- Manage components of the system.

2.2 Assumptions

- Once the application is built, the AMS will manually load the lists into the system.
- There will be no concurrent users for the application.
- Any changes to the design mentioned in the Product Backlog(PB) would be taken as a Change Request.



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2.3 Dependencies

- Eclipse IDE is used for developing java applications.
- Maven is for software project management and comprehension tool.
- Junit4 is for unit testing framework and important in the improvement of test driven development.
- MySQL Database is used for the database operations.
- Tomcat Server is used to execute java servlets and render web pages.
- Web servlets, jstl, jsp
- CSS and HTML for designing the web page

2.4 Risks

An element of risk may be observed if multiple users of same or different domain try to access the page and it may rarely redirect to the same page

3.0 Use Case Realization

3.1 User Login

3.1.1 Functional Requirement

Login Page checks the authentication of the user and based on his role, directs the user to the respective page. User is provided with tourism packages, inquiry posts, raising complaints if any problem is faced and choose and pay for the packages that they desire.

3.1.2 UI Validations

- User Id and Password fields are mandatory.
- Invalid User Id and / or password should not allow the user to get into the system



3.1.3 UI Controls

#	UI Component	Type	Name	Details
1	Admin Id	Label	userName	
2	Manager Id	Label	empId	
3	User Id	Label	User_id	
4	Login	Button	Login	Button to submit login details and login to system
5	Home	Button	Home	

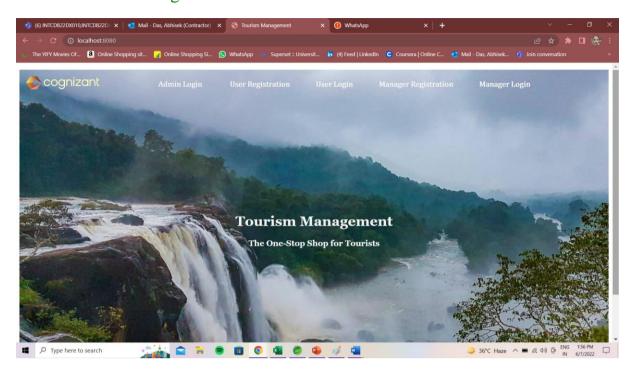
3.1.4 UI Methods Definition

Method Name	Details
LoginButton_Click	Allows the user to login into the portal.
HomeButton_Click	Allows the user to be redirected to homepage

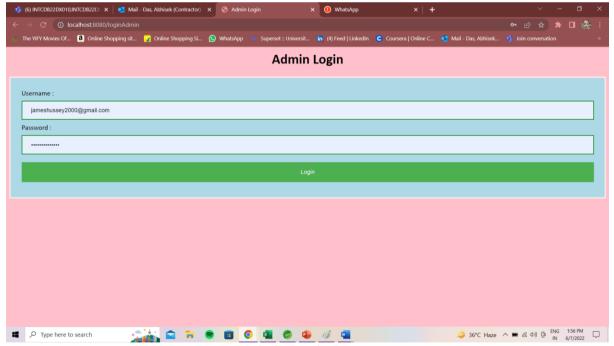


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3.1.5 UI Design



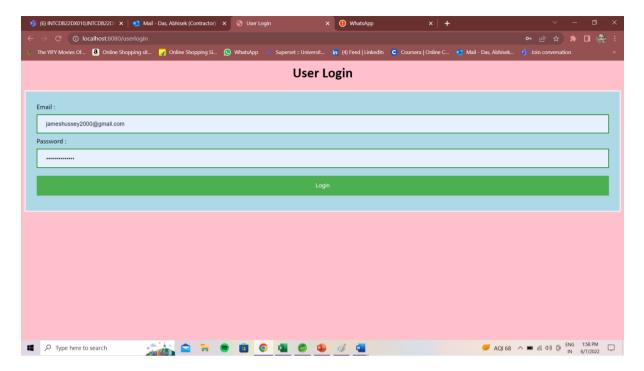
Welcome Page



Admin Login Page



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User Login Page

3.2 User Registration

3.2.1 Functional Requirement

From the login page if the user selects the register option, the respective registration form for user will appear in a new page for the selected option. Users will be able to fill in the details and register.

3.2.2 UI Validations

- All the fields are necessary.
- Invalid entries and empty fields are not accepted.

3.2.3 UI Controls

#	UI Component	Type	Name	Details
1	First Name	Label	firstName	To enter first name
2	Last Name	Label	lastName	To enter last name



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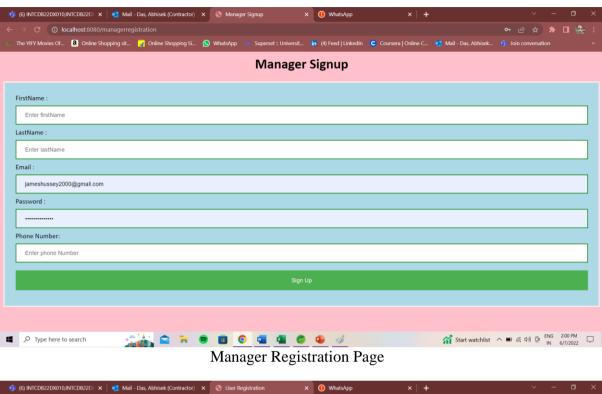
3	DOB	Label	DOB	To enter date of birth
4	Gender	Label	Gender	To enter the gender
5	Contact Number	Label	Contact No	To enter contact number
6	Password	Label	Password	To enter the password
7	Confirm Password	Label	Confirm Password	To enter confirm password
15	Submit	Button	Submit	Button to submit details entered

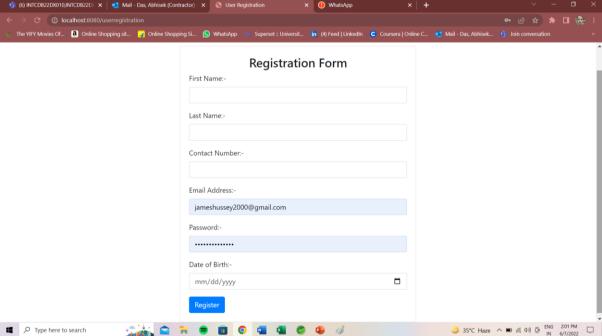
3.2.4 UI Method Definition

Method Name	Details	
Register_Click	Allows to register the entered details.	
ClearButton_Click	Clears the details entered by the user.	



3.2.5 UI Design





User Registration Page



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3.3 Admin Tasks

3.3.1 Functional Requirement

Admin Dashboard contains all the buttons for admin to perform different tasks like add packages, managing and maintaining them, which redirect to respective pages. The admin is the soul of the system who creates the packages that users might be interested in and the admin decides the price and all the other attributes for each packages.

3.3.2 UI Validations

- Fields in add and edit packages, package details are marked as well as their availability.
- If mandatory fields are empty or invalid data is filled, an error message is given.

3.3.3 UI Controls

#	UI Component	Type	Name	Details
1	Add packages	Button	AddPackages	Adds planes to the database
2	Add package details	Button	Addpackagedetails	Adds flight plan to the database
3	View Packages	Button	viewpackages	Adds hangar to the database
4	Modify Packages	Button	AddPilotSchedule	Adds the pilot schedule
5	Modify Payment Methods	Button	modifypaymentmethods	Registration request for manager

3.3.4 UI Methods Definition

Method Name	Details
AddPackages	Adds packages to the database



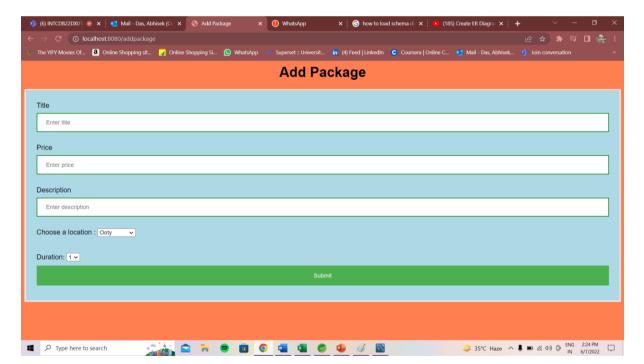
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3.3.5 UI Design





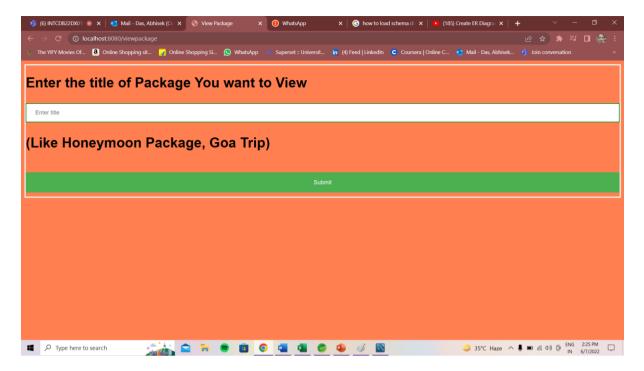
Admin Portal



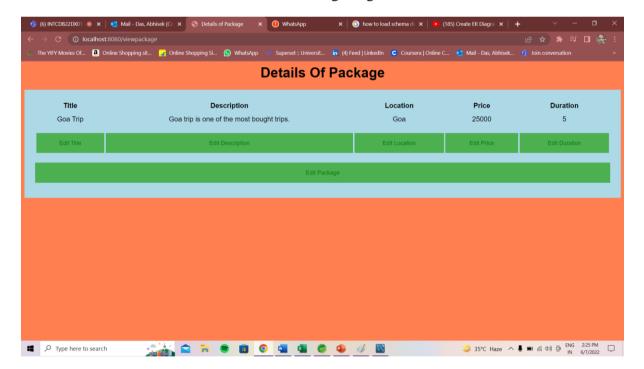
Add Packages Page



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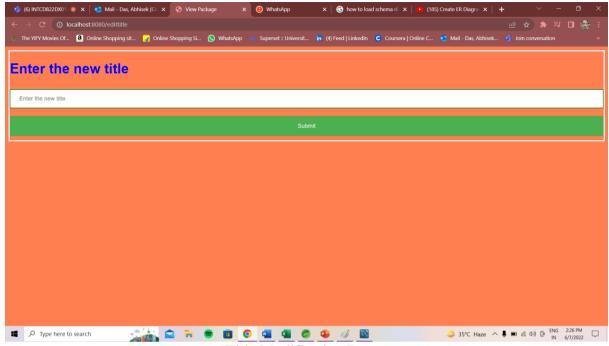


View Package Page

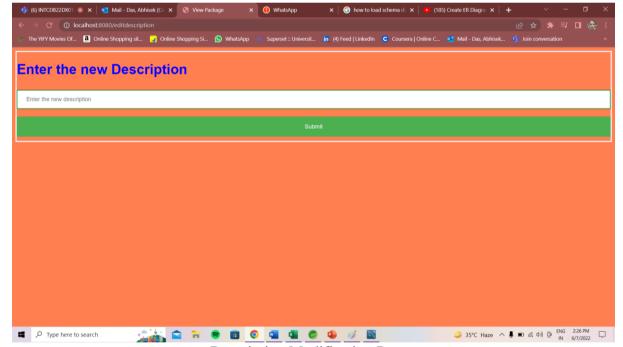


Modification Page for Packages



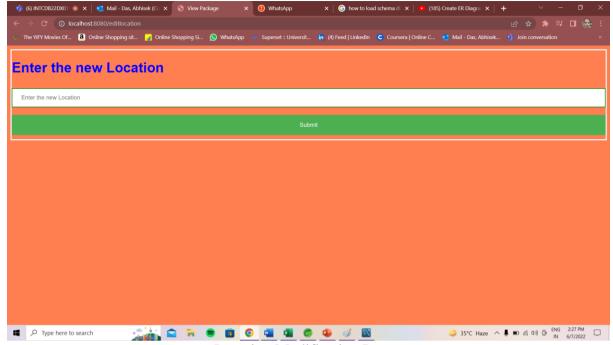


Title Modification Page

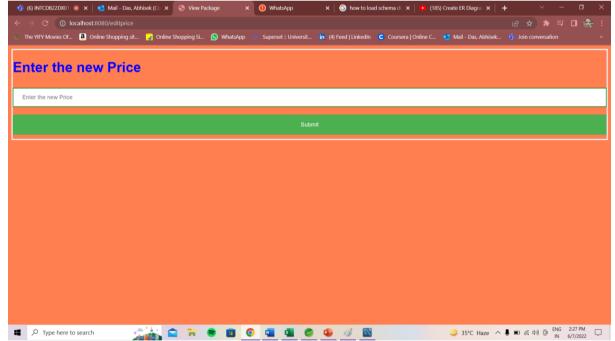


Description Modification Page



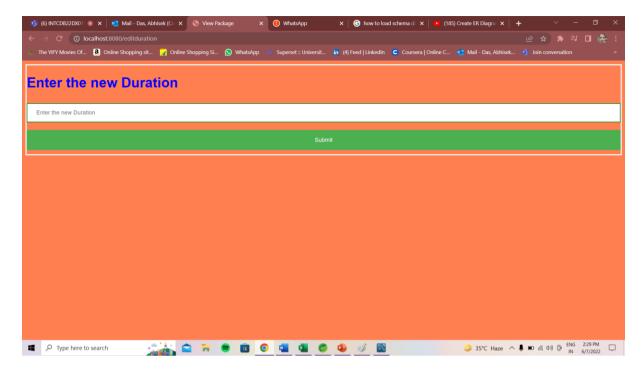


Location Modification Page



Price Modification Page





Duration Modification Page

3.4 Manager Tasks

3.4.1 Functional Requirement

Manager Dashboard is all about managing user problems. The manager manages the inquiries that users post in the portal as well as marks the inquiries "done" after solving them. The manager also responds to user complains if any registered user paid for any tour package and faced any problem during the payment or after the payment. So, manager performs only tasks related to the welfare of the users.

3.4.2 UI Validations

- Text boxes for selecting User Queries, User Complaints and Feedback Forms.
- Date fields can be left empty.

3.4.3 UI Controls

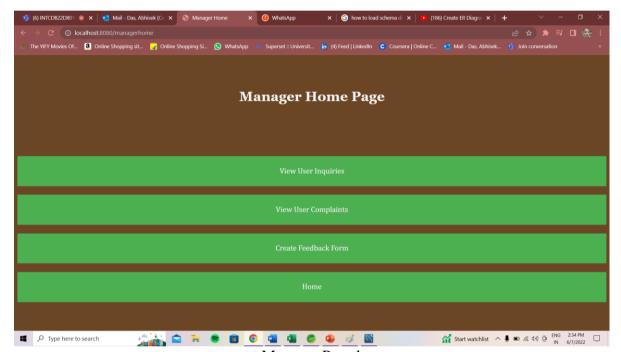
#	UI Component	Type	Name	Details
1	View User Queries	Button	viewqueries	Displays the queries.



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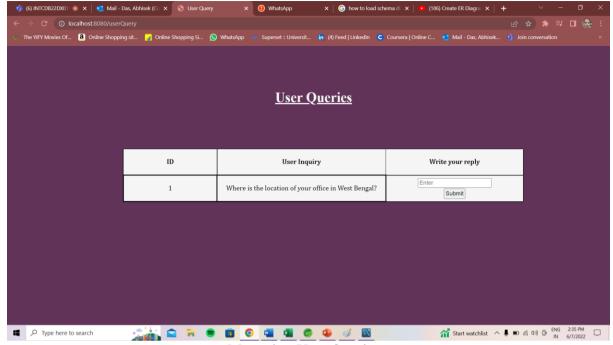
2	View User Complaints	Button	viewusercomplains	Displays the complains
3	Update User Queries	Button	updateinquiry	Updates the user queries with replies
4	Create Feedback Forms for Users	Button	createfeedback	Display the feedback form to users

3.4.4 UI Design

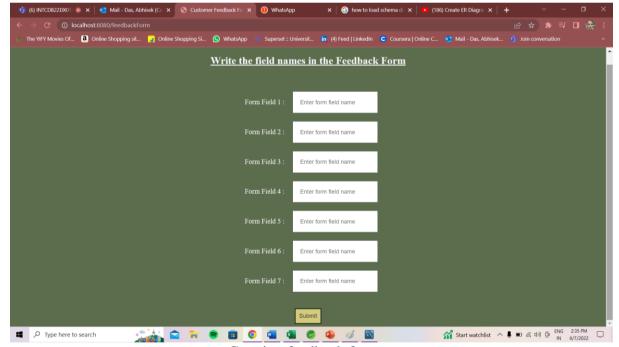


Manager Portal





Managing User Queries



Creating feedback forms

3.5 User Tasks

3.5.1 Functional Requirement

User home page contains different packages that the user wants to add to their cart and pay for them. The home page also contains links to User queries or inquiries and user complains along with the feedback form that is created by the manager.



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3.5.2 UI Validations

- All the fields are necessary.
- Invalid entries and empty fields are not accepted.

3.5.3 UI Controls

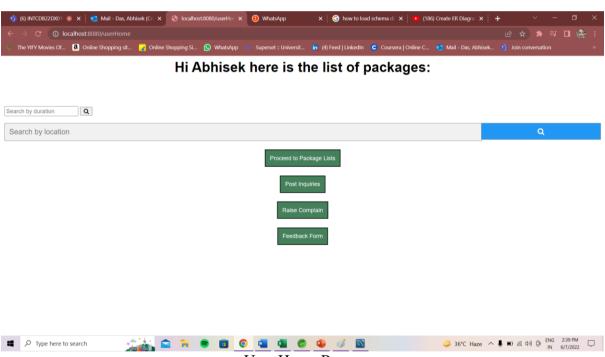
#	UI Component	Type	Name	Details
1	Update package plan	Button	updatepackageplan	Redirects to flight plan page
2	Request reschedule	Button	requestreschedule	Redirects to the request page
3	Update pre-tour checklist	Button	Updatepre-pretour	Redirects to pre-flight checklist page
4	Update post-tour checklist	Button	Update post-posttour	Redirects to post-flight checklist page
5	View schedule	Button	Viewschedule	Redirects to pilot schedule page
7	Back	Button	Back	Takes to the previous page
8	Home	Button	Home	Takes back to home page
9	Logout	Button	Logout	Logout of the system.
10	Register	Button	Register	Enters the data to the database
11	Clear	Button	Clear	Clear the data entered in the web page
12	Update	Button	Update	Updates the page with the data
13	User id	Label	user Id	Takes the pilot id



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14	Original departure date	Label	Original Departure Date	Takes the original departure date
15	Request departure date	Label	Request Departure Date	Takes the request departure date
16	Original destination date	Label	Original Destination Date	Takes original destination date
17	Request destination date	Label	Request Destination Date	Takes request destination date

3.5.4 UI Design

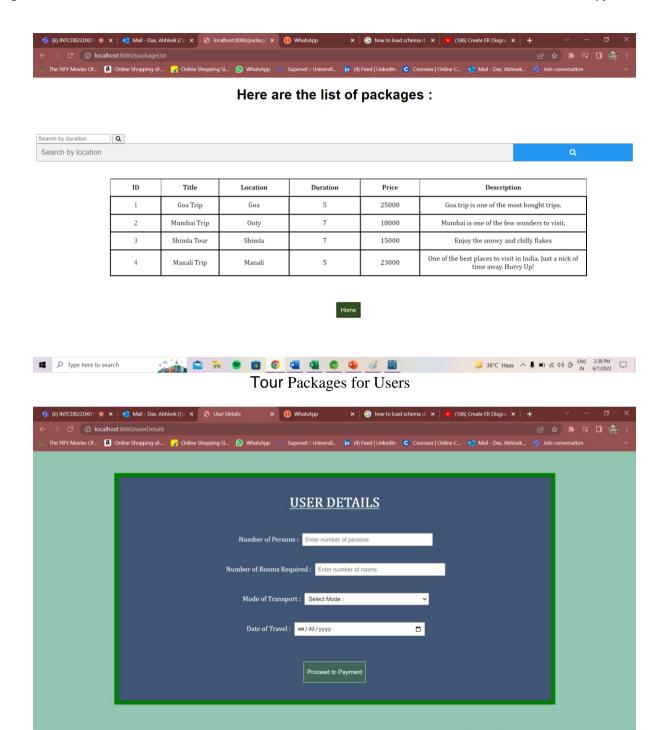


User Home Page



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Type here to search

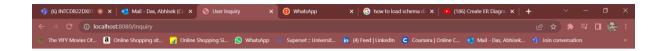


Payment Form for Users



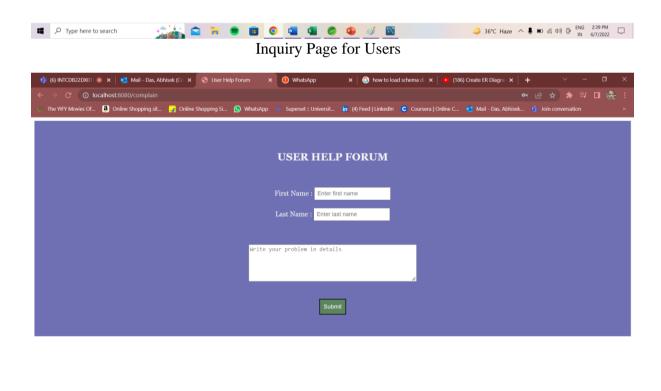
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Type here to search



Post your Inquiries to the Manager



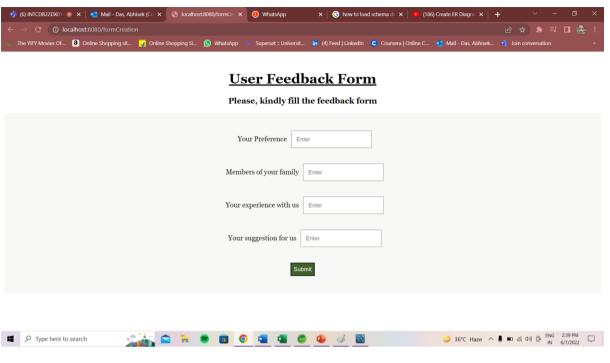


User Raise Complaint Form

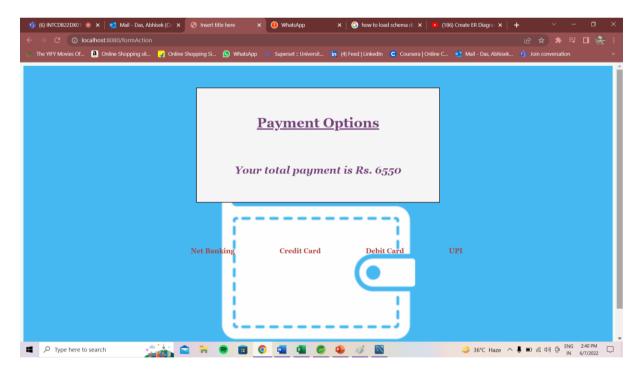


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User Feedback Form



User Payment Options



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4.0 <u>Database Design</u>

4.1 Data Model

The following is an overall view of the tables in the database :-

4.2 Tables Structure

Following tables in this topic will show the various fields used throughout this project at various levels

4.2.1 Manager

Field Name	Field Type	Data Type	Mandatory	Possible Values
Manager ID	Text(10)	Numeric	Yes	System Generated
First Name	Text(50)	Alphabetic	Yes	-
Last Name	Text(50)	Alphabetic	Yes	-
Gender	Drop Down	NA	Yes	Male, Female
DoB	Text(10)	Numeric	Yes	-
Contact Number	Text(10)	Numeric	Yes	-
Password	Text(15)	Alphanumeri c	Yes	-
Email ID	Text(50)	Email	Yes	-
Confirm Password	Text(15)	Alphanumeri c	Yes	-

4.2.2 Admin

Field Name	Field Type	Data Type	Mandatory	Possible Values
Admin ID	Text(10)	Alphabetic	Yes	-
Password	Text(15)	Alphanumeric	Yes	-



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1.1.1 Manager

Field Name	Field Type	Data Type	Mandatory	Possible Values
User ID	Text(10)	Numeric	Yes	System Generated
First Name	Text(50)	Alphabetic	Yes	-
Last Name	Text(50)	Alphabetic	Yes	-
Gender	Drop Down	NA	Yes	Male, Female
DoB	Text(10)	Numeric	Yes	-
Contact Number	Text(10)	Numeric	Yes	-
Password	Text(15)	Alphanumeric	Yes	-

1.1.1 User Inquiries

Field Name	Field Type	Data Type	Mandatory	Possible Values
User Queries	Text(10)	Alphabetic	Yes	-
Manager Reply	Text(15)	Alphabetic	Yes	-

1.1.1 User Complaints

Field Name	Field Type	Data Type	Mandatory	Possible Values
User Complaints	Text(10)	Alphabetic	Yes	-
User Name	Text(15)	Alphabetic	Yes	-



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2.0 Appendices

2.1 Glossary

Acronyms	Definitions
TMS	Tourism Management System
PB	Product Backlog

