Visvesvaraya Technological University
BELGAUM, KARNATAKA
ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ
ಬೆಳಗಾವಿ, ಕರ್ನಾಟಕ

DBMS MINI PROJECT REPORT ON

"TRAVEL AND TOURISM MANAGEMENT SYSTEM"

Mini Project submitted in partial fulfillment of the

Requirement for the 5th semester of

Computer Science and Engineering

Submitted by:

Name	USN
TEJASHWINI R H	4JN21CS172
VAIBHAV J B	4JN21CS179
VIDYA R	4JN21CS184
YUKTHA B	4JN21CS191

Under the guidance of

Mrs Namitha.M.V,M.tech,PhD
Asst. Prof., Dept. of CS&E
JNNCE, SHIMOGA

Mr Devaraj.F.V,M.Tech,PhD
Asst. Prof., Dept. of CS&E
JNNCE, SHIMOGA

Department of Computer Science & Engineering
J N N College of Engineering
Shivamogga - 577 204

MARCH 2024

National Education Society®

Jawaharlal Nehru New College of Engineering

Department of Computer Science & Engineering

CERTIFICATE

This is to certify that the DBMS – MINI project entitled

"TRAVEL AND TOURISM MANAGEMENT SYSTEM"

Submitted by

TEJASHWINI R H	4JN21CS172
VAIBHAV J B	4JN21CS179
VIDYA R	4JN21CS184
YUKTHA B	4JN21CS191

Student of 5th semester B.E. CSE, in partial fulfilment of the requirement for the award of degree of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the year 2023-24

Signature of Guides

Mrs Namitha.M.V,M.tech,PhD
Associate Professor, Dept. of CS&E,
JNNCE, Shimoga.

Mr Devaraj.F.V,M.Tech,PhD
Associate Professor, Dept of CS&E,
JNNCE, Shimoga.

Signature of HOD

Dr. Jalesh Kumar,B.E.,M.Tech,PhD,
Prof. & Head, Dept. of CS&E

Examiners: 1. _____ 2. _____

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 liable and pleasant tourism so that people can enjoy their vacations at their favourite places. This way also benefits develop tourism with different cultures so that they enrich the tourism experience and build variety. 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. This system also gives tours-related data like which bus can go to certain places and which are tourist attractions, cities, and provinces. 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.

A customer demonstrates that it is extremely complicated to search for the multiple of the packages as for significant websites, contact, and communication with the travel agents and more options that exists in it which is a passive method and time-consuming. This project will assist travellers to recommend the best Travel Package among all the packages relevant information such as image, hotel facility, Google map facility, transport facility and description about the places where they want to visit. The tour and travels management system will be helpful for tourism.

ACKNOWLEDGEMENT

On presenting the Database Management Systems Mini Project report on **"TRAVEL AND TOURISM MANAGEMENT SYSTEM"**, I feel great to express my humble feelings of thanks to all those who have helped me directly or indirectly in the successful completion of the project work.

We would like to thank our respected guides **Mrs Namitha.M.V,M.tech,PhD** Associate Professor, Dept. of CS&E, and **Mr Devaraj.F.V,M.Tech,PhD** Associate Professor, Dept. of CS&E, who has helped me a lot in completing this task, for their continuous encouragement and guidance throughout the project work.

We would like to thank **Dr. Jalesh Kumar**, Professor and Head, Dept. of CSE, JNNCE Shivamogga and **Dr. Y. Vijay Kumar**, The principal, JNNCE, Shivamogga for all their support and encouragement.

We are grateful to **Department of Computer Science and Engineering** and our institution **Jawaharlal Nehru New College of Engineering** and for imparting me the knowledge with which we can do our best.

Finally, we also would like to thank the whole teaching and non-teaching staff of Computer Science and Engineering Dept.

Thanking you all,

TEJASHWINI R H (4JN21CS172)

VAIBHAV J B (4JN21CS179)

VIDYA R (4JN21CS184)

YUKTHA B (4JN21CS191)

CONTENTS

LIST OF FIGURES

LIST OF TABLES

Chapter 1
INTRODUCTION

1.1 Overview of DBMS

A Database Management system, or DBMS is a software designed to assist in maintaining and utilizing large collection of data, and the need of such systems, as well as their use, is growing rapidly. The alternative to using a DBMS is to use ad hoc approaches that do not carry over from one applications to another.

The area of database management systems is a microcosm of computer science in general. The issues addressed and the techniques used span a wide spectrum, including languages, object-orientation and other programming paradigms, compilation, operating systems, concurrent programming, data structures, algorithms, theory, parallel and distributed systems user interfaces, expert system and artificial intelligence, statistical techniques, and dynamic programming.

1.2 History

Database Management Systems (DBMS) have been around for several decades, and their history can be traced back to the early 1960s. In the early days, computer systems were designed to manage data in a hierarchical or navigational manner, where data was stored in a tree-like structure. This method of storing data was inefficient and difficult to use, as it required a lot of manual effort to access and manage the data.

In the late 1960s, The first general-purpose DBMS, designed by **Charles Bachman**, was called the **Integrated Data Store (IDS)** which was based on network data model for which he was received the **Turing Award** (The most prestigious award which is equivalent to Nobel prize in the field of Computer Science.).

In the late 1970s, **Mr Edgar Codd** proposed a new data representation framework called the **Relational Database Model**. Mr Edgar Codd won the 1981 Turing Award for his seminal work. This model was based on the concept of a table, with rows representing individual records and columns representing individual fields within those records. The relational model allowed for more efficient storage and retrieval of data and was easier to use than the hierarchical or navigational models.

In the late 1980s IBM developed the **Structured Query Language (SQL)** for relational databases, as a part of R project. This system was designed to manage large amounts of data and was used primarily in corporate and government applications. SQL was adopted by the American National Standards Institute (ANSI) and International Organization for Standardization (ISO).

In the 1980s, several new DBMS products were introduced, including Oracle, Sybase, and Microsoft SQL Server. These systems were designed to be more user-friendly and to support more advanced data modelling and query languages.

In the 1990s, **object-oriented DBMS (OODBMS)** emerged, which were designed to store and manage complex data structures, such as multimedia and other types of non-traditional data. These systems were initially popular in research and academic environments, but their adoption was limited in the commercial sector.

In the 1991, **Microsoft ships MS access**, a personal DBMS and that displaces all other personal DBMS products.

In the 1997, **XML** applied to database processing. Many vendors begin to integrate XML into DBMS products.

In the 2000s, web-based applications and cloud computing became more popular, and DBMS systems began to adapt to these new technologies. New DBMS systems were developed to support distributed and web-based applications, including NoSQL databases such as MongoDB and Cassandra.

Today, DBMS systems continue to evolve, with an emphasis on scalability, performance, and support for cloud-based applications. Some of the most popular DBMS systems in use today include Oracle, Microsoft SQL Server, MySQL, PostgreSQL, and MongoDB.

1.3 Applications of DBMS

Nowadays DBMS are used in almost all the areas ranges from science, engineering, medicine, business, industry, government, art, entertainment, education and training.

Railway Reservation System − The railway reservation system database plays a very important role by keeping record of ticket booking, train's departure time and arrival status and also gives information regarding train late to people through the database.

Library Management System − Now-a-days it's become easy in the library to track each book and maintain it because of the database. This happens because there are thousands of books in the library. It is very difficult to keep a record of all books in a copy or register. Now DBMS used to maintain all the information related to book issue dates, name of the book, author and availability of the book.

Banking − Banking is one of the main applications of databases. We all know there will be a thousand transactions through banks daily and we are doing this without going to the bank. This is all possible just because of DBMS that manages all the bank transactions.

Universities and colleges − Now-a-days examinations are done online. So, the universities and colleges are maintaining DBMS to store Student's registrations details, results, courses and grade all the information in the database. For example, telecommunications. Without DBMS there is no telecommunication company. DBMS is most useful to these companies to store the call details and monthly postpaid bills.

Credit card transactions − The purchase of items and transactions of credit cards are made possible only by DBMS. A credit card holder has to know the importance of their information that all are secured through DBMS.

Social Media Sites − By filling the required details we are able to access social media platforms. Many users sign up daily on social websites such as Facebook, Pinterest and Instagram. All the information related to the users are stored and maintained with the help of DBMS.

Finance − Now-a-days there are lots of things to do with finance like storing sales, holding information and finance statement management etc. these all can be done with database systems.

Military − In military areas the DBMS is playing a vital role. Military keeps records of soldiers and it has so many files that should be kept secure and safe. DBMS provides a high security to military information.

Online Shopping − Now-a-days we all do Online shopping without wasting the time by going shopping with the help of DBMS. The products are added and sold only with the help of DBMS like Purchase information, invoice bills and payment.

1.4 Project Initiation Planning

This project is a consequence of our musings and difficult work. At the absolute starting point, we had a few thoughts for our final project. From those few thoughts, we pick the travel industry area for our project. We had some past data voyaging organizations. Subsequent to talking with the authority and our supervisor we chose to do this specific project. At that point, we began our task. Our supervisor had given appropriate guidance.

1.5 Objective of the project

This project has a few goals. The main destinations are given underneath:

1. To build up a system that gives information identifying specific places.
2. To generally helpful for the travellers having no arrangement concerning the spots they need to go to.
3. To efficiently access the proper information and make essential travel adaptations.
4. To give client's mastery of the visit, which can work with the new clients to go to the places.

1.6 Expected Outcomes

This System will present to connect directly client and agents within the internet. It provides facilities to change and delete traveller data as well as client data. It implements a feedback tool for travelers. It stores some social media sections. It gives knowledge about the inbound and outbound tour packages. It provides maintains & controls the database of tourists' information. It provides displays beautiful vacationer places. It gives a kind of travel co-operations that will sure to match all tourist advantages.

Chapter 2
BACKGROUND

2.1 Introduction

The Travel and Tourism Management System is a web-based application for travel industry organizations. It's very useful who goes on a trip for this 'Travel and Tourism Management' would act an immediate role in preparing the proper tour. It provides the client with the system to access all the features such as events, places, packages, etc. The goal of the system is to help travellers to go to their favourite places and manage hotels easily. It can be utilized for also used for professional tours also a business. Travelers are more attracted to the social heterogeneity of the world. In South Asia, Bangladesh is quite possibly the most excellent nation and there are numerous celebrated traveller places.

2.2 Related to Works

There are some development projects which are associated with the tour and travel sector like Travel Agency, Hotel Management, Tourism Management, etc. Users register, admin login, hotel details, place details, google map, etc. are related to our projects from those tour and travel sectors. Packages details, online bus booking, nearby places, etc. are the unique and main attraction of our project.

2.3 Comparative Analysis

Collecting information is a big challenge. Because through this project people will get information of nearby beautiful places, hotels, bus service, all over the country. Data must be authentic.

2.4 Scope of the Problem

The screen size of different smart devices is a big issue to develop this project. Sometimes we face this problem that for different screen size applications cannot run properly. Some part of the application is unavailable to the user for different screen size.

2.5 Challenges

Data collection of hotels, places, bus service, e-mail etc. is a big issue. Data of hotel and place like price, proper name, history, etc. and primary health tips like tour packages, security level, etc. The authentication of data is a big factor.

Chapter 3

DESIGN AND IMPLEMENTATION

3.1 System Design

The system design process involves developing several modules of the system at different levels of abstractions. Here we put ER diagram that shows the process of Travel and Tourism Management System.

3.2 ER Diagram

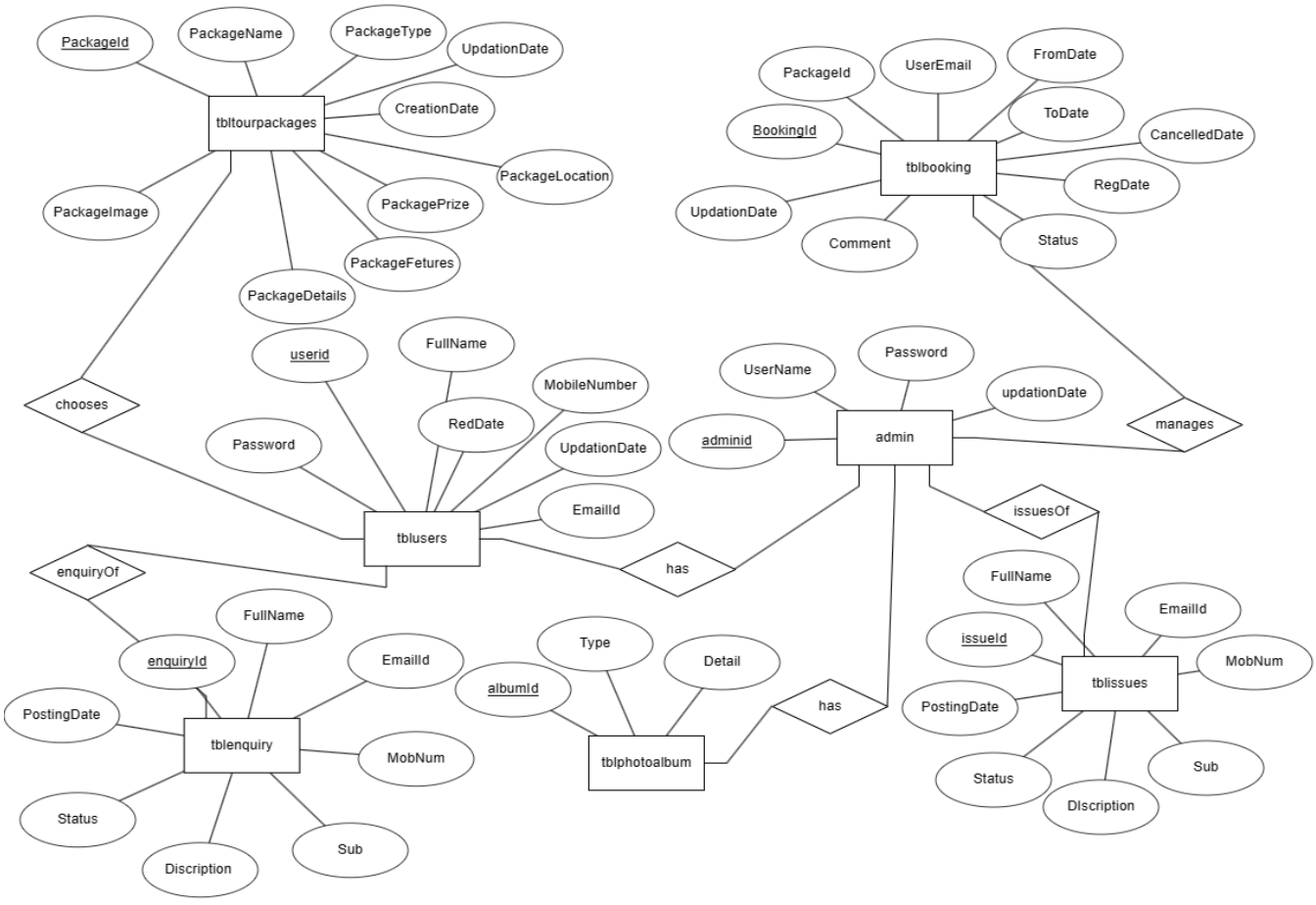

Fig 3.2 ER Diagram

3.3 Schema Diagram

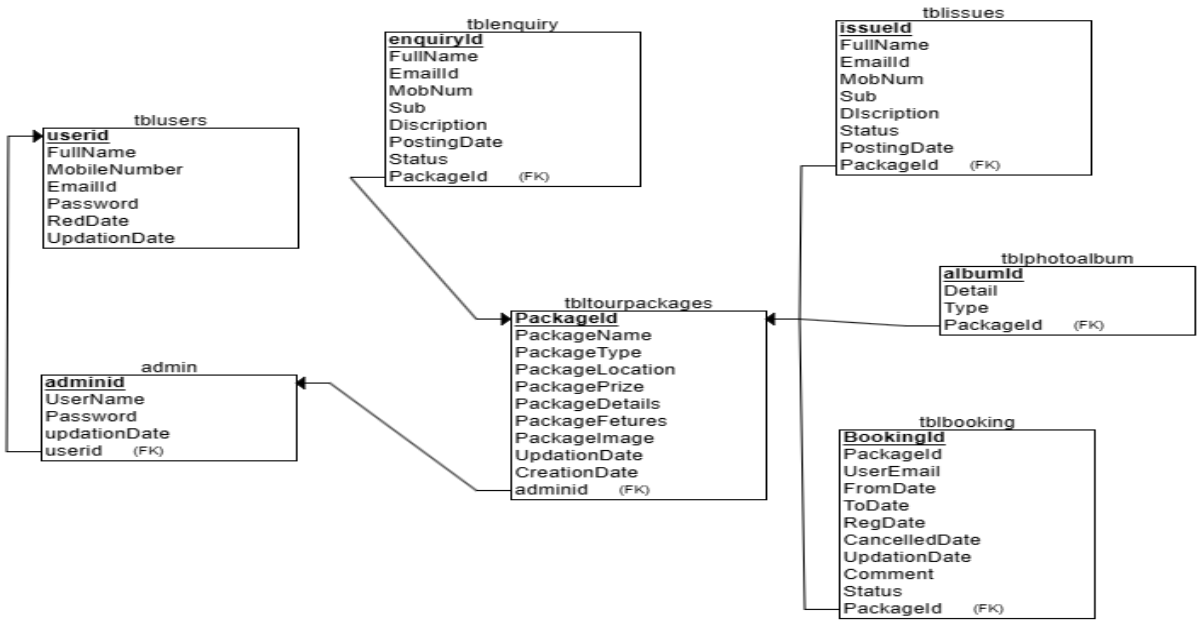

Fig 3.3 Schema Diagram

3.4 Design Requirements

- Our whole system was designed based on user requirements analysis. It is one of the most critical phases of a development project.
- We build a login page because in our system there is an authentication for the user.
- We have three types of users, Admin, User, and Guest. Admin and registered users can use all features but Guests can view only.
- Registered users can book an ambulance and place an order for medicine after logged in. they can also update their profile.
- Guest can view selected sections and also can create a new profile. In detail planning phase we went through these:
    - Analyzed the System
    - System creation started
    - Oracle Database
    - SQL
    - Planned which tools and Forms to be used.

3.5. Overview Tools and Technologies

1. Hardware Requirements

Processor : Any standard processor (minimum 2GHz)

Hard Disk : Minimum disc space 2GB

RAM : 1 GB (Minimum)

Any desktop/Laptop system with above configuration

2. Software Requirements

Front- end development tool: HTML, CSS, JAVASCRIPT

Database: SQlite3

Back-end: SQlite3

Front end

Basically, the front-end design represents the UI. On other hand it also the combination of the web design part and the web development part. To make this visible we used HTML, CSS, JavaScript, and Php. We always tried to keep it more flexible, scalable, and extensible. We also tried to maintain its robustness

Back end

DB Browser for SQLite: DB4S is a high quality, visual, open-source tool made for creating, designing, and editing database files that are compatible with SQLite. It is for users and developers who want to create, search, design and edit databases.

SQLite is often used as the on-disk file format for desktop applications such as version control systems, financial analysis tools, media cataloging and editing suites, CAD packages, record keeping programs, and so forth. The traditional File/Open operation calls sqlite3 open () to attach to the database file.

Summary

In this chapter we have learnt about the requirements for the development of this application, like processor, RAM, hard disk are the hardware requirements. Software requirements like python idle and sqlite3. We have use python as frontend tool and sqlite3 as back end tool to develop this application.

Chapter 4

RESULT AND SNAPSHOTS

4.1 Database Design

The following table 4.4.1 shows the database of whole project.

Table	Action	Rows	Type	Collation	Size	Overhead
admin	Browse Structure Search Insert Empty Drop	1	InnoDB	latin1_swedish_ci	16.0 KiB	-
tblbooking	Browse Structure Search Insert Empty Drop	3	InnoDB	latin1_swedish_ci	16.0 KiB	-
tblenquiry	Browse Structure Search Insert Empty Drop	3	InnoDB	latin1_swedish_ci	16.0 KiB	-
tblissues	Browse Structure Search Insert Empty Drop	7	InnoDB	latin1_swedish_ci	16.0 KiB	-
tblpages	Browse Structure Search Insert Empty Drop	4	MyISAM	latin1_swedish_ci	8.6 KiB	-
tbltourpackages	Browse Structure Search Insert Empty Drop	9	InnoDB	latin1_swedish_ci	16.0 KiB	-
tblusers	Browse Structure Search Insert Empty Drop	5	InnoDB	latin1_swedish_ci	48.0 KiB	-
7 tables	Sum	32	InnoDB	utf8mb4_general_ci	136.6 KiB	0 B

Table 4.4.1 Database of whole project

The following table 4.4.2 shows the Initialized Database of admin Information.

	id	UserName	Password	updationDate
Edit Copy Delete	1	admin	f925916e2754e5e03f75dd58a5733251	2020-05-11 16:48:49

Table 4.4.2 admin

The following table 4.4.3 shows the Initialized Database of tblbooking Information.

	BookingId	PackageId	UserEmail	FromDate	ToDate	Comment	RegDate	status	CancelledBy	UpdationDate
Edit Copy Delete	1	1	test@gmail.com	2020-07-11	2020-07-18	I want this package.	2020-07-08 12:08:36	2	u	2020-07-08 12:23:45
Edit Copy Delete	2	2	test@gmail.com	2020-07-10	2020-07-13	There is some discount	2020-07-08 12:13:25	1	NULL	2020-07-08 12:22:44
Edit Copy Delete	3	4	abir@gmail.com	2020-07-11	2020-07-15	When I get conformation	2020-07-08 12:14:39	2	a	2020-07-08 12:19:55

Table 4.4.3 tblbooking

The following table 4.4.4 shows the Initialized Database of tblenquiry Information.

	id	FullName	EmailId	MobileNumber	Subject	Description	PostingDate	Status
Edit Copy Delete	1	Jone Paaire	jone@gmail.com	4646464646	Enquiry for Manali Trip	Kindly provide me more offer.	2020-07-08 12:00:32	1
Edit Copy Delete	2	Kishan Twaerea	kishan@gmail.com	6797947987	Enquiry	Any Offer for North Trip	2020-07-08 12:01:38	NULL
Edit Copy Delete	3	Jacaob	Jai@gmail.com	1646689721	Any offer for North	Any Offer for north	2020-07-08 12:02:41	1

Table 4.4.4 tblenquiry

The following table 4.4.5 shows the Initialized Database of tblissues Information.

	id	UserEmail	Issue	Description	PostingDate	AdminRemark	AdminremarkDate
Edit Copy Delete	1	NULL	NULL	NULL	2020-07-08 12:03:20	NULL	NULL
Edit Copy Delete	2	NULL	NULL	NULL	2020-07-08 12:03:56	NULL	NULL
Edit Copy Delete	3	NULL	NULL	NULL	2020-07-08 12:04:20	NULL	NULL
Edit Copy Delete	4	NULL	NULL	NULL	2020-07-08 12:04:38	NULL	NULL
Edit Copy Delete	5	NULL	NULL	NULL	2020-07-08 12:05:06	NULL	NULL
Edit Copy Delete	6	test@gmail.com	Booking Issues	I am not able to book package	2020-07-08 12:06:03	Ok, We will fix the issue asap	2020-07-08 12:25:22
Edit Copy Delete	7	test@gmail.com	Refund	I want my refund	2020-07-08 12:26:29	NULL	NULL

Table 4.4.5 tblissues

The following table 4.4.6 shows the Initialized Database of tbltourpackages Information.

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

	PackageId	PackageName	PackageType	PackageLocation	PackagePrice	PackageFetures	PackageDetails	PackageImage
Edit Copy Delete	1	Swiss Paris Delight Premium 2020 (Group Package)	Group Package	Paris and Switzerland	6000	Round trip Economy class airfare valid for the du...	Pick this holiday for a relaxing vacation in Paris...	1581490262_2_1.jpg
Edit Copy Delete	2	Bhutan Holidays - Thimphu and Paro Special	Family Package	Bhutan	3000	Free Wi-fi, Free Breakfast, Free Pickup and drop f...	Visit to Tiger's Nest Monastery | Complimentary se...	BHUTAN-THIMPU-PARO-PUNAKHA-TOU 6N-7D.jpeg
Edit Copy Delete	3	Soulmate Special Bali - 7 Nights	Couple Package	Indonesia(Bali)	5000	Free Pickup and drop facility, Free Wi-fi , Free p...	Airport transfers by private car | Popular Sightse...	1583140977_5_11.jpg
Edit Copy Delete	4	Kerala - A Lovers Paradise - Value Added	Family Package	Kerala	1000	Free Wi-fi, Free pick up and drop facility,	Visit Matupetty Dam, tea plantation and a spice ga...	images (2).jpg
Edit Copy Delete	5	Short Trip To Dubai	Family	Dubai	4500	Free pick up and drop facility, Free Wi-fi, Free b...	A Holiday Package for the entire family.	unnamed.jpg
Edit Copy Delete	6	Sikkim Delight with Darjeeling (customizable)	Group	Sikkim	3500	Free Breakfast, Free Pick up drop facility	Changu Lake and New Baba Mandir excursion | View t...	download (2).jpg
Edit Copy Delete	7	6 Days in Guwahati and Shillong With Cherrapunji E...	Family Package	Guwahati(Sikkim)	4500	Breakfast, Accommodation » Pick-up » Drop » Sight...	After arrival at Guwahati airport meet our represe...	95995.jpg
Edit Copy Delete	8	Grand Week in North East - Lachung, Lachen and Gan...	Domestic Packages	Sikkim	4500	Free Breakfast, Free Wi-fi	Changu Lakeand New Baba Mandir excursion | Yumthan...	download (3).jpg

Table 4.4.6 tbltourpackages

The following table 4.4.7 shows the Initialized Database of tblusers Information.

	id	FullName	MobileNumber	EmailId	Password	RegDate	UpdationDate
Edit Copy Delete	1	Manju Srivatav	4456464654	manju@gmail.com	202cb962ac59075b964b07152d234b70	2020-07-08 12:03:20	NULL
Edit Copy Delete	2	Kishan	9871987979	kishan@gmail.com	202cb962ac59075b964b07152d234b70	2020-07-08 12:03:56	NULL
Edit Copy Delete	3	Salvi Chandra	1398756416	salvi@gmail.com	202cb962ac59075b964b07152d234b70	2020-07-08 12:04:20	NULL
Edit Copy Delete	4	Abir	4789756456	abir@gmail.com	202cb962ac59075b964b07152d234b70	2020-07-08 12:04:38	NULL
Edit Copy Delete	5	Test	1987894654	anuj@gmail.com	f925916e2754e5e03f75dd58a5733251	2020-07-08 12:05:06	2021-05-11 10:07:41

Table 4.4.7 tblusers

SIGNUP PAGE:

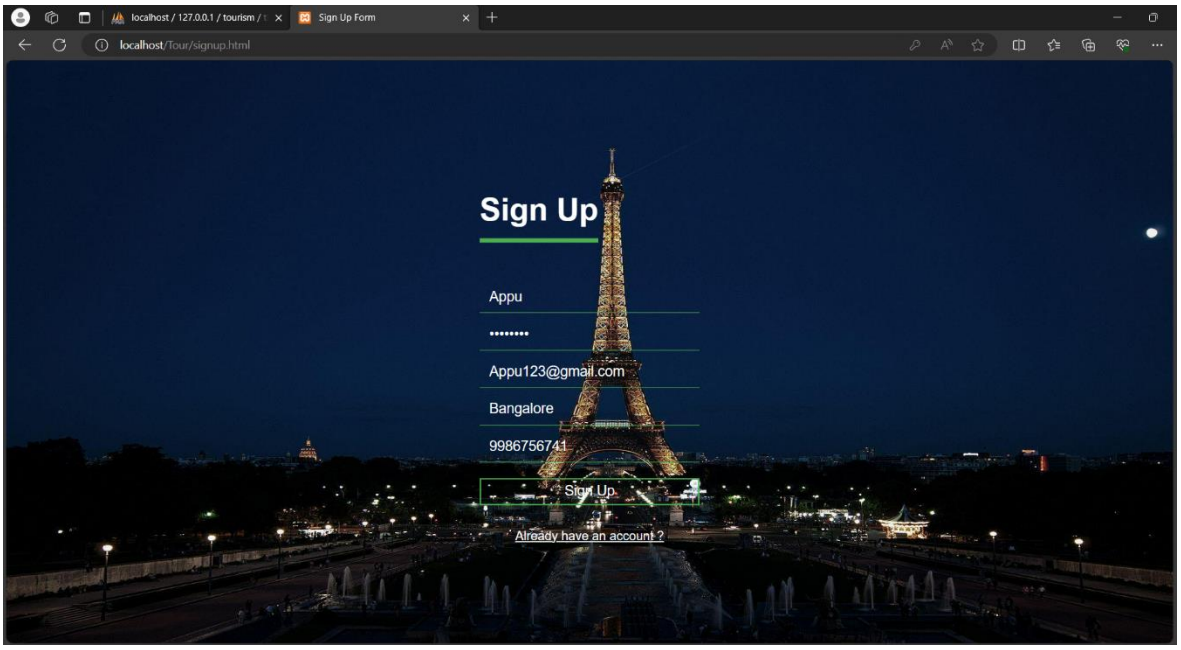

Fig 4.2

SIGNIN PAGE:

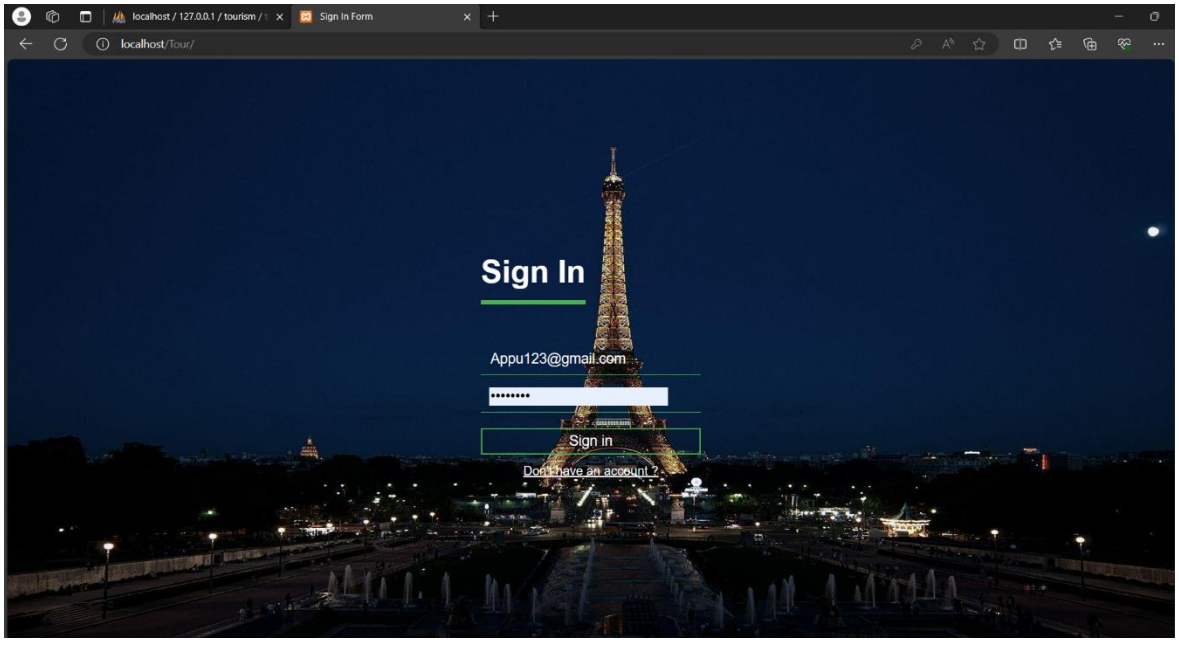

Fig 4.3

HOME PAGE:

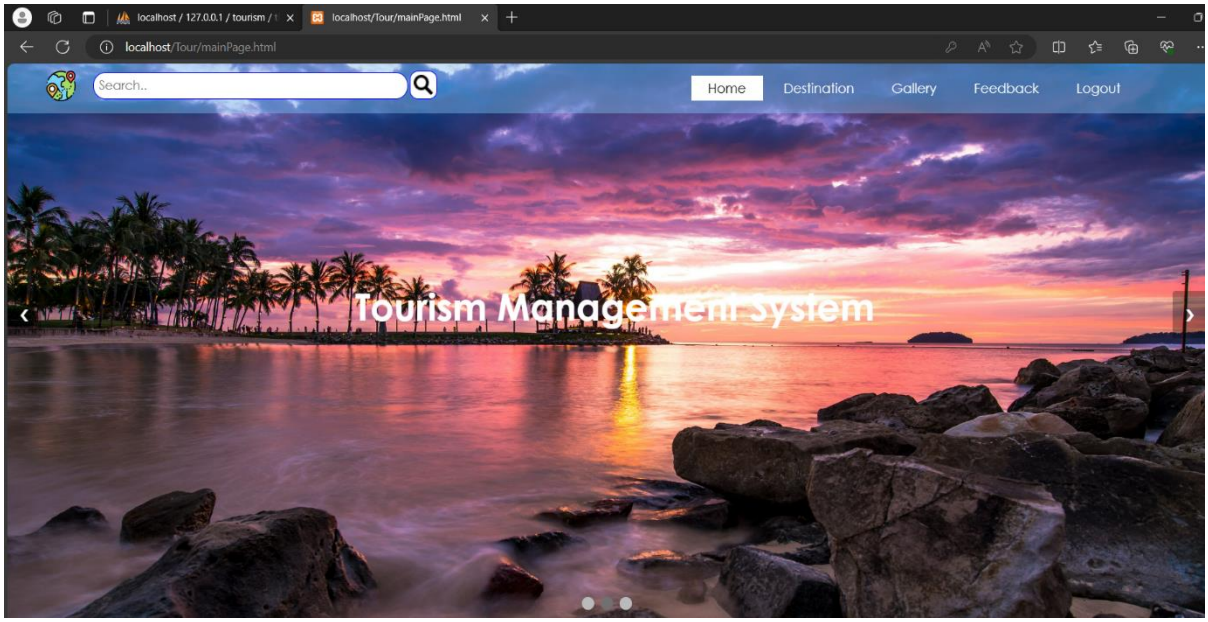

Fig 4.4

TOUR PACKAGES PAGE:

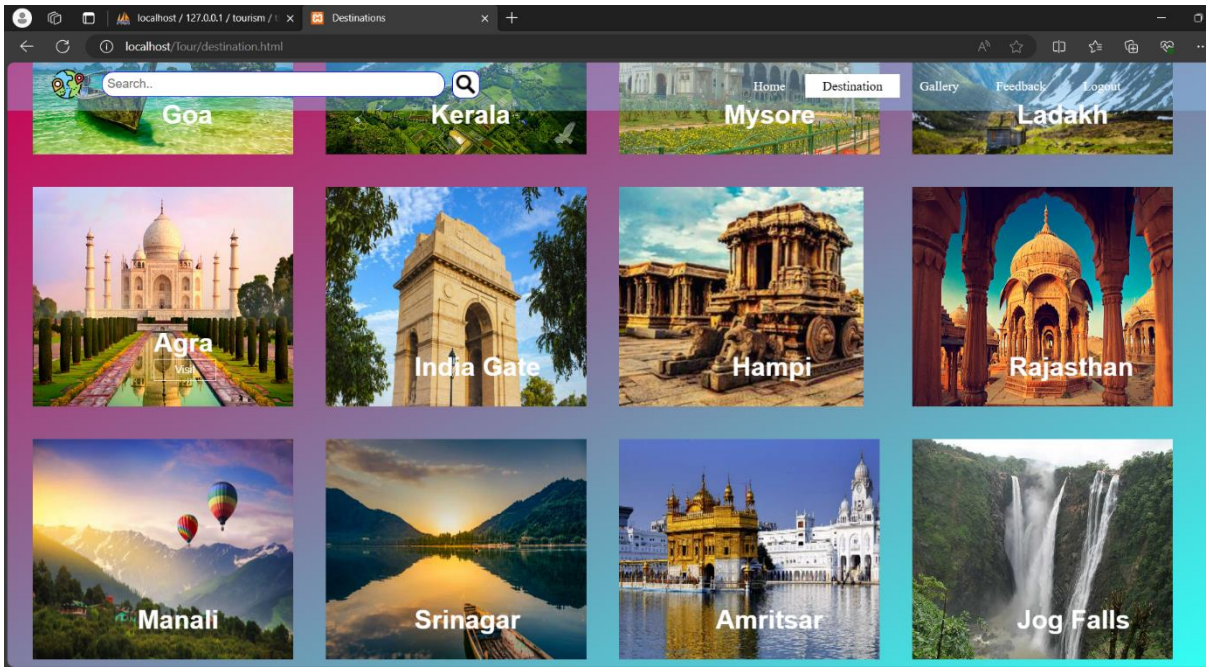

Fig 4.5

PHOTO ALBUM PAGE:

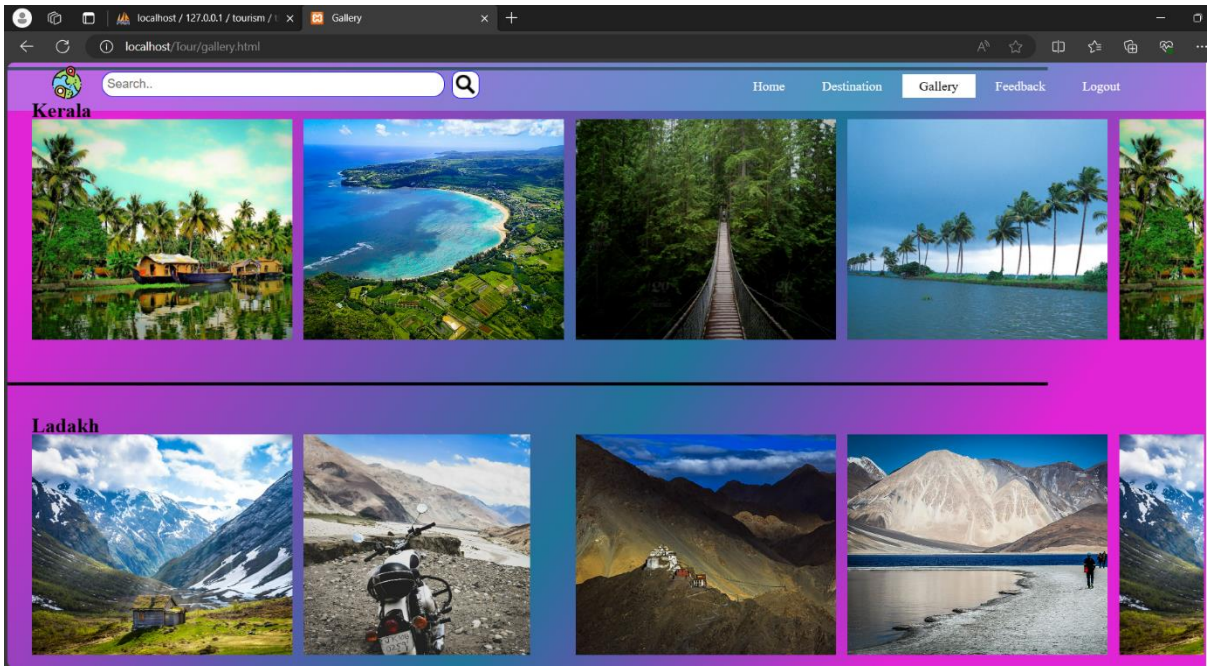

Fig 4.6

FEEDBACK PAGE:

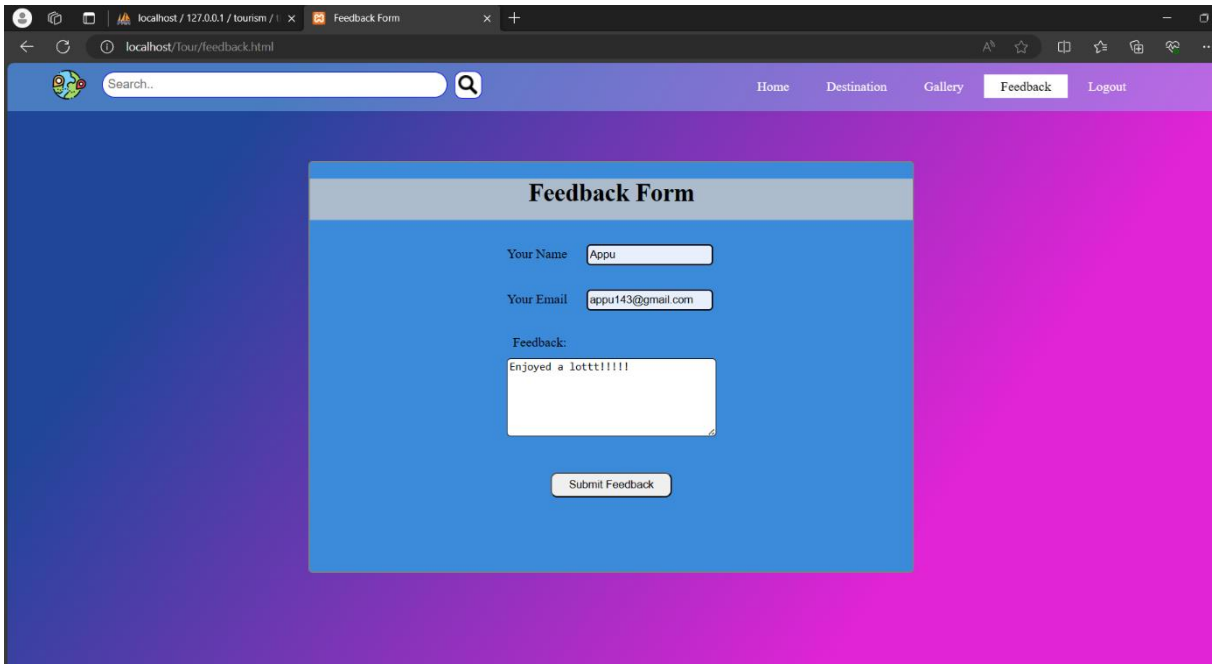

Fig 4.7

Chapter 5
CONCLUSION AND FUTURE SCOPE

5.1 Conclusion

Day by day travel is known as a global trade which is extremely increasing at a great flow like other trade. There are many various activities are occurring in tour functions. Our 'Travel and Tour Management System' is a web-based application that benefits in the online order of travel packages, hotels, transfers, etc. The 'Travel and Tour Management System' can be completely modified with the coordination of various APIs. It has a well□disposed climate that interfaces with clients readily. At long last, we can say that this Web□Based Application will help the travel administrators to manage and control tour-related initiates successfully and productively. It provides an easy route to automate all the functionalities of expense. If this system is executed in a few tuberculosis, it will be effective. It is presumed that the application functions admirably and fulfills the requirements. It additionally goes about as the sharing of documents too significant assets. Along these lines, we built up our application popularity of the upcoming scene.

5.2 Extent for Further Improvements

In the future, we are going to develop this project on a web page. Also, we will try to add more features to this application according to demand. In future development, we will provide location-based service.

5.3 Limitation

Everything has its own limitation and we are not exceptional we have some limitation too. We tried as much as we can to avoid limitations. It could be more dynamic and user friendly. Fake user or anyone can make misuse of this platform with fake documentation.

REFFERENCES

[1] Onuiri, E., Omoroje, H., Ntima, C. and Omotunde, A., 2021. Intelligent Tourism Management System. [online] Asrjetsjournal.org. Available at: *https://asrjetsjournal.org/index.php/American_Scientific_Journal/article/view/1577*

[2] Weaver, D. and Oppermann, M., 2021. Tourism Management.. [online] Cabdirect.org. Available at: *https://www.cabdirect.org/cabdirect/abstract/20013080795*

Introduction with PHP,
[3] W3schools.com. 2021. PHP Introduction. [online] Available at: *https://www.w3schools.com/php/php_intro.asp*

Hypertext Mark-up Language,
[4] W3schools.com. 2021. Introduction to HTML. [online] Available at: *http://www.w3schools.com/html/html_intro.asp*

JavaScript programming language,
[5] W3schools.com. 2021. Introduction to HTML. [online] Available at: *http://www.w3schools.com/html/html_intro.asp*

MySQL, Opensource database,
[6] Dev.mysql.com. 2021. MySQL :: MySQL 5.7 Reference Manual :: 1.2.1 What is MySQL?. [online] Available at: *https://dev.mysql.com/doc/refman/5.7/en/what-is-mysql.html*

Introduction with CSS,
[7] W3schools.com. 2021. CSS Introduction. [online] Available at: *https://www.w3schools.com/css/css_intro.asp*