

TOURISM MANAGEMENT SYSTEM

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A Project
in
The Department
of
Computer Science and Engineering



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Approval Certificate

This Project titled **TOURISM MANAGEMENT SYSTEM**, submitted by MD. NAZMUL HASAN, Student ID: **012123010** to the Department of Computer Science and Engineering, United International University, has been recognized for the contentment of the requirements for the degree of Master of Science in Computer Science and Engineering and accepted as to its style and contents. The demonstration has been held on 18 Feb, 2018.

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Abstract

As tourism is one of the fastest and largest growing industries these days, thus within the tourism industry occasions are getting important. People have become more concerned in all kinds of occasions, and will travel far away to take part in events they find exciting. Occasions can offer various economic and social benefits for destinations, and therefore destination managers can and should use occasions in a tourism role. It has become established that every community and destination needs to adopt a long-term, strategic approach to occasion-tourism planning and development to appreciate the full tourism potential of occasions. This study launches as a response to the lack of studies on how Tours strategies are use in destinations. The study directed to tours and travel management system and the aim was to explore Tour and Travel packages. Organization offer tour and travel like holiday tour packages, domestic tour packages and provides services including ticket bookings, hotel reservations, rent-a-car services, and provides the most premeditated and the personalized travel packages to the customers. Organization can offer their customers everything related to travelling services in less than one roof.

Acknowledgement

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Table of Contents

1. Introduction.....	01
1.1 Purposes of the Tourism Management System	02
1.2 Scope of Proposed System.....	03
2. Features of the Projects	04-05
2.1 Feature of Tourism Management System	04
2.2 The Domain.....	04
2.3 The Client.....	04
2.4 The User.....	05
3. Projects Requirements and its success criteria.....	06-07
3.1 Non Functional Requirement	06
3.2 The Success Criteria of The Project	07
4. Methodology And Technology	08-09
4.1 Tools and Technology	08
4.2 System Requirement.....	08
4.2.1 Software Requirement	08
4.2.2 Hardware Requirement	09
4.3 System Development Methodology	09
5. Requirement Analysis & Specification	10
5.1 Initial Request & Feasibility Study	10
5.2 Requirement Analysis & Specification	10
5.3 Systems Design	10
5.3.1 Logical System Design	10
5.3.2 Physical System Design.....	10

6. Systems Design and development.....	11-17
6.1 Systems Design	11
6.1.1 System Development (Code & Unit Test).....	11
6.1.2 System Integration and Testing (Implementations).....	11
6.2 System Acceptance Test	11
6.2.1 Maintenance	12
6.2.2 Data Modeling.....	12
6.2.3 System Work Flow	12
6.2.4 Use Case Diagram	13
6.2.5 Class Diagram	14
6.2.6 Data Flow Diagram.....	15
6.2.7 Entity Relationship Diagram	16
6.2.8 Software Architecture	17
7. Entities Of Tourism Management:.....	18- 19
7.1 Description of Tables.....	18-20
7.2 Description of the Input Forms	21
7.3 List of Input Forms Related Entity	21
7.4 User Manual Description	22-38
7.5 Output Reports	39
8. Conclusion and future works	40
8.1 Future Works.....	40
8.2 Conclusion	40
9. References.....	41

LIST OF TABLES

Table 1: CUSTOMER	18
Table 2: PACKAGE.....	19
Table 3: BOOKM	19
Table 4: BOOKD	20
Table 5: HOTEL	20
Table 6: AGENCY	20
Table 7: Input Forms.....	21
Table 8: Forms Related Entity	21

LIST OF FIGURES

Figure 1: System Development Life Cycle	9
Figure 2: Connecting To Database Server	22
Figure 3: Opening Screen	24
Figure 4: Change Password	25
Figure 5: Home Page.....	27
Figure 6: Customer.....	28
Figure 7: Quick Customer Entry.....	30
Figure 8: PACKAGE	31
Figure 9: BOOKM	33
Figure 10: HOTEL	35
Figure 11: AGENT.....	37
Figure 12: Package Booking Detail (Report)	39

Chapter 1

Introduction

Without any automated system managing tourism smoothly is very difficult. It may cause a lot of efforts and paperwork. Implementing such an automated system is possible but a lot of preliminary works need to do such as requirements analysis and finalize the feasible requirement, decision of the system structure, software requirements, selection of the barcode system and software tools selection.

Tourism Management is a Tour Management Application System that contains each activity and section of Traveling. Tourism Management contains different modules. It is a very compound application including manage Customer, Package booking, Hotel Booking, Agent etc.

Tourism is a large industry and entertainment businesses. It is a collection of activities and services that delivers travel experience. It is include transportation, accommodations facilities, establishments of eating and drinking and other hospitality services provided for an individuals or a group of people who are traveling away from home. Tourism is currently on of the largest industry of the world. Bangladesh earns over millions dollar revenues from it. By providing over six million jobs in United States it becomes the country's largest employer.

It is very important to stay up to date with the current status of Tourism activities. For this a combined assignment of authority and admin specific reporting prepared to meet the exact requirement is necessary which makes the Tourism Management a ready reference for the higher management.

Purposes of the Tourism Management System

Now a day, the travel and tourism has developed because the strictest sector in terms of each services and repair suppliers. Training institutes, universities and other business organization also offer course on travel and tourism. As a result it becomes the biggest exchange earners throughout the world. This sector gives huge opportunities of employment to a lot of jobseekers over the world. Moreover, there are units several related fields giving equally nice career opportunities.

Purposes of Travel:

- For Visiting friends or relatives or for recreation –
 - Primary activities are Socializing, Outdoor entertainment, and Home entertainment
 - Secondary activities are Physical recreation, Shopping, Sight-seeing, and Urban entertainment
- For other personal business –
 - Primary activities are Shopping, Religious visit, Medical appointment
 - Secondary activities is visiting friends and families
- For Pleasure -
 - Primary activities are Recreation and Sight-seeing
 - Secondary activities are Visiting friends and families, Convention, Business and Shopping

So, the purposes of the proposed software named Tourism Management System is to help the management and concern personnel to enter employee's operational data and maintain thereafter.

The proposed Tourism Management System software will replace the manual and the legacy system to achieve the followings benefits:

Facilities: When tourists arrive at attractions they require facilities and services.

- Lodging: Represent a variety of services from campgrounds, parks, motels and five star resorts.
- Food & Beverage not only provide basic diet for tourists but an important factor in the overall tourism experience.
- Support Services usually are represented by small retail businesses providing souvenirs and personal services. Shopping is an important part of the travel experience. Tourists seek unique and novel items which represent the area and cultures of that area they visit.
- Infrastructure is he basic services on which all tourism depends. These systems include water and drain systems, security, networks communication, medical services, electricity, police and fire protection and condition of the roads.

Scope of proposed system

Tourism Management is flexible and complete end-to-end software with correct engineering to improve the managerial proficiency of tourism management. Ready for today and tomorrow, web enabled at its core, it provides all-in-one connectivity with hand held devices for routine tasks. It is a communicating platform for all individuals.

Chapter 2

Feature of Tourism Management System

Tourism System Software's top features include:

- Multi-Client, Multi User
- Comprehensive Help
- Quick Customer Registration and Easy Booking System
- Easy to Review
- User friendly Interface
- Customizable Reports
- Notification of Package update or Cancel

The Domain

The aim of this proposed project is the at management control of the Tourism Management. Such a large domain has large scope of development. As a result I limited my software work to my case study of one branch of Quality Tour, I've focused only on the basic properties utilized in manage of the Tourism. Although the software will be developed keeping in mind the needs of quality information and available data at first, then applying it to the larger domain of the entire blocks based one branch can be achieved with ease.

The Client

My software will allow the clients to easily maintain the database, operate the system as need of tour management organization. They can vary in system of their own management level. This provides a unique product that can be customized as well as a smaller scale to larger scale.

The User

The main users of this product would be govt. or private tour management organization. The management would approve the system that would be work in their own management and levels. Many of these tasks, such as the information regarding user, customer, package, hotel, and agent would need to be set only once. Of course, the option to add, remove, or update this data would be implemented as well. Once this initial step has been taken, my software will require nothing more than booking a package, minimizing the work that management has to complete in order to ensure the correct control is available.

Chapter 3

Non Functional Requirement

Usability:

- i. The system must be easy to use by both administrators and end users such that they do not need to read the large volume of manuals.
- ii. The system must be quickly manageable by both management and employees.
- iii. The system must be normal and simple in the way it shows all relevant data and relationships.
- iv. The menus of the system must be easily manageable by the users with buttons that are easy to understand.

Reliability:

- i. The System must provide perfect status to the user endlessly.
- ii. The System must successfully add any customer package given by the user and provide information and active or cancel status in relevance with the newly updated data.
- iii. The system must provide password enabled login to the user to avoid any unauthorized access and changing the data in the system.
- iv. The system should provide the user updates on end of requested processes and if the requested processes fail, it should provide the reason for the failure to the user.
- v. The system should not update the data in any database for any failed processes.

Performance:

- i. The system must not have any down-time. Users don't have to wait for to complete an action.
- ii. Every time the user requests a process, system must complete updating the databases, adding a customer successfully.
- iii. All the functions of the system must be accessible by the user every time the system is turned on.
- iv. The data performed by the system must comply according to the rules set by the user and should not vary unless explicitly altered by the user.

Supportability:

- i. The software is designed such a way that it works smoothly on systems having the minimum configuration.
- ii. The system is adaptable even if any further plugging or modules are added at a later point.
- iii. The data can be exported to the management so as to make the system more portable

The Success Criteria of the Project

The success criteria depend on:

- i. Accuracy in maintaining the management level
- ii. Accuracy in admission process
- iii. Ease of use when it comes to know about old information

Chapter 4

Tools and Technology

Front End Tools:

- i. Oracle 10g Developer Suite - Forms and Reports

Back End Tools:

- i. SQL
- ii. PL/SQL

Database:

- i. Oracle 10g Database
- ii. Oracle 11g Database

Server:

- i. Oracle Application Server 10g
- ii. Oracle Application Server 11g

System Requirement:

I decide to build a browser based system. The system is going to be used by a large number of users, so it should have been designed to be accessible for every single user, instead of having a desktop application for every user.

Software Requirement:

- **Operating System:** Windows 7/10 – 64bit
- **Database:** Oracle Database 11g Enterprise Edition - 64bit
- **Application:** Oracle 10g Developer suite (Forms and Report)
- **Server:** Oracle application server 10g

Hardware Requirement:

Minimum hardware requirement are as below-

- Processor: Intel Core i5 x64 Based
- RAM: 4 GB

System development Methodology

System Development Life Cycle (SDLC) is the complete method of developing information systems over a multi-step process from investigation of initial requirements through analysis, design, implementation and maintenance. There are many different prototypes and methodologies, but for this project I have use Structured System Analysis and Design Methodology (SSADM) which contains of a series of defined steps or stages. The consecutive stages for Tourism Management System are represented by V Lifecycle Model.

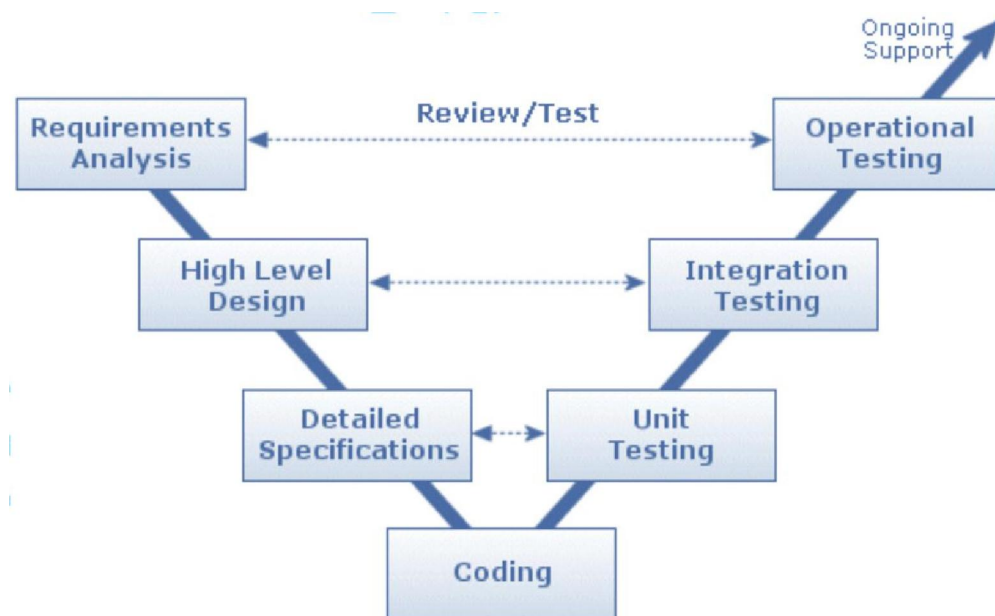


Figure 1: System Development Life cycle (SDLC)

Chapter 5

Initial request & feasibility study

The Initial request and feasibility study establishes a high-level view of the proposed project and explains its goals.

Deliverables:

- Feasibility Study Report is a report of cost benefits analysis and total time frame.

Requirement Analysis & Specification

The Requirement Analysis and Specification enhances project goals into defined functions and operation of the projected application after analyzing end-user's information needs.

Systems Design

This phase defines desired features and processes in detail, including layouts of the screen, business rules, process diagrams, pseudo code and other documentation. It consists of two phases. Those are:

1. Logical System Design

At this stage the logical view of the system is specified by system architecture in terms of components and their communication.

2. Physical System Design:

In this step, logical system design will be transformed into Physical design.

Deliverables:

- Data Dictionary
- Forms Layout
- Report Format

Chapter 6

System Development (coding and unit test)

In this stage, the development of the user procedures and the interfaces is completed. Ongoing and throughout development, and also as a separate stage after development, a thorough Testing is executed. The actual code is written in this stage.

Deliverables:

- Complete System specification and documentation (System Documentation)
- Forms
- Reports

System Integration and testing (Implementations)

After the coding has been completed, the unit test, integration, testing of all programs running as a complete system is carried out. This stage brings all the segments together into a special testing environment and then checks for errors, bugs and interoperability.

Deliverables:

- Integration Report

System Acceptance Test:

This is the final stage of initial development, where the software is put into production or lives and runs actual business.

Deliverables:

- User's sign off document

Maintenance

The maintenance activities are those actions that are required after an application has been successfully installed into production. This includes modifications, correction, additions, move to a different computing platform and more. This, the least fashionable and perhaps most important step of all, goes on speciously forever.

Data Modeling

The data modeling shows the data objects/entities in the system, their structure and the relationship among them.

System Flow:

- After login to the system user can create customer or customer can entry his own information.
- User entry Hotel information, Agent Information, Package information
- User or customer book a package including no of member and payment
- If any change of package happened, customer will get notification in their mobile
- Finally, the tourism organization executes the tour.

1. Use-case Diagram

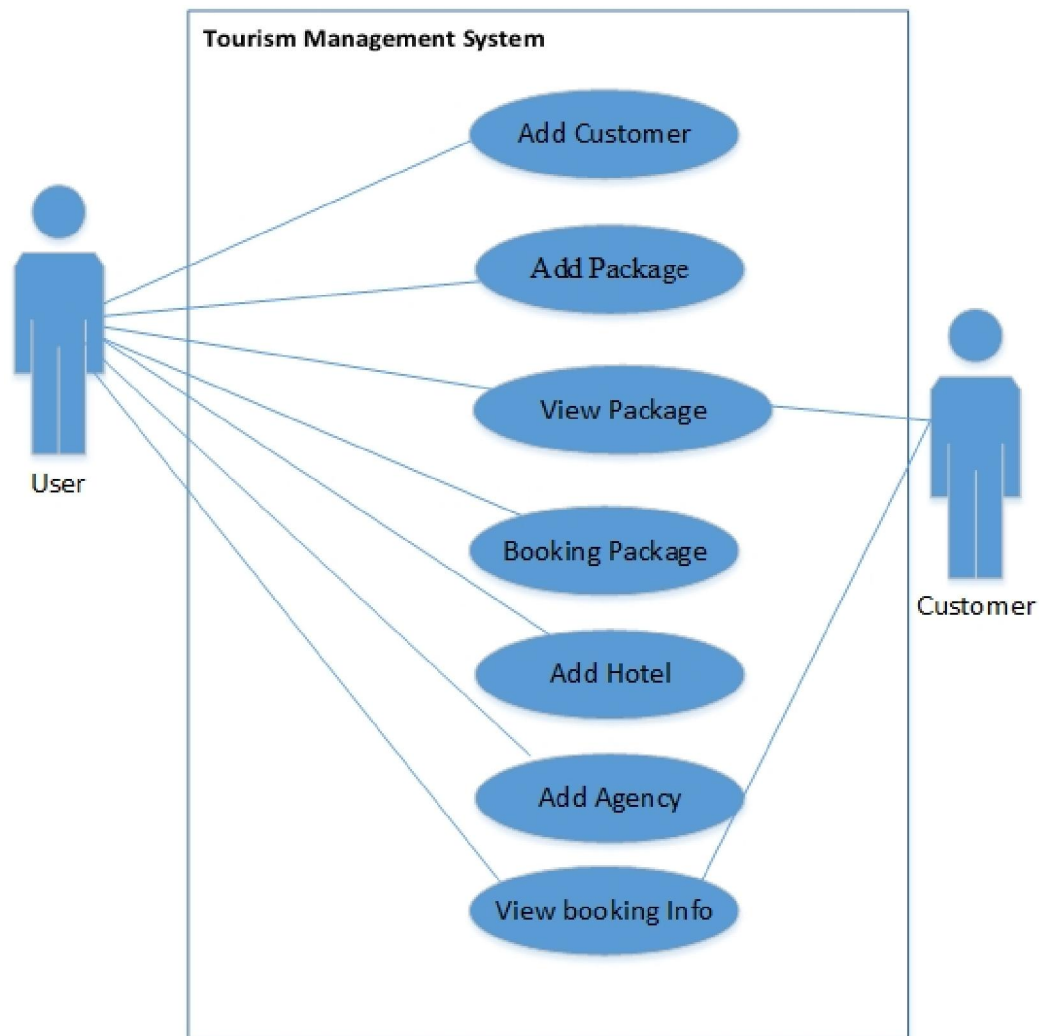


Fig: Use Case Diagram

2. Class Diagram

Tourism Management System

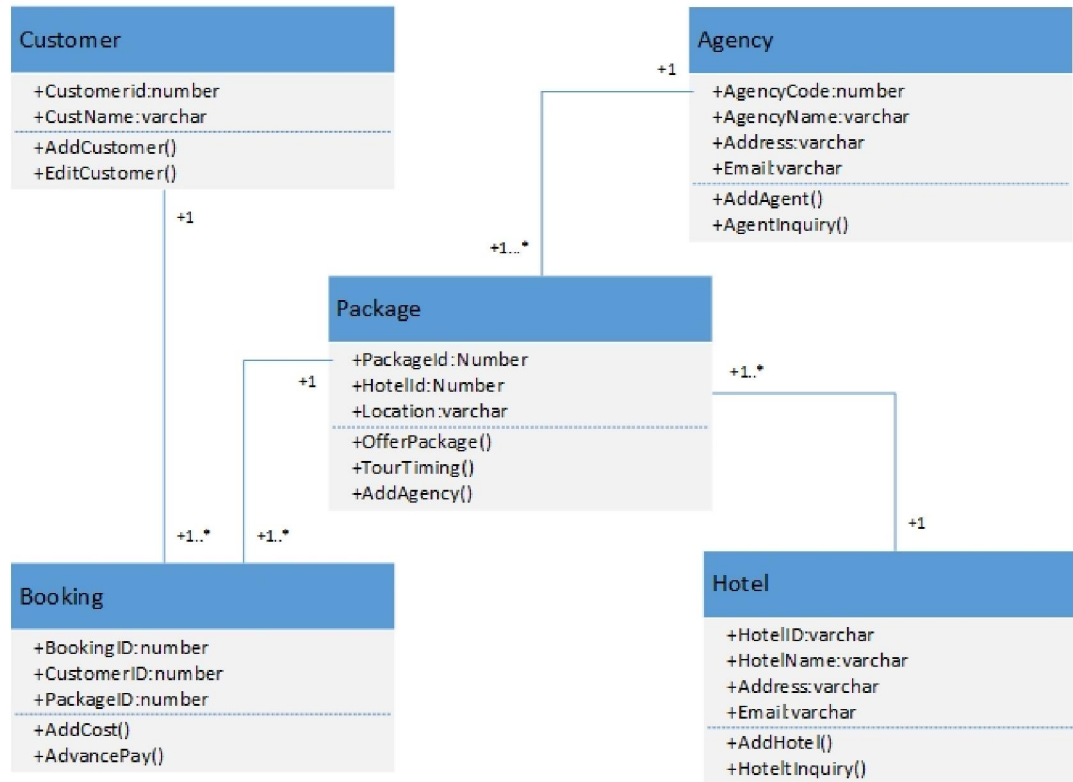
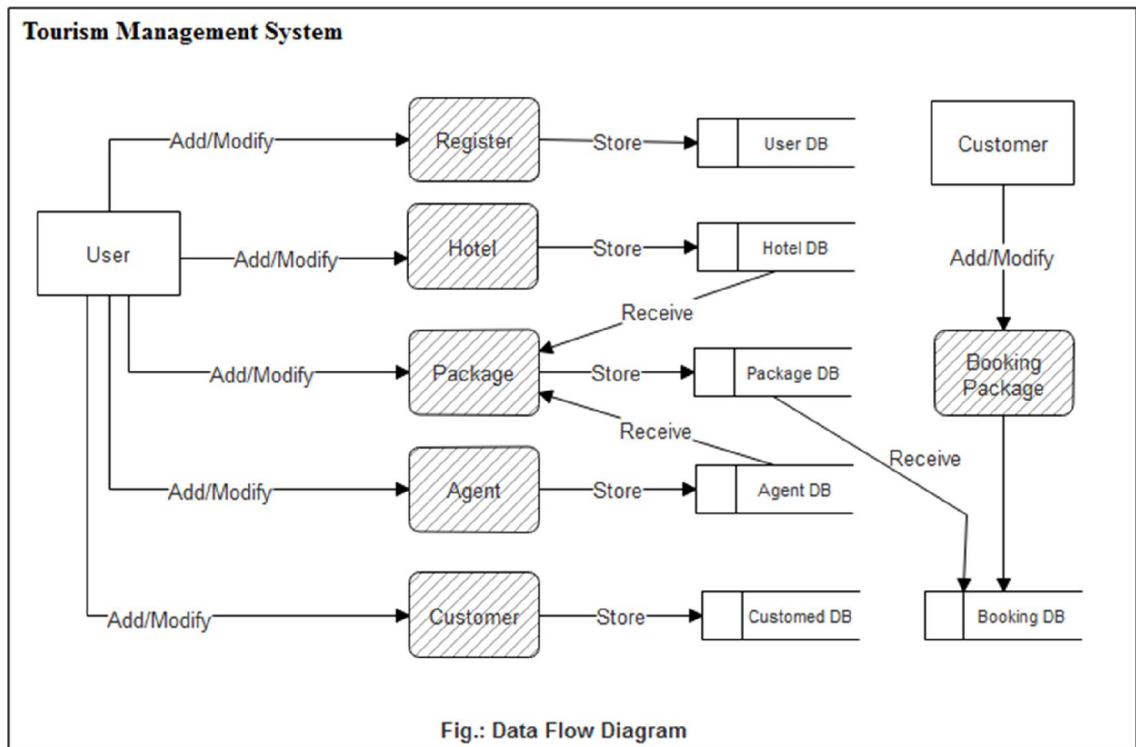


Fig:Class Diagram

3. Data Flow Diagram (DFD)



4. Entity Relationship Diagram (ERD)

The normalized ERD for the proposed Tourism Management System is shown in the following diagram.

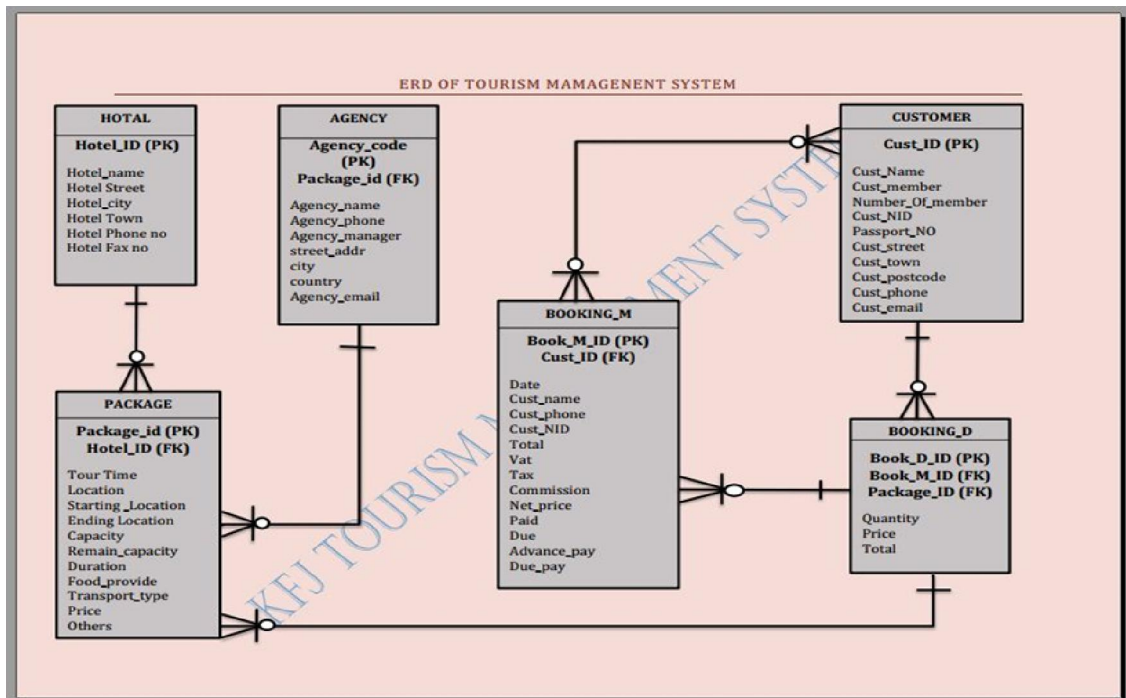
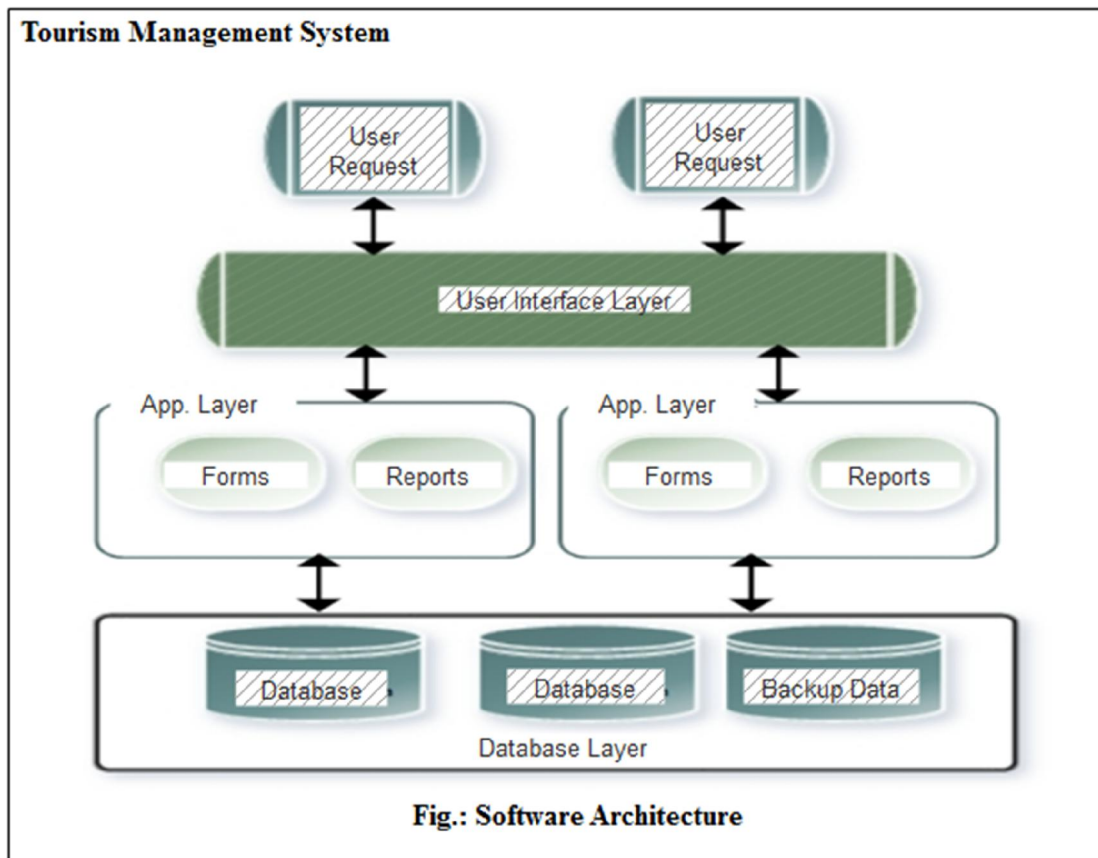


Figure: Database Entity Relationship Diagram

5. Software Architecture



Chapter 7

Table of Tourism Management:

1. CUSTOMER
2. PACKAGE
3. BOOKM
4. BOOKD
5. HOTEL
6. AGENCY
7. MESSAGE
8. USER

Description of Tables:

Table 1: CUSTOMER

Attribute	Details	Data type	Length	Constraint
CUST_NO	Unique CUSTOMER NO	NUMBER	15	NOT NULL
CUSTOMER_NAME	Customer Name	VARCHAR2	20	
CUST_MUMBER	Subject assigned for the Customer	VARCHAR2	60	
CUST_STREET	Location	VARCHAR2	60	
CUST_TOWN	Address	VARCHAR2	10	
CUST_POSTCODE	Post Code	NUMBER	15	
CUST_PHONE	Phone number	NUMBER	15	
CUST_EMAIL	Customer email	VARCHAR2	15	
CUST_NID	Number	NUMBER	20	
PASSPORT_NO	Passport _id no	VARCHAR2	30	
PHOTO	Customer photo	BELOB		

Table 2: PACKGE

Attribute	Details	Data Type	Length	Constraint
PACKAGE_ID	Package Unique ID	NUMBER		NOT NULL
FOOD_PROVIDE	Food Provide	VARCHAR2	15	
PRICE	Controlled	VARCHAR2	15	
DURATION	Duration	VARCHAR2	15	
CAPACITY	Capacity	VARCHAR2	15	
STARTING_LOCATION	Starting Address	VARCHAR2	15	
ENDING_LOCATION	Ending Address	VARCHAR2	15	
TOUR_TIME	Tour Date	DATE	15	
RETURN_TIME	Tour Return Date	DATE	15	
HOTEL_ID	Package Details	NUMBER		
OTHERS	Others	VARCHAR2	15	

Table 3: BOOKM

Attribute	Details	Data Type	Length	Constraint
BOOKM_ID	Unique Booking ID	NUMBER		NOT NULL
BOOKING_DATE	Date	DATE		
CUST_NO	Customer id	number		
CUST_NAME	Customer name	VARCHAR2	15	
CUST_PHONE	Customer phone	NUMBER		
CUST_NID	Customer NID	VARCHAR2	30	
TOTAL	Gross total	NUMBER		
TAX	Tax	NUMBER		
VAT	Vat	NUMBER		
COMMISSION	Commission	NUMBER		
PAID	Paid	NUMBER		
DUE	Due	NUMBER		
DUE_PAY	Due Pay	NUMBER		

Table 4: BOOKD

Attribute	Details	Data Type	Length	Constraint
BOOKD_ID	BOOKING DETAIL ID	NUMBER		NOT NULL
BOOKM_ID	BOOKING MASTER ID	NUMBER		
PACKAGE_ID	PACKAGE ID	NUMBER		
PRICE	RATE	NUMBER		
TOTAL	TOTAL	NUMBER		
QUANTITY	QUANTITY	NUMBER		

Table 5: HOTEL

Attribute	Details	Data Type	Length	Constraint
HOTEL_ID	HOTEL ID	NUMBER		
HOTEL_NAME	HOTEL NAME	VARCHAR2	60	
HOTEL_STREET	ADDRESS	VARCHAR2	150	
HOTEL_CITY	CITY	VARCHAR2	11	
HOTEL_PHONE_NO	PHONE NO	VARCHAR2	35	
HOTEL_EMAIL	EMAIL	VARCHAR2	50	
PACKAGE_ID	PACKAGE ID	NUMBER		

Table 6: AGENCY

Attribute	Details	Data Type	Length	Constraint
AGENCY_CODE	Unique Of Agency	VARCHAR2	25	NOT NULL
PACKAGE_ID	PACKAGE_ID	NUMBER		
AGENCY_NAME	Agency Name	VARCHAR2	10	
AGENCY_PHONE_NO	Phone Number	NUMBER		
AGENCY_MANAGER	Manager Name	VARCHAR2	15	
ADDR_STREET	Location	VARCHAR2	10	
ADDR_CITY	City	VARCHAR2	25	
ADDR_COUNTRY	Country	VARCHAR2	25	

Table 7: Description of the Input Forms

Forms name	Purpose and Short Description
LOGOGING	To Logon to access the system
HOMEPAGE	To access different modules through button
CHANGE PASSWORD	To store employee's personal information.
USER_ADD	To create new user
CUSTOMER	To store Customer information
PACKAGE	To store PACKAGE information.
BOOKM	To store BOOKM information.
BOOKD	To store BOOKD information.
HOTEL	To store Hotel information.
AGENCY	To store Agency information.

Table 8: List of input forms related Entity (Table)

Forms name	Related Entities
LOGON FORM	LOGING
HOMEPAGE	LOGING
CHANGE PASSWORD	LOGING
USER_ADD	LOGING
CUSTOMER	CUSTOMER
PACKAGE	PACKAGE
BOOKM	BOOKM
BOOKD	BOOKD
HOTEL	HOTEL
AGENCY	AGENCY

User Manual Description:

Getting started – connecting to database:

At first, to start a module, double click on the icon of the module on the desktop. Next a database connection screen appears. In this screen, user input user name and password to connect to a database server. Database Server stores all the data. The Database Administrator determines the login name and password to connect the database server. Without valid user and password, no one can connect to the system. The following view is the window of Connect to Database Server.

Database Login Screen:

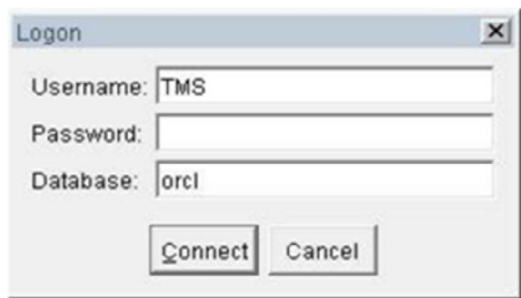
A screenshot of a 'Logon' dialog box. The dialog box has a title bar with the text 'Logon' and a close button (X). Inside the dialog, there are three text input fields. The first field is labeled 'Username:' and contains the text 'TMS'. The second field is labeled 'Password:' and is empty. The third field is labeled 'Database:' and contains the text 'orcl'. Below the input fields, there are two buttons: 'Connect' and 'Cancel'.

Figure 2: Connecting to the database server

User Type

Users have a hierarchy of authority according to their section, and they are only allowed to use related modules except system admin. System admin has the authority to use every module in the system. In order to prevent improper use, the system logs every act, every edit. Although users can only use their modules, they can also use some other features of the system. There are two user types.

1. Admin
2. Users

User Characteristics:

The application shall have different types of user ranging from level one to level two. These different levels shall have different permissions.

Admin user is the database administrators. This is the highest user level. They shall have permission to read any data that exists in the database and have the authority to generate, alter any structure in the database. Also, they shall have the permission to back-up the database at any time.

General user can read, add records to a database table. They shall also have the permission to modify and delete any records in the database.

System Login Screen:

The first step is **login** to the system. There are two login options. First one is the system management, the other one is the end users. The login data is gathered from Software firm's database, so the users can login the system with their existing user name and password.



The screenshot shows a web application window titled "Log In". The main heading is "Tourism Management" in blue text on a green background. Below this, there is a section titled "User Authentication" in blue text. To the left of the authentication fields is a photograph of a large, ornate building. The authentication fields include "User ID" with the value "102" and "Password" with the value "123456789". A yellow "Login" button is positioned below the password field. At the bottom of the window, there is a green footer with the text "Country Tourism Bangladesh" in pink.

Figure 3: Opening Screen of the system login

User's Guideline:

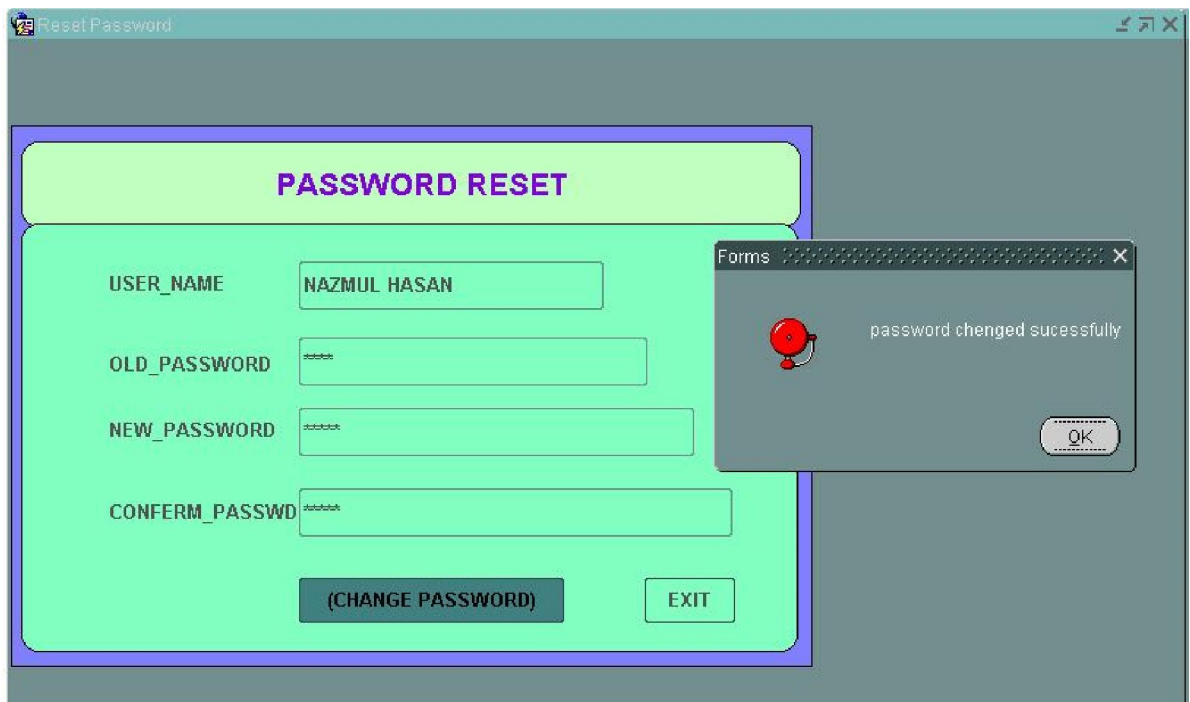
Field description:

- **User Name:** This field is used to user name and its non-database item.
- **Password:** This field is used to user valid previous password and it's a non-database item.
- **Login:** This button is used to enter the system homepage and it's also a non-database item.
- **Change Password:** This button is used to change password.

- **Display Item:** When user input wrong password then message shown message - Wrong Password Given!
- **Image:** This item shows the users picture.

Change Password:

This form is used to change user password.



The screenshot shows a window titled "Reset Password" with a light blue background. Inside, there is a white rounded rectangle containing the form. The form has a title bar "PASSWORD RESET" in red. Below it, there are four input fields: "USER_NAME" (containing "NAZMUL HASAN"), "OLD_PASSWORD", "NEW_PASSWORD", and "CONFIRM_PASSWD", all with masked characters. At the bottom of the form are two buttons: "(CHANGE PASSWORD)" and "EXIT". Overlaid on the right side of the form is a small dialog box titled "Forms" with a red speech bubble icon. It contains the text "password changed sucessfully" and an "OK" button.

Figure 4: Change password

Users guide:

Field Description:

- **User Name:** This field is to insert User Name.
- **Old Password:** This field is to insert Old Password.
- **New Password:** This field is to insert New Password.
- **Confirm Password: :** This field is to confirm new Password.

Uses of button

- **Change Password:** This field is to store the new Password.
- **Exit:** This field is to go to home page.

HOME PAGE:

After Login user will get the homepage from they can access different modules of the system.



Figure 5: Home page of system

User's Guideline:

- **Customers:** This button is used to query, insert, update and delete Customer information.
- **Qk Customers:** This button is used to entry and manages the Customer information quickly.
- **Package:** This button is used to query, insert, update and delete Package information.
- **Booking:** This button is used to query, insert, update and delete Booking information.
- **Agency:** This button is used to query, insert, update and delete the information of consumers that provided by the booking.

- **Hotel:** This button is used to query, insert, update and delete Hotel information.
- **Payment:** This button is used to query, insert, update and delete Payment information.
- **Users:** This button activate user to change their user password.

CUSTOMER:

Customer information form is used for to store Customer information. This form is used for insert, update and delete purpose. The Customer information is viewed through this form.

The screenshot shows a software window titled "Customer". Inside, there's a cyan-colored header bar with the text "CUSTOMER INFORMATION" in blue. Below this header is a row of nine buttons: (SAVE), (INSERT), (EXECUTE), (ENTER), (PREVIOUS), (NEXT), (CLEAR), (DELETE), and (EXIT). The main content area has a light green background. Within this area, there's a blue rectangular box containing a tab labeled "CUSTOMER". Below the tab, there are several input fields for customer information: "Cust Id" (containing "1"), "Name" (containing "Mohammad Hanif"), "Address" (containing "12/3, Asad Gate"), "P.S. / District" (containing "Dhaka"), "Post Code", "Phone No" (containing "01821223344"), "Email Id", "Passport No", and "NID".

Figure 6: Customer information Form

User Guideline:

- **Cust_id:** This field is used to Insert, Update and Delete Customer_id.
- **Customer Name:** This field is used to Insert, Update and Delete Customer Name.
- **Cust_Street:** This field is used to Insert, Update and Delete Cust_Street.
- **Cust_Postcode:** This field is used to Insert, Update and Delete Customer post code individually.
- **Cust_Mobile:** This field is used to Insert, Update and Delete Customers mobile no

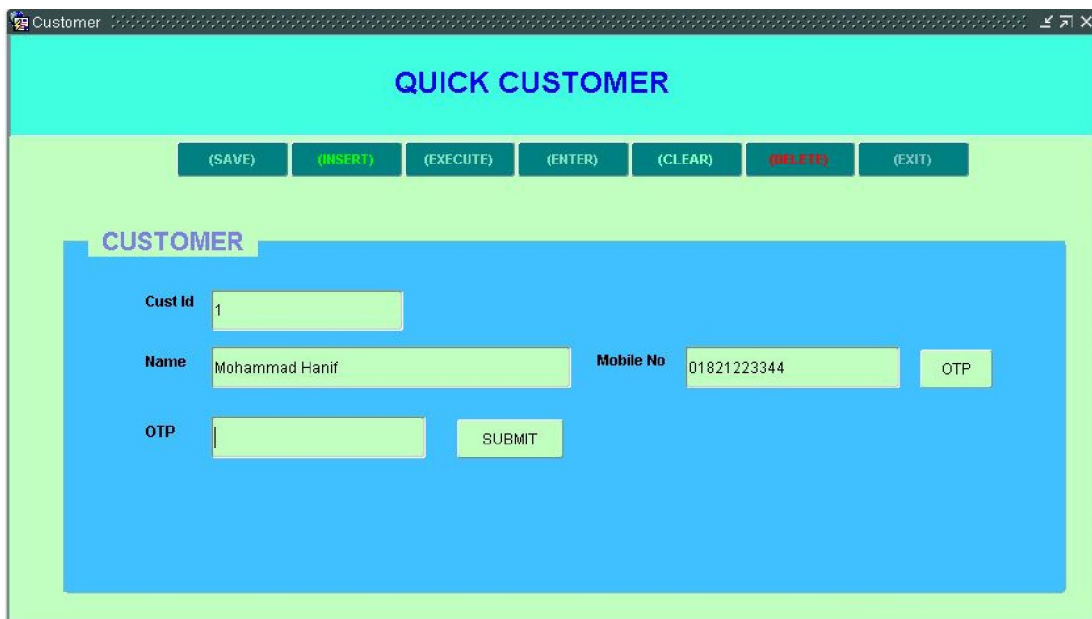
- **Cust_NID:** This field is used to Insert, Update and Delete Customers National ID Card.
- **Passport_No:** This field is used to Insert, Update and Delete Customers Passport Number.
- **Cust_Town:** This field is used to Insert, Update and Delete Customers Town.
- **Cust_Email:** This field is used to Insert, Update and Delete Customers Email Id.
- **Photo:** This field is used to Insert, Update and Delete Customers Picture.

Usage of Buttons:

- **Execute:** This button is used to query the existing information.
- **Clear:** This button is used to clear or refresh fields.
- **Insert:** This button is used to create new record.
- **Save:** This button is used to save new record.
- **Delete:** This button is used to delete or remove existing record.
- **Previous:** This button is used to go to the previous record while query.
- **Next:** This button is used to go to the next record while query.
- **Exit:** This button is used to exit the form.

QUICK CUSTOMER

This form uses to avoid fake customer registration and quick entry. Customer can entry/register quickly by entering only name and mobile no. After entry the mobile number, a **One Time Pin-code** (OTP) send to the customer's mobile for verification. After verification the OTP, customer's information saves in to the system. This customer can do other operation of the system.



The screenshot shows a software window titled "Customer" with a cyan header bar containing the text "QUICK CUSTOMER" in blue. Below the header is a row of seven buttons: (SAVE), (INSERT), (EXECUTE), (ENTER), (CLEAR), (DELETE), and (EXIT). The main area has a light green background and contains a blue-bordered box labeled "CUSTOMER" in purple. Inside this box, there are input fields for "Cust Id" (containing "1"), "Name" (containing "Mohammad Hanif"), and "Mobile No" (containing "01821223344"). To the right of the "Mobile No" field is an "OTP" button. Below the "Name" field is an "OTP" input field, and to its right is a "SUBMIT" button.

Figure 7: Quick Customer Entry

User Guideline:

- **Cust_id:** This field is used to Insert, Update and Delete Customer_id.
- **Customer Name:** This field is used to Insert, Update and Delete Customer Name.
- **Cust_Mobile:** This field is used to Insert, Update and Delete Customers mobile no
- **OTP:** To Enter the one time pin code to verify the customer.
- **OTP Button:** Sent a one time pin code to customer mobile no.
- **SUBMIT button:** Pressing this button, system verify the generated OTP which send to the customer mobile no and given (entered) OTP are same or not. If both are same the registers the customer.

PACKAGE

Package form is used for to entry package information. Organization offer packages to customers in different place. The purpose of this form is to insert, update and delete data. The package information is viewed through this form.

The screenshot shows a web application window titled "Package". The main heading is "PACKAGE INFORMATION". Below this heading is a row of buttons: (Save), (Query), (Execute), (Previous), (Next), (Clear), (Delete), (Exit), and Report. The form area is titled "PACKAGES" and contains two columns of input fields. The left column includes Package Id (2), Hotel Id (1), Pkg Duration (3), Capacity (15), Remain Capacity (8), and Transport Type (BUS). The right column includes Tour Time (02-MAR-2018 09:35:00 PM), Location (Cox's Bazar), Start Loc (Kakrail), End Loc (Cox's Bazar), Food Provide (BREAKFAST,LUNCH,TIFIN,DI...), and Price (12000). There is also an "Others" field at the bottom.

Figure 8: Package Information Form

User Guideline:

Field description:

- **PACKAGE_ID:** This field is to insert, update, and delete Package_id unique ID.
- **HOTEL_ID:** This field is to insert, update, and delete Hotel_id.
- **STARTING_LOCATION:** This field is to insert, update & delete Starting_location.
- **ENDING_LOCATION:** This field is to insert, update and delete Ending_location.
- **TRANSPORT_TYPE:** This field is to insert, update and delete Transport_type.
- **LOCATION:** This field is to insert, update and delete customer's Location.
- **TOUR_TIME:** This field is to insert, update and delete Tour Time.
- **PRICE:** This field is to insert, update and delete Tour Price.

- **CAPACITY:** This field is to insert, update and delete Remain_capacity.
- **REMAIN_CAPACITY:** This field is to insert, update and delete Remain_capacity.
- **DURATION:** This field is to insert, update and delete stay Duration.
- **FOOD_PROVIDE:** This field is to insert, update, and delete Food_provide.
- **OTHERS:** This field is to insert, update and delete Others Related Tour.
- **PKG_STAT:** This field's value wills **Active** or **Cancel**. For any reason if a package is cancel, user will update this status.

Usage of Buttons:

- **Execute:** This button is used to query the existing information.
- **Clear:** This button is used to clear or refresh fields.
- **Insert:** This button is used to create new record.
- **Save:** This button is used to save new record.
- **Delete:** This button is used to delete or remove existing record.
- **Previous:** This button is used to go to the previous record while query.
- **Next:** This button is used to go to the next record while query.
- **Exit:** This button is used to exit the form.

BOOKM

BOOKM form is used for to store BOOKING information provided by the TOURISM MANAGEMENT system. This form is used for insert, update and delete purpose. The BOOKM is viewed through this form.

Book M Id	Package Id	Quantity	Price	Total
1	1	10	10000	100000
1	4	2	5000	10000
1	1	5	5000	25000

Figure 9: Booking Information

User Guideline:

Field description:

- **BOOKM_ID:**
 - This field is used to insert, update, delete and query unique ID of Books.
- **CUST_NO:**
 - This field is to insert, update, delete and query Customers ID.
- **CUST_NAME:**
 - This field is to insert, update, delete and query Customers Name.
- **CUST_PHONE:**
 - This field is to insert, update, delete and query Customers Phone Number.

- **CUST_NID:**
 - This field is to insert, update, delete and query about Customers National ID Card.
- **TOTAL:**
 - This field is to insert, update, delete amount paid by the tour total.
- **TAX:**
 - This field is to insert, update, delete amount of TAX included with tour fee.
- **VAT:**
 - This field is to insert, update, delete amount of VAT included with tour fee.
- **COMMITION:**
 - This field is to insert, update, delete amount of discount declared with tour fee.
- **NEXT PAYMENT:**
 - This field is to insert, update, delete total amount the customers have to pay next time.
- **PAID:**
 - This field is to insert, update and delete the amount paid by the customers.
- **DUE FEE:**
 - This field is to insert, update and delete the amount of due fee.
- **TOTAL DUE:**
 - This field is to insert, update and delete the total amount paid of the customers.

Usage of Buttons:

- **Execute:** This button is used to query the existing information.
- **Clear:** This button is used to clear or refresh fields.
- **Insert:** This button is used to create new record.
- **Save:** This button is used to save new record.
- **Delete:** This button is used to delete or remove existing record.

- **Previous:** This button is used to go to the previous record while query.
- **Next:** This button is used to go to the next record while query.
- **Exit:** This button is used to exit the form.

HOTEL

Hotel form is used for to stay customers many days. This form is used for insert, update and delete purpose. The hotel is viewed through this form.

The screenshot shows a Windows application window titled "WINDOW1". The main content area has a light blue background. At the top, there is a green header bar with the text "HOTEL INFORMATION" in orange. Below the header, there is a row of eight buttons: (Save), (Query), (Execute), (Previous), (Next), (Clear), (Delete), and (Exit). Below these buttons, the word "HOTEL" is displayed in a red box. The form contains several input fields: "Hotel Id" (with a small icon), "Hotel Name" (containing "Hotel Aunorag"), "Phone No" (containing "715717"), "Fax No" (empty), and "Hotel Address" (containing "Dhopa Dighi North, Sylhet"). There is also a small "(ED)" button next to the address field.

Figure 10: Hotel Information

User Guideline:

Field Description:

- **HOTEL_ID:** This field is to insert, update, delete and unique Hotel ID.
- **HOTEL_STREET:** This field is to query, insert, update and delete Hotel Street.
- **HOTEL_NAME:** This field is to insert, update, delete and query Hotel Name.
- **HOTEL_CITY:** This field is to insert, update, delete and query Hotel City.
- **HOTEL_PHONE_NO:** This field is to insert, update, delete and query Hotel Phone Number.
- **HOTEL_EMAIL:** This field is to query, insert, update and delete the email number assigned for the hotel.
- **PACKAGE_ID:** This field is to insert, update, delete and unique Package ID.

Usage of Buttons:

- **Execute:** This button is used to query the existing information.
- **Clear:** This button is used to clear or refresh fields.
- **Insert:** This button is used to create new record.
- **Save:** This button is used to save new record.
- **Delete:** This button is used to delete or remove existing record.
- **Previous:** This button is used to go to the previous record while query.
- **Next:** This button is used to go to the next record while query.
- **Exit:** This button is used to exit the form.

AGENCY

Agency form is used for to tour management system. This form is used for insert, update and delete purpose. The agency is viewed through this form.

WINDOW1

AGENCIES INFORMATION

(Save) (Query) (Execute) (Previous) (Next) (Delete) (Clear) (Exit)

AGENCY

Agency Code: 1

Name: Team Coxsbazar

Address: 112/c Coxsbazar (ED)

Package Id: 1

Phone No: 189765672

Manager: MD Kamran

Agency Email: tcoxsbazar@name.com

Figure 11: Agencies Information

User guideline:

Field Description:

- **AGENCY_CODE:** This field is to query, insert, update and delete unique Agency Code.
- **NAME:** This field is to query, insert, update and delete Agency Name.
- **MANAGER:** This field is to query, insert, update and delete Agency Manager.
- **ADDRESS:** This field is to query, insert, update and delete the Address.
- **PHONE_NO:** This field is to query, insert, update and delete Agency phone number.
- **AGENCY_EMAIL:** This field is to query, insert, update and delete Agencies email.
- **PAGKAGE_ID:** This field is to query, insert, update and delete Package Id.

Usage of Buttons:

- **Home:** Clicking on this button user can go to the home page.
- **Execute:** This button is used to query the existing information.
- **Clear:** This button is used to clear or refresh fields.
- **Insert:** This button is used to create new record.
- **Save:** This button is used to save new record.
- **Delete:** This button is used to delete or remove existing record.
- **Previous:** This button is used to go to the previous record while query.
- **Next:** This button is used to go to the next record while query.
- **Exit:** This button is used to exit the form.
- **Logout:** This button is used to log out.

OUTPUT REPORTS

Booking Report

With this report user can show Booking payment:

Booking Package Detail				
Cust Name	Shohel			
Cust Phone	1552225625			
Booking Id	1			
pkg id	B Date	Quantity	Price	Total
4	15-OCT-16	2	5000	10000
G Total				10000
Vat				2000
Tax				2000
Comm				5000
N Price				99000
Due Pay				9000
Due Pay				
Powered By KFJ Tourism Management				

Figure 12: Package Booking detail (Report)

Chapter 8

Future Works

- Payment conformation by **Transaction Id** and checker-maker option
- Customer Relationship Management (CRM) through this system
- Communicate/ offer about next tour to the dropped out clients.
- Send wish on special event to clients through SMS.
- Online booking with bkaash, rocket and Credit card and customer confirm by input the Transaction ID.

Conclusion

In the light of software engineering methods, after analyze client's requirement I figure out the workflow, design methods and structures, construct scenarios, make test, code the software, debug the faults and bugs, and finally I achieve a new Tourism Management System. My first aim was to develop the Tourism Management System that is able to meet the requirements gathered. During the development process, there are many feedbacks leaded me to re-design. I'm confident that this proposed Tourism Management System software will meet the requirement of the client.

References

- [1] http://en.wikipedia.org/wiki/Use_case
- [2] http://en.wikipedia.org/wiki/Data_model
- [3] <http://en.wikipedia.org/wiki/Flowchart>
- [4] http://en.wikipedia.org/wiki/User_interface_design
- [5] http://en.wikipedia.org/wiki/Software_testing