VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belgaum-590018, Karnataka



A Mini project report on

"GLOBETROTTING MANAGEMENT SYSTEM"

Submitted in fulfillment for the requirements of V semester degree of

BACHELOR OF ENGINEERING

IN

DEPARTMENT OF CSE(ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING)

by

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 ${\bf DEPARTMENT\ OF\ CSE} ({\bf ARTIFICIAL\ INTELLIGENCE\ AND\ MACHINE\ LEARNING})$

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CERTIFICATE

This is to certify that the Mini project report entitled "GLOBETROTTING MANAGEMENT SYSTEM" is a bonafide work carried out by NIDHI SINHA(1DB20CI029), in partial fulfilment of award of Degree of Bachelor of Engineering in CSE(Artificial Intelligence And Machine Learning) of Visvesvaraya Technological University, Belagavi, during the academic year 2022-2023. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated. The Mini project has been approved as it satisfies the academic requirements associated with the degree mentioned.

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DECLARATION

I NIDHI SINHA(1DB20CI029), student of Fifth semester B.E, DEPARTMENT OF CSE(Artificial Intelligence And Machine Learning), Don Bosco Institute of Technology, Kumbalagodu, Bangalore, declare that the project work entitled "GLOBETROTTING MANAGEMENT SYSTEM" has been carried out by us and submitted in partial fulfilment of the course requirements for the award of degree in Bachelor of Engineering in CSE(Artificial Intelligence And Machine Learning) of Visvesvaraya Technological University, Belagavi during the academic year 2022-2023. The matter embodied in this report has not been submitted to any other university or institution for the award of any other degree or diploma.

NIDHI SINHA(1DB20CI029)

Date:

Place: Bangalore

ACKNOWLEDGEMENT

Here by we are submitting the Mini project report on "GLOBETROTTING MANAGEMENT SYSTEM", as per the scheme of Visvesvaraya Technological University, Belagavi.

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ABSTRACT

This project "TRAVEL AND TOURISM MANAGEMENT" is used to automate all process of the travel and tourism, which deals with creation, booking and confirmation and user details. The project is designed HTML-PHP as front end and Microsoft SQL Server 2008 as backend which works in any browsers. The coding language used HTML and PHP. Travel and tourism management system is used to book a tour from anywhere in the world by a single dynamic website which will help the user to know all about the places and tour details in a single website. The admin can add packages to the website from a certain travel agents and hotels by create a tour page. Then the users can sign in and book each project, they can be confirmed by the admin in their manage booking page. The user can see the confirmation in their my booking page. It is an easiest platform for all travelers which can be easily booked and know the all details.

Keywords: Travel and tourism management, travel packages, tourism, package booking

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Introduction

1.1 Overview

Globetrotting is the synonym of tourism. It is a project serves as an information hub for prospective travelers planning a getaway regarding a complete or partial plan for tours. Today, people travel for a range of experiences—babymoons, staycations, voluntourism or bleisure—you name it. So, provide as much relevant information as possible to help users plan their trips. This report discusses the result of the work done in development of "GLOBETROTTING MANAGEMENT SYSTEM" on "HTML,CSS,JAVASCRIPT" Front-end Platform and "PHP,SOL" as back-end Platform.

At the development of an application PHP provides a good connecting facility between all pages, also the back-end SQL is most important to save all the data related the application.

1.2 PROBLEM STATEMENT

The definition of our problem lies in manual system and a fully automated system.

Manual system: The system is very time consuming and lazy. This system is more prone to Errors and sometimes the approaches to various problems are unstructured.

Technical system: With the advent of latest technology if we do not update our system thenOur business results in losses gradually with time. The technical systems contains the tools of latestTrend i.e. computers printers, fax, Internet etc. The systems with this technology are very fast,Accurate, user-friendly and reliable.

1.3 DATABASE MANAGEMENT SYSTEM

A database management system (DBMS) is system software for creating and managing databases. A DBMS makes it possible for end users to create, protect, read, update and delete data in a database. The most prevalent type of data management platform, the DBMS essentially serves as an interface between databases and users or application programs, ensuring that data is consistently organized and remains easily accessible.

1.4 SQL

Structured Query Language, abbreviated as SQL is a domain-specific language used in programming and designed for managing data held in a relational database management system (RDBMS), or for stream processing in a relational data stream management system (RDSMS). It is particularly useful in handling structured data, i.e. data incorporating relations among entities and variables.

1.5 HTML / JAVASCRIPT

JavaScript, often abbreviated as JS, is a programming language that is one of the core technologies of the World Wide Web, alongside HTML and CSS. As of 2022, 98% of websites use JavaScript on the client side for webpage behavior, often incorporating third-party libraries.

The HyperText Markup Language or HTML is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets and scripting languages such as JavaScript.

1.6 PHP

PHP stands for Hypertext Preprocessor. It is a server-side scripting language, like ASP. PHP scripts are executed on the server. It was among the first server-side languages that could be embedded into HTML, making it easier to add functionality to web pages without needing to call external files for data. PHP supports many databases (MYSQL, Informix, Oracle, Sybase, Solid, Generic ODBC, etc.). It is an open source software. PHP is free to download and use. It is easy to connect with the database to store and retrieve data from the database. Multiple databases can also be integrated with PHP.

REQUIREMENTS SPECIFICATION

2.1 OVERALL DESCRIPTION

"GLOBETROTTING MANAGEMENT SYSTEM" is a database whose main objective is to store all the bookings and restore the flights,hotels & other arrangements inclusive in the package to explore the INCREDIBLE INDIA. It also emprovise the safety and security regarding the privacy concerns of its users along with promoting the travelling and exploring india in sacred terms.

2.2 SPECIFIC REQUIREMENTS

- Understand the specific requirements of the project and develop a clear scope of work.
- Choose the right DBMS that best fits the project's objectives.
- Identify the data to be stored in the database and the data types.
- Create an appropriate database design that optimizes data retrieval, storage, and manipulation.
- Construct the database using a DBMS of your choice.
- Test the database for accuracy and integrity.
- Develop user-friendly interfaces for data entry and retrieval.
- Establish proper security measures to protect the database from unauthorized access.
- Monitor the database performance and make necessary changes for optimization.
- Create backup and recovery procedures for the database.

2.3 SOFTWARE REQUIREMENTS

- Visual studio code (ide-integrated development environment)
- Front end-HTML, CSS and JavaScript
- Backend-SQL, PHP

2.4 HARDWARE REQUIREMENTS

The section of hardware configuration is an important task related to the software development insufficient random-access memory may affect adversely on the speed and efficiency of the entire system.

The process should be powerful to handle the entire operations. The hard disk should have sufficient capacity to store the file and application. These requirements include the minimum processor speed, memory, and disk space required to install Windows.

Processor : Intel Core i3Installed RAM : 4.00 GB

• Operating system : Windows 10

• Version : 20H2

• System Type : 64-bit operating system

• Storage: 525 GB

DETAILED DESIGN

3.1 SYSTEM DESIGN

System Design is the process of designing the architecture, components, and interfaces for a system so that it meets the end-user requirements. System Design for tech interviews is something that can't be ignored! Almost every IT giant whether it

be Facebook, Amazon, Google, Apple or any other ask various questions based on System Design concepts such as scalability, load-balancing, caching, etc. in the interview. This specifically designed System Design tutorial will help you to learn and master System Design concepts in the most efficient way from basics to advanced level.

3.2 ENTITY RELATIONSHIP DIAGRAM

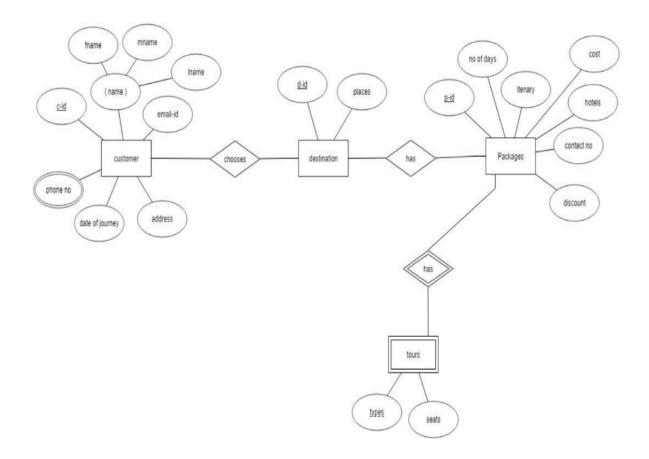


Fig 3.2.1 ER-Diagram

3.3 RELATIONAL SCHEMA

1] user:-

User_id,email,password

User_id email password

2] booking:-

Booking_id,Fname,Lname,NoOfPeople,place,package,start_date,end_date

Booking_id	Fname	Lname	NoOfPeople	Place	package	Start_date	End_date

3] Package

Package_id,package_name,package_price

Package_id	Package_name	Package_price	

4] Places:

Place_id,place_name,journey_date,package_available

Place_id	Place_name	Journey_date	Package_available	
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5] Transaction:

Transaction_id,userPaid,amountPaid

Transaction_id	userPaid	amountPaid
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6] Admin:

Admin_id,admin_name,admin_password

Admin_id	Admin_name	Admin_password
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Fig 3.3.1 Relational Schema

IMPLEMENTATION

4.1 MODULE AND THEIR ROLES

Another important statement in SQL is CREATE TRIGGER. Trigger has three components:

- i. The event(s): These are usually database update operations that are explicitly applied to the database. In this example the events are: inserting a new employee record, changing an employee's salary, or changing an employee's supervisor.
- ii. The condition: That determines whether the rule action should be executed: Once the triggering event has occurred, an optional condition may be evaluated. If no condition is specified, the action will be executed once the event occurs.
- iii. The action: The action is usually a sequence of SQL statements, but it could also be a database transaction or an external program that will be automatically executed.

4.2 STORED PROCEDURES

- A stored procedure is a program that is executed through a single SQL statement that can be locally executed and completed within the process space of the database server.
- The results can be packaged into one big result and returned to the application, or the application logic can be performed directly at the server, without having to transmit the results to the client.
- Stored procedures are also beneficial for software engineering because once a stored procedure is registered with the database server, different users can re-use the stored procedure, eliminating duplication of efforts in writing SQL queries or application logic, and making code maintenance easy.

4.3 RESULT The CREATE TABLE Command in SQL

- The CREATE TABLE command is used to specify a new relation by giving it a name and specifying its attributes and initial constraints.
- The attributes are specified first, and each attribute is given a name, a data type to specify its domain of values, and any attribute constraints, such as NOT NULL.
- The key, entity integrity, and referential integrity constraints can be specified within the CREATE TABLE statement after the attributes are declared, or they can be added later using the ALTER TABLE command.
- The schema name can be explicitly attached to the relation name, and the separated by a period.
- Syntax for create: create table (<attribute1><type 1>, <attribute 2><type 2>); The INSERT Command
- INSERT is used to add a single tuple to a relation. The relation name and a list of value are specified for the tuple.
- The values should be listed in the same order in which the corresponding attributes were specified in the CREATE TABLE command.

- A second form of the INSERT statement allows the user to specify explicit attribute names that correspond to the values provided in the INSERT command.
- This is useful if a relation has many attributes but only a few of those attributes are assigned values in the new tuple.

The DELETE Command

- The DELETE command removes tuples from a relation.
- It includes a WHERE clause, to select the tuples to be deleted.
- Tuples are explicitly deleted from only one table at a time.
- The DELETE command can be used to delete rows.
- A missing WHERE clause specifies that all tuples in the relation are to be deleted but the table remains in the database as an empty table.
- Syntax: delete from where <condition>;

The UPDATE Command

- The UPDATE command is used to modify attribute values of one or more selected tuples.
- The UPDATE command can be used to change the value of a column.
- A WHERE clause in the UPDATE command selects the tuples to be modified from a single relation. A SET clause in the UPDATE command specifies the attributes to be modified and their new values.
- Syntax: update set <attribute>=<new value> where < attribute >=<value>;

4.2 TRIGGERS AND STORED PROCEDURES

A Trigger in Structured Query Language is a set of procedural statements which are executed automatically when there is any response to certain events on the particular table in the database. Triggers are used to protect the data integrity. In Structured Query Language, triggers are called only either before or after the below events:

- INSERT Event: This event is called when the new row is entered in the table.
- UPDATE Event: This event is called when the existing record is changed or modified in the table.
- DELETE Event: This event is called when the existing record is removed from the table.

A stored procedure is a group of one or more pre-compiled SQL statements into a logical unit. It is stored as an object inside the database server. It is a subroutine or a subprogram in the common computing language that has been created and stored in the database. Each procedure in SQL Server always contains a name, parameter lists, and Transact-SQL statements. The SQL Database Server stores the stored procedures as named objects. We can invoke the procedures by using triggers, other procedures, and applications such as Java, Python, PHP, etc. It can support almost all relational database systems.

SQL Server builds an execution plan when the stored procedure is called the first time and stores them in the cache memory. The plan is reused by SQL Server in subsequent executions of the stored procedure, allowing it to run quickly and efficiently.

4.3 RESULT

The motive to build this system is to make it easy to plan, book and travel. It is dynamic and responsive towards the challenges like maintaining records, keeping track on activities done by the users.

Tourism is currently recognized as a global industry that is growing at a high rate, like any other industry. This web-based application helps in maintaining the database. It has a friendly environment that connects customers willingly. Thus, it simplifies the process by saving our time and efforts. It will help tour managers to control and handle the tour-related activities effectively and efficiently. A further modification could be possible where the system can be integrated with bigger organizations such as tourist agencies in order to help them.

TESTING

5.1 SOFTWARE TESTING

Software testing is the process of evaluating and verifying that a software product or application does what it is supposed to do. The benefits of testing include preventing bugs, reducing development costs and improving performance. Software Testing is a method to check whether the actual software product matches expected requirements and to ensure that software product is Defect free. It involves execution of software/system components using manual or automated tools to evaluate one or more properties of interest. The purpose of software testing is to identify errors, gaps or missing requirements in contrast to actual requirements. Some prefer saying Software testing definition as a White Box and Black Box Testing. In simple terms, Software Testing means the Verification of Application under Test (AUT).

5.2 MODULE TESTING AND INTEGRATION

A software application contains an integration of various modules. Modules are programs written in a specific language consisting of subprograms, subroutines, functions, classes, and procedures. Module testing is a process where you need to test each unit of these modules to ensure they adhered to the best coding standards. Unless a module passes the testing phase, it cannot go for the application testing process.

Module testing, aka component testing, helps to early detection of errors in application testing. This can be a massive relief for testers during the later stage of testing. Module testing is a gateway to parallel testing that allows testers to test multiple modules simultaneously.

Integration Testing is defined as a type of testing where software modules are integrated logically and tested as a group. A typical software project consists of multiple software modules, coded by different programmers. The purpose of this level of testing is to expose defects in the interaction between these software modules when they are integrated. Integration Testing focuses on checking data communication amongst these modules.

5.3 LIMITATIONS

- A Database Management System is quite complex as it involves creating, modifying and editing a database.
- All the relevant data for any company is stored in a database. So it is imperative that the database works in optimal condition and there are no failures.
- A database contains a large amount of data, especially for bigger organisations. The bigger the database is, it is more difficult to handle and maintain.
- Often new functionalities are added to the database. This leads to database upgradations. All of these upgradations cost a lot of money.
- If the database is changed or modified in some manner, all the data needs to be converted to the new form. This cost may even exceed the database creation and management costs sometimes.

SNAP SHOTS

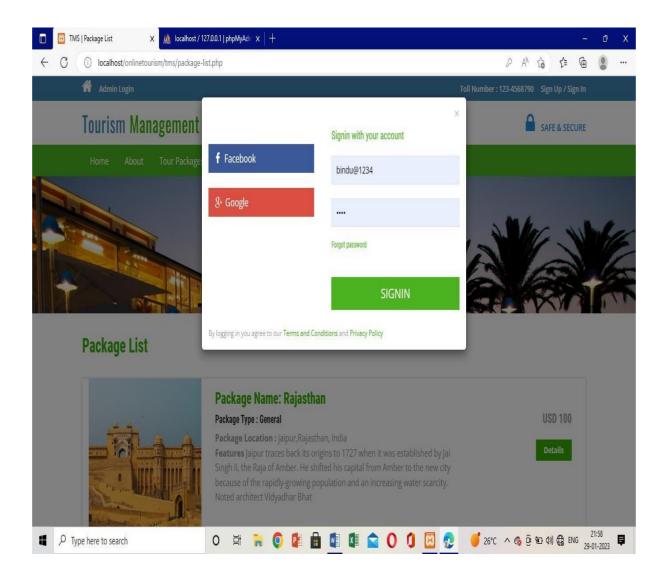


Fig 6.1 SignIn.php

GLOBETROTTING MANAGEMENT SYSTEM

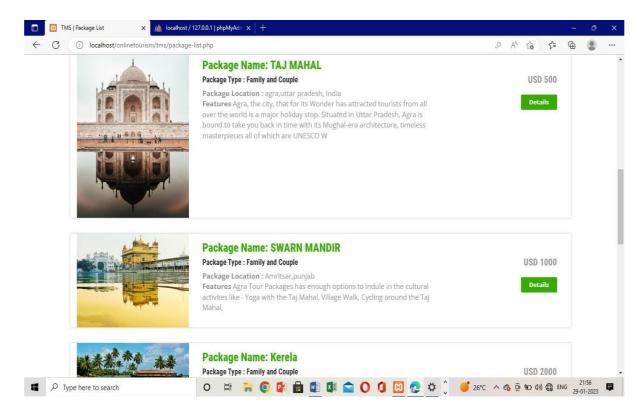


Fig 6.2 Packages.php

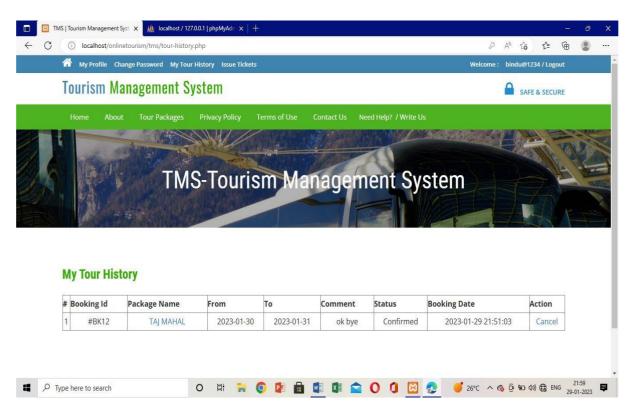


Fig 6.3 Tour History.php

GLOBETROTTING MANAGEMENT SYSTEM

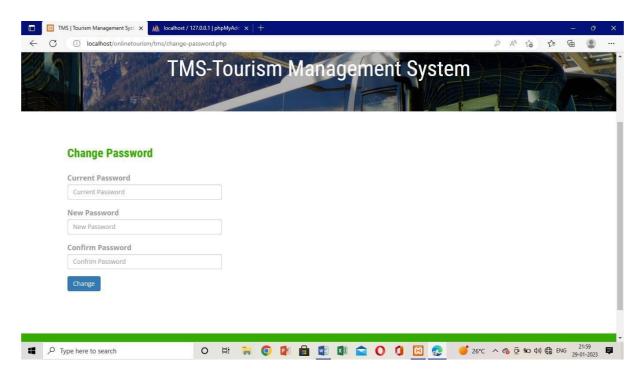


Fig 6.4 ChangingPassword.php

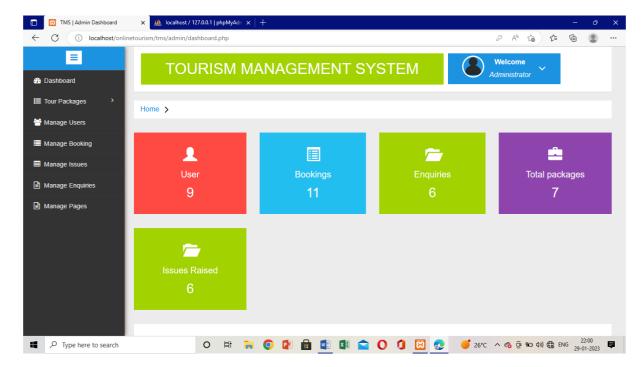


Fig 6.5 Admin Dashboard.php

GLOBETROTTING MANAGEMENT SYSTEM

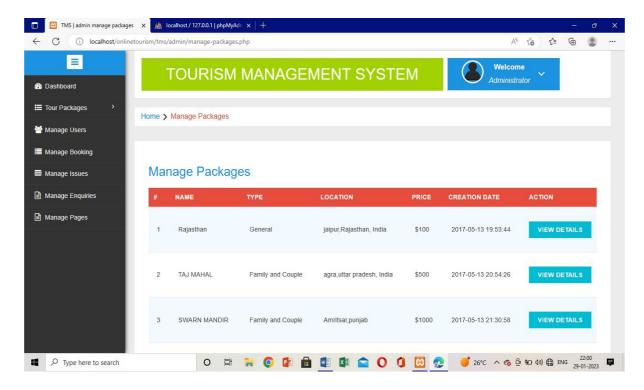


Fig 6.6 Package management.php

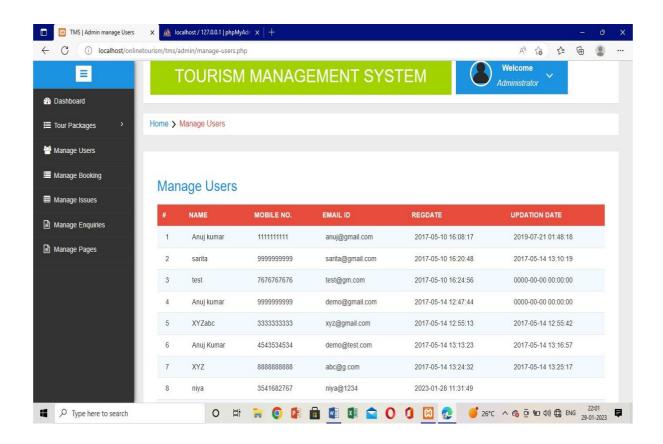


Fig 6.7 User Management.php

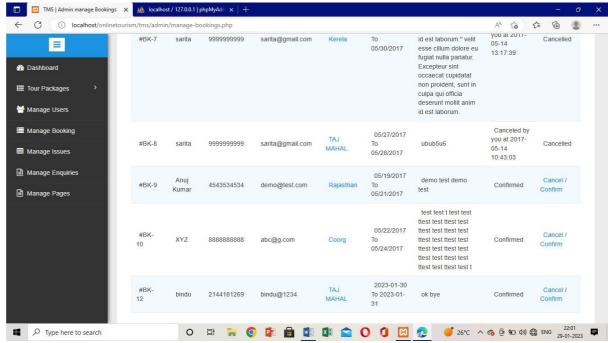
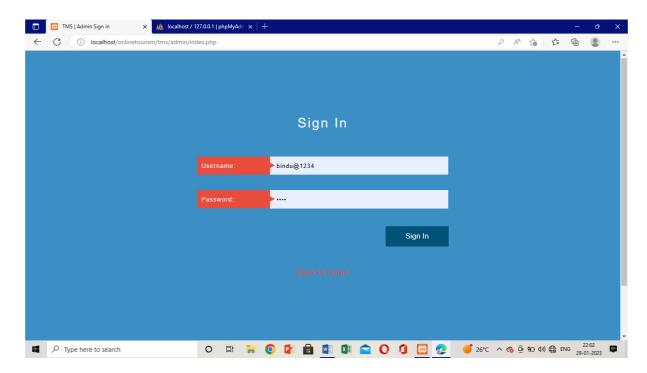


Fig 6.8 Issues Management.php



ig 6.9 SignIn.php

CONCLUSION

The motive to build this system is to make it easy to plan, book and travel. It is dynamic and responsive towards the challenges like maintaining records, keeping track on activities done by the users.

Tourism is currently recognized as a global industry that is growing at a high rate, like any other industry. This web-based application helps in maintaining the database. It has a friendly environment that connects customers willingly. Thus, it simplifies the process by saving our time and efforts. It will help tour managers to control and handle the tour-related activities effectively and efficiently. A further modification could be possible where the system can be integrated with bigger organizations such as tourist agencies in order to help them.

FUTURE ENHANCEMENTS

The project has met the standards required to work at reservation system. If the business logic remains same the project can be ported to any other reservation system Airline reservation, bus reservation) company with minor changes in the working procedure of the project.

The project can be used as an availability to develop a project for a different company with different business logic wherein the commonalties in certain areas remain the same at any business level. By using the common features in future development, the development time as well as the cost of development can be decreased considerably. This project is based on 8tandalone application platform. To modify the project to take the advantage of geographical remote area. By shifting the project to the networking & internet platform the project can be made into a mobile Accessible Application by which the restrictions of the software & hardware requirements can be scaled down, which is not possible using Standalone platform.

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