

Tour Management system for ISTL

A Practicum Report Submitted By

Md Ashraful Islam

ID # 18203028

A practicum report submitted in partial fulfillment of the requirements for
the award of Bachelor of Computer Science and Engineering



Department of Computer Science and Engineering

College of Engineering and Technology

IUBAT – International University of Business Agriculture and Technology

Summer 2022

Tour Management system for ISTL.

Md Ashraful Islam

A practicum report submitted in partial fulfillment of the requirements for the degree of
Bachelor of Computer Science and Engineering (BCSE)

The practicum has been examined and approved by,

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Summer 2022

Letter of Transmittal

20 January 2022The Chairman

Practicum Defense Committee

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Subject: Letter of Transmittal.Dear Sir,

I am pleased to present to you my practicum report titled ‘Development of Tour Management system’ as required by IUBAT for the partial fulfillment of the requirements for the award of Bachelor of Computer Science and Engineering.

It was indeed a great opportunity for me to work on this project to actualize my theoretical knowledge into practice. Now I am looking forward for your kind appraisal of my report.

Finally, I would like to thank you for giving me the opportunity to pursue my studies in your renowned university.

Yours sincerely,

Md Ashraful Islam
ID: 18203028

Letter of Authorization

20 May 2022

IUBAT – International University of Business Agriculture and Technology
4 Embankment Drive Road, Sector -10
Uttara Model Town, Dhaka-1230
Subject: Letter of Authorization

Dear Md Ashraful Islam,

You will be happy to know that project on “Tour Management System for ISTL” has been accepted by the department. We hope you will successfully complete the project on time. After successful completion of the project, you are requested to write a report based on the project. For any kind of needs, don’t hesitate to contact with us.

Co Supervisor

.....

Dr. Hasibur Rashid Chayon
Coordinator and Associate
Professor

Department of Computer Science
and Engineering

Supervisor

.....

Md Hasibul Islam
Lecturer,
Department of Computer Science
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Student's Declaration

I am Md Ashraful Islam, a student of BCSE-Bachelor of Computer Science and Engineering program, under the College of Engineering and Technology (CEAT) of International University of Business Agriculture and Technology (IUBAT) declaring that, this report on the topic of 'Tour management system for ISTL has been prepared for the fulfillment of the internship course CSC 490, which is the partial requirement of Bachelor of Computer Science and Engineering degree.

The report and the project on "Ferry Ticket selling system for Aurora IT-21 Ltd" are originally prepared by me. All module and procedure of this project made after proper inspection and internet information.

It has not been prepared for any other purposes, rewards or presentations.

.....

Md Ashraful Islam

ID # 18203028

Program: BCSE

Acknowledgements

In the name of Allah, the most merciful, graceful, and kindhearted. I'd like to thank a few people who helped, motivated, directed, and endorsed me across the whole of my practicum program. I'd like to thank my parents for their unending support and encouragement in helping me achieve this magnificent event in my life. My heartfelt thanks go to Prof. Dr. Utpal Kanti Das, Chair of the Department of Computer Science and Engineering, who is the most sincere and responsible person for the structure of our course curriculum, which allows us to experience a professional environment and work on real-life projects. I'd like to express my appreciation to my faculty advisor, Md Hasibul Islam, lecturer of Computer Science & Engineering Department, who has guided me throughout my project and report not only this semester but also throughout my university career by providing valuable suggestions and advice at any time, in any situation. Only because of his expert guidance was I able to develop this project and report effectually and correctly. I would like to express my gratitude to Md. Nazmus Sakib (Chief Executive Officer, Integrated Software Technology Limited) for providing me with the opportunity to complete my internship and project. Their constant encouragement and contribution provided me with the courage and determination I required to complete the internship and project successfully.

Supervisor's Certification

This is to certify that Practicum report on “Tour management system for ISTL” has been carried out by Md Ashraful Islam, bearing ID# 18203028, of IUBAT–International University of Business Agriculture and Technology, as a partial fulfillment of the requirement of practicum defense course. The report has been prepared under my guidance and is a record of the accomplished work, carried out successfully. To the best of my knowledge and as per his declaration, no parts of this report have been submitted anywhere for any degree, diploma or certification.

Now he is permitted to submit the report. I wish him success in all his future endeavors.

Practicum Supervisor

.....

Md Hasibul Islam

Lecturer, Department of Computer Science and Engineering
IUBAT- International University of Business Agriculture and Technology

Department's Certification

On behalf of the Department of Computer Science and Engineering of IUBAT- International University of Business Agriculture and Technology, we, the undersigned, certify that this practicum report 'Tour management system for ISTL' for the award of Bachelor of Computer Science and Engineering (BCSE) degree was duly presented by Md Ashraful Islam (ID No.18203028) and accepted by the department.

.....

Prof. Dr. Utpal Kanti Das Professor & Chair,

Department of Computer Science and Engineering

IUBAT- International University of Business Agriculture and Technology

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Internship Certification

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Date: 10-08-2022

TO WHOM IT MAY CONCERN

Integrated Software and Technologies Ltd. certifies that **MD. Ashraful Islam** successfully completed the internship program 10th May, 2022 to 10th August 2022 at our organization.

During this time **MD. Ashraful Islam** work on Participating in peer code reviews, Basic Software Development & Basic Software Designing.

MD. Ashraful Islam displayed professional traits during his internship period and managed to complete all assigned task as requested. He was hardworking, dedicated, and committed. It was a pleasure having his with us in this short period.

Sincerely,



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Abstract

The Tour Management System is a Web based application. The primary function of “Tour ManagementSystem” is to give facilities online tour booking and manage tour packages through online. The goal of this project is develop a system that improves the operation and activities of a tour agency. In this project, I will make an easier process of booking tour packages. Currently clients have to come office or make a phone call to book a tour packages or ask enquiries about tour packages. This requires a lot of time and effort, and also need a person to manage customer through phone call or office reception. I provide a system to critically examine how to digitalize system for a tour management agency. By using this software user can easily book tour package, know detail about tour package, do enquiry about agency and their facilities and their working procedural and the agency can track their clients record easily. The project ‘Tour management system’ is developed to replace the manual system, which helps in keeping records of the customer details of destination as well as payment received.

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Tour Management System

Chapter: 01

Organizational Part

1.1 Organizational Overview

Integrated Software Technology Limited (ISTL) started its journey in 2013 and is located in Mirpur DOHS, Dhaka, Bangladesh. ISTL is a provider of software development solutions and stands for the tenacity, creativity, and commitment of those who work there. We are dedicated about our work and give it our all to meet the needs of our customers.

We have experience work with so many clients. Our main services are Software development, AFIV, content& research, Quality assurance, Business intelligence, Cloud & IOT based solution, Server maintains, IT consultancy.



Figure 1.1: ISTL Logo

The team ISTL is not a simple team of professionals at business disposal but it complements the activities of the software development solution. Unity of purpose and a common vision allow the teamwork to achieve settled goals. Here are worked 25 people they are almost expert in different side.

1.2 Organization Mission

Go above and beyond software to offer the greatest Web solutions that turn data into knowledge so that customers may solve their problems.

1.3 Organization Vision

Rather than professionals, we prefer people who are dedicated, diligent, and enjoy working in team. We are confident in our teaching method. Our teaching method helps them establish themselves as professionals. That's why no need to hire any professionals.

1.4 Organization's Location

Level 3 & Level 5, House 1043 Avenue 9 Road 9 Mirpur DOHS, Dhaka - 1216 Bangladesh

1.5 My Position in this Company

I am working as a Software Developer intern in this company.

1.6 Organization Services

ISTL is committed to deliver excellence and certainty across all types of enterprise's IT needs. They offer services that cover:

1.6.1 Web design and Development

1.6.2 Software design Development & Android App Development

1.6.3 CRM Solutions & ERP Solutions

1.6.4 Data, Content & Research

1.6.5 Quality Assurance

1.6.6 Cloud & IOT Based Solution

1.6.7 IT Consultancy

1.7 Organizational Structure



Figure 1.2: Organizational Structure

Chapter: 02

Project Introduction

2.1 Introduction

Internships are a way to put theoretical knowledge into practice and may be seen as an initial trial to get to know any firm while also gaining the self-assurance needed to start a career and enter the working world. IUBAT-International University of Business Agricultural and Technology offers this opportunity to create capability with the most suitable opportunities because the outside world is quite competitive for everyone after graduation. The student is given the chance to use the theoretical information and practical abilities that they have acquired throughout their undergraduate studies. A thorough summary of my project work at Integrated Software Technologies Limited is provided in this documentation. There were at least 12 weeks in the internship.

This project Tour Management System is being developed while I am doing my internship at Integrated Software Technologies Limited, and I have been assigned to it by my office supervisor. This report is created to describe the procedures and work completed at various stages of this development. I have provided appropriate visuals for each section of the development process that I have detailed in this report.

2.2 Project Overview

A Web -based program, the Tour Management System. The goal of the Tour Management System project is to create a system that automates travel processes and activities, as well as to design a system that can perform all operations related to traveling.

Getting solutions over the internet has become increasingly popular for both organizations and clients because all services are more physically trouble free, getting and providing solutions without physically maintaining queues. So, with this internet-based tour management system, the relevant people access the website, view all of the tour details and can book their desired package, if they have any queries they will submit their queries, and receive solution feedback from the organization.

2.3 Background of Study

Now-a-days we can see different types of management software to manage our everyday tasks smoothly and perfectly. Each and every office needs management software for manage all the work done in the office. Before starting the work, I have done some study on different tour management software. Such as which type of requirements is needed to manage the system. What kind of functionalities people want in the software, to add customer info, add service to system and last of all generate an invoice and generate sales report. I discovered that almost every tour management website makes it difficult for users to use the application. So I did my best to make the web app more user friendly, so that the user can understand the system at a glance and prefer the system to other apps available on the internet.

2.4 Objectives

This application was created to give a great experience of Bangladeshi tourist and tour agency. I created Tour management system to manage and book tour packages through online. By using this system user can perform many task automatically and without any interaction of admin so its reduce admin's work pressure.

This system also provides information on customer all information, such as tourist name, traveling time and date, package information. This system now allows track all information.

2.4.1 Broad Objective

The main goal of this project was to develop a tour management system, which would automate the entire travel system and provide a quick, effective, and user-friendly solution.

2.4.2 Specific Objectives

- To remove the old fashioned manuals system by introducing a modern computerized system.
- To provide automated tour booking System
- To provide a smooth and user-friendly system for Customer betterment.
- To maintain all the records of the tour agency.

2.5 Proposed System Benefits

Development of a Tour Management System is one kind of application which helps tour agency and customer both. My proposed system is basically a web based system which provides ultimate solution for travel and tour area.

2.6 Methodology

The "Development of a Tour Management System" development process is finished by adhering to the framework discussed later on in Software Analysis & Design. This project's investigation is in its early stages. It seeks to create a system that makes the service more convenient. The factors to manipulate were found through a quick review and from primary and secondary sources of information.

2.6.1 Data Sources:

I have collected two types of data for this project work.

- Primary Data
- Secondary Data

Primary data is created in the office. We generate this data using organization previous work, researching online and reading various articles and research papers. Data and information gathered from various websites and other sources helped us better understand the project.

Secondary data is generated through real life experiences. Face to face interview with the clients.

2.7 Process Model

In this project I am using waterfall process model. It was used in most of the project for easy and successful completion. The "Waterfall" model make various section to the whole process. Typically, in this paradigm, the results of one phase use as input for the following phase successively. I separated the project into different phases and use a sequence to develop it.

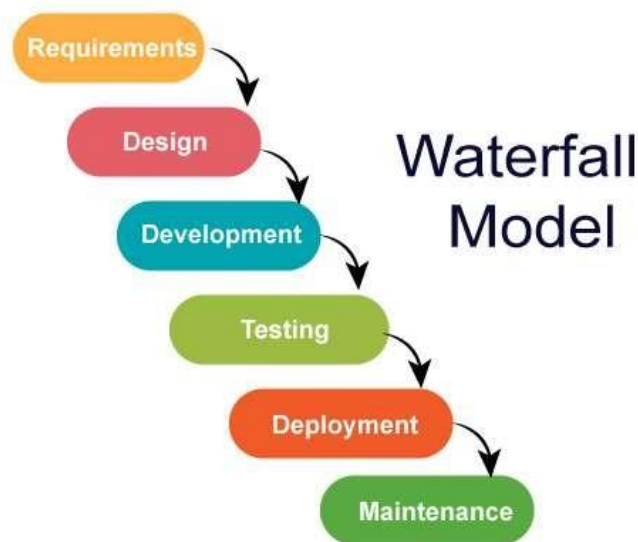


Figure 2.1: Waterfall Process Model

2.7.1 Why Waterfall Process Model

- ★ The departmentalization and control offered by waterfall development are possible. By establishing deadlines for each stage of development and making a schedule, a product can be guided through the many stages of the design process one at a time.
- ★ It is easy for using since it completed the project through easy comfortable and explainable phases.
- ★ Due to the firmness of this model, it is easily manageable – all the phase has clearly reviewable and deliver procedure.
- ★ In this method, all the phase analyzed and complete together with no overlap. Smaller projects with clear needs respond best to the waterfall paradigm.

2.8 Feasibility Study

A feasibility analysis looks at the chances of successfully completing a project. A feasibility study's goal is to identify if the project will accomplish the company's goals for the time and effort it will take to implement it. The developer can predict the project's future usefulness and success through a feasibility study. A system proposal's workability—defined as the impact on the organization, capacity to meet user needs, and efficient resource use—is the foundation of a feasibility study. As a result, a feasibility review is typically performed before such a new application is approved for development. Three sections make up the feasibility study.

- Technical feasibility
- Economic feasibility
- Operational feasibility

2.8.1 Technical feasibility

The objective of the technical feasibility assessment is to determine how well the company's existing technology assets match the needs of the proposed model. The hardware and software are being tested to assess how well they meet the needs of the intended system.

Table 2.1: Required Hardware and Software

	Hardware Requirement	Software Requirement
	A Computer or Laptop	Running System (windows 10 or equivalent) browser (Firefox/Google Chrome)
	Electricity	HTML, CSS Bootstarp & PHP
	Sufficient secondary memory and system memory	MySQL

Communication Interface

- Client on Internet will be using HTTP/HTTPS protocol
- Client on Internet will be using TCP/IP protocol.

2.8.2 Economic feasibility

The economic feasibility analysis's objective is to identify the financial benefits that the proposed system will bring to the business. My method is economically viable since it enables the completion of numerous tasks in a short amount of time that are impossible to complete simultaneously with human labor. This technique allows the vendor to receive a fair price. Therefore, I believe the suggested system will have positive economic effects.

2.8.3 Operational feasibility

The proposed system is user friendly, so users may utilize it with ease. It is simple to obtain service information, purchase goods in accordance with needs, and cancel purchases before making payments within the allotted period. Anyone who is familiar with computers may easily use and maintain the program. Every feature and activity I included in the system was created to make the selling process easier for the vendors.

Chapter: 03

Requirements Engineering

3.1 Requirement Analysis

System engineering and system design are connected through the software engineering task of requirements analysis. A software engineer can make data model, functionality, and behaviour domains that software will handle via requirements analysis. The software designer can visualize the information, function, and behavior of the system using requirement analysis.

Requirements analysis is the first step in the software development process. It involves specifying the requirements or standards that must be satisfied for a new or updated product while taking into account the occasionally conflicting interests of various stakeholders, such as consumers or users.

The examination of requirements is key to a development project's success. In order to enable for system design, tangible, observable, testable criteria must be connected to acknowledged business needs or opportunities. There may be both functional and nonfunctional requirements.

There are 6 phases of requirement analysis which is described below:

Requirement Initiation: I submit a proposal on the project entitled “Tour Management System”.

Requirement Elicitation: Eliciting requirements is the process of talking to customers and users to learn about their needs. Occasionally, this is called to as needs gathering.

It's crucial to identify all users, take into account all of their needs, and make sure they understand the implications of the new systems because they change the environment and how people interact with one another.

I also make an effort to comprehend the system's limitations and the user's requirements. I evaluate User's output. In this era, I mostly work on two projects:

- Recording User Requirements
- Analyze the Requirement

Requirement Elaboration: This is the process of gathering information about the demands and restrictions of users. How the system's entities will interact with one another.

Requirement Negotiation: This is the process of negotiating the software pricing and other features that will be included with the system with the client.

Requirement Specification: The behavior of the system to be created is described in detail in a software requirements specification (SRS). It also provides use case diagram that are used to describe the software's interactions with users. At this point, I described the manpower and technology needs for the system's deployment.

Requirement Verification: I verify all the requirements of the user whether they need any modification or not.

3.2 Requirements Engineering

Needs engineering, as its name suggests, is the branch of engineering that develops requirements of the user and describes software systems. Although requirements engineering has several definitions, they all concur that requirements involve figuring out what users need from a software system and what it means in terms of design. Software engineering and requirements engineering share many similarities since they both center on the process of creating the solution that the user wants.

- User requirements.
- System requirements.
- Functional requirements
- Non-Functional requirements.

3.2.1 User Requirements

- Admin can add new packages.
- Admin can delete packages.
- Admin can delete user's information.
- Admin can see the user's review.
- User can see packages.
- User can registration and log in.
- User can book tour packages.

3.2.2 System Requirements

Admin:

- Admin can be able to manage user
- Admin must login
- Admin can Control unauthorized Issues.

User:

- User can ask queries.
- User must have to login
- User can print the ticket

3.2.3 Functional Requirements

- User have to log in the system
- User can book tour packages
- User can print the ticket copy
- Admin have to log in the system
- Admin will add any tour package
- Admin can see the reviews and enquiries of the users.

3.2.4 Non-Functional Requirements

- System will have secure login
- Different privilege for user, admin and visitors
- System will store all the input data in database

3.3 Use Case Diagram of the System

At its most basic level, a use case diagram shows how a user interacts with the system by showing how they relate to all of the many use cases they are involved in.. A use case diagram can be used to depict different types of users as well as the numerous use cases for a system, and it is often supplemented by other diagrams. The use case approach is used to capture the behavioral needs of a system by establishing scenario-driven threads through functional requirements.

3.3.1 Use case symbols

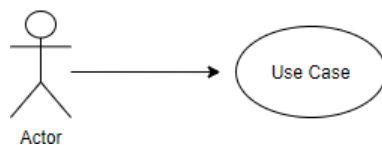
Actor: When users engage with use cases, an actor represents a set of roles that they play. Humans or automated systems can act as actors.



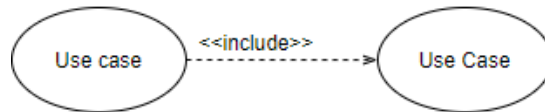
Use case: A use case is a user purpose that may be accomplished via the usage of a system or software application. A use case is a description of a series of activities taken by a system to produce an observable result that is generally useful to one or more of the system's players.



Association: An actor and a use case can be linked to show that the actor is involved in that use case. As a result, an association corresponds to a series of activities carried out by the actors and the use case in order to achieve the use case.



Include: The behavior for the inclusion use case is integrated into the behavior provided for the base usecase using an include relationship.



Extend: The behavior of the extended use case may be integrated into the behavior described for the basic use case using an extend relationship.



System: The system's use cases are placed inside the system form, while the actors who interact with it are placed outside. The complete requirements of the system are made up of the use cases in the system.



3.3.2 Use case diagram

The Use Case Diagram drawn below represents how admin and users interact with 'Tour Management System ' and how the system interacts with its environment.

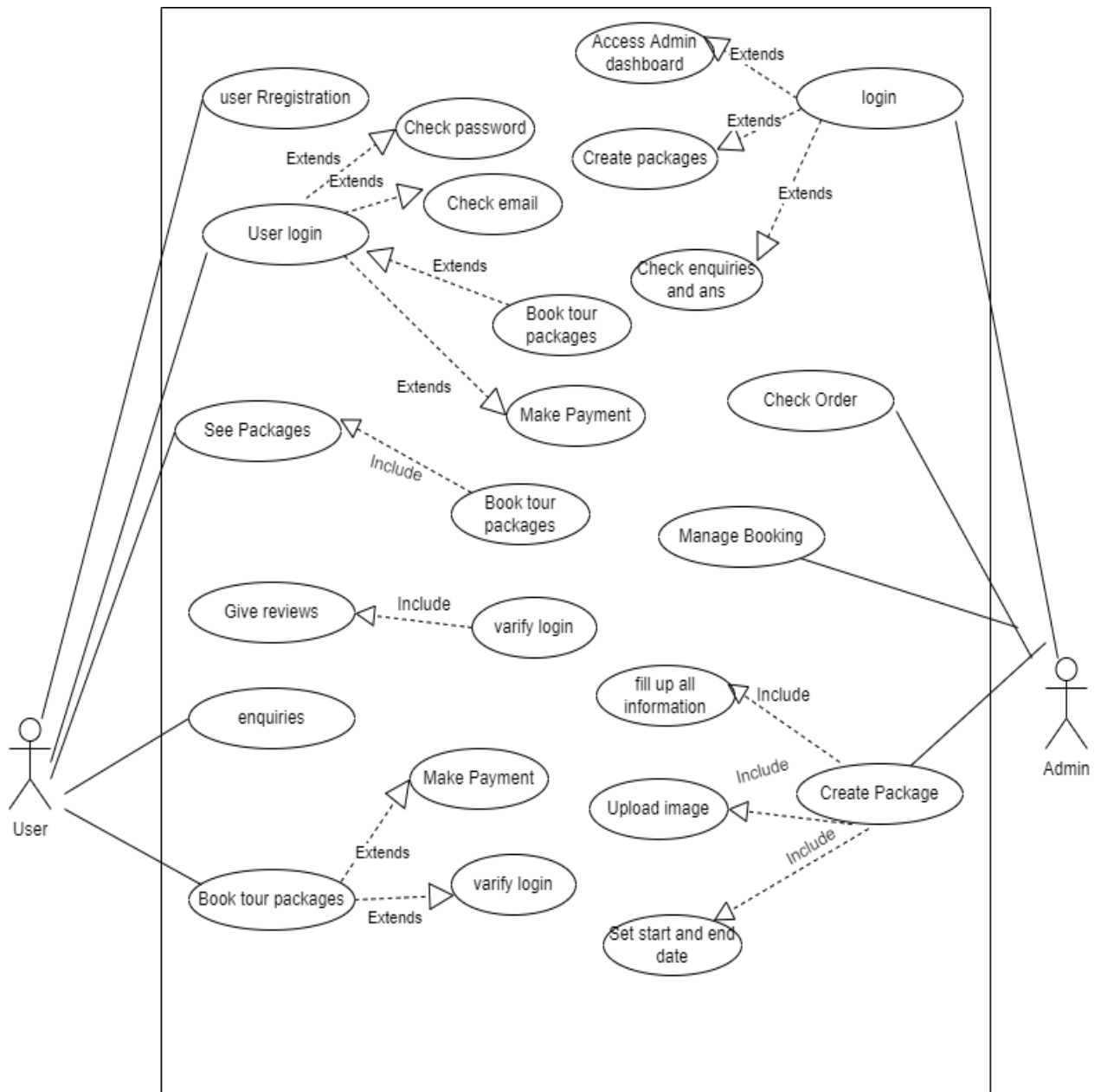


Figure 3.1: Use Case Diagram

Chapter: 04

System Planning

4.1 Functions of Proposed System

Function Name	Synonym
Login	F1
Register the User	F2
View the Profile	F3
Create Tour Packages	F4
Add package Name	F5
Add the date	F6
View the booking info	F7
Make Payment	F8
Enquiry	F9
Review	F10
Logout	F11

4.1.1 Function Description

The function description is a detailed explanation of the function. It is concerned with three factors: what are the available inputs and outputs for a certain function, as well as which database table the function utilizes.

Registration to the system

Input: First Name, Last Name, email, Mobile, Password.

Output: If registration is successful then give a message “Your account is Successfully Created. Please Login to continue” and redirect to login page. Otherwise give error message.

Use table of the database: User

Login to the system

Input: Email and Password

Output: If the information is valid then the given user will be redirect to the page according to their role. If the information is not valid then an error message will be shown to the user, and admin.

Use table of the database: Admin, user

View Profile

Input: email, User password

Output: If valid information is given websites header file is changed and there is a view profile option. Use table of the database: User

Create tour package

Input: Package Name, package location, price, start date, end date, package details.

Output: if package is created then will show a successful message.

Use table of the database: package

Book Package

Input: email and password.

Output: A form will come with some necessary information

Use table of Database: Booking

Enquiry

Input: Name, email, subject, description
Output: Submit the question successfully
Use table of the database: enquiry

Review
Input: fill the star and give
comment
Output: show review
Use table of the database: Review

Admin Dashboard
Input: Admin email, Admin password
Output: Show package number, Total booking, total user,
Use of table of database: admin

4.2 System Project Planning

It is required to calculate the progress to be made, the resources needed, the time needed from start to end, and to examine the project to see if it is feasible before beginning any project.

The activities of this project's software design phase that have come after are as follows:

- System Project Estimation
- Function Oriented Metrics
- Process Based Estimation
- Effort Distribution
- Task Scheduling
- Project Schedule Chart
- Cost Estimation

4.2.1 System Project Estimation

The accuracy of a software project estimate is determined by several factors:

- Exact measurement of the product's size for construction.
- The ability to translate size estimations into labor hours, calendar days, and monetary worth.
- How accurately the project plan depicts the engineering or software teams' abilities.
- The consistency between product requirements and setting in which the software development process carried out.

The most important aspect of the software project that I must consider is software size estimation. If the software size is not calculated correctly, it will cause a variety of issues such as scheduling issues, budget issues, and so on. Before estimating the software size, I need to confirm that the software scope is limited as the project progresses.

4.2.2 Function Oriented Metrics

Instead of software values, the emphasis of a function point-based estimate is on the information domain values. To determine function points, five properties of the information domain are compared.

Data Functions

- External Inputs [EI]
- External Output [EO]
- External Inquiries [EQ]

Transaction Functions

- Internal Logical Files [ILF]
- External Interface Files [EIF]

Number of external inputs: Since every user input gives unique framework data to the software, inputs and inquiries should be distinguished from one another.

Number of external outputs: Each user output that provides the user with application-specific information is tallied.

Number of external inquiries: A question is defined as an online input that generates an online result in the form of a software response. There were distinct counts for each inquiry.

Number of Internal Logical files: Each logical internal file is a logical grouping of data that lives within the application's border and is kept up to date by external inputs.

Numbers of external interfaces: It was determined how many machine-readable interfaces were being used to transfer data across systems. In the related table, you can find the fixed domain weights. Depending on how the system functions, weights are divided into three groups. The three categories are straightforward, average, and complex. Each element is a component of the intricate overall system. Following the data collection, a complexity value is applied to each count.

Functional Complexity: The first basis of observations examines the Functional Complexity for each distinct function. The combination of data groupings and data items determines the functional complexity of a function. The quantity of data elements and various categories is totaled and matched to a sophistication matrix, which rates the function as low, average, or high in terms of complexity. Each of the five functional elements (ILF, EIF, EI, EO, and EQ) has a unique complexity matrix. Below is a diagram of the complication matrix for external outputs.

Following the classification of the components as one of the five primary components (EIs, EOs, EQs, ILFs, or EIFs), a low, average, or high ranking is assigned. The number of files updated or referenced (FTRs) and the number of data element types (DETs) are used to score transactions (EIs, EOs, and EQs). The ranking is based on record element types (RETs) and data element types (DETs) for both ILF and EIF files. Within an ILF or EIF, a record element type is a user-recognizable subdivision of data elements. A data element type is a non-recursive field that is unique to the user. The value adjustment factor (VAF) is based on 14 general system characteristics (GSCs) that assess the application's overall functioning. On a scale of zero to five, the degrees of influence vary from no influence to high influence. After the data has been collected, each count is assigned a complexity value. And the equation is used to determine the estimated FP.

$$\text{FP estimated} = \text{count-total} * [0.65 + 0.01 * \Sigma Fi]$$

The following formula is used to estimate the function points

- $\text{FP count} = \{(\text{opt} + 4 * \text{likely} + \text{pessimistic}) / 6\} * \text{weight}$
- $\text{Complexity adjustment factor} = [0.65 + 0.01 \times \text{Sum of Factor Values}]$
- $\text{FP estimated} = \text{count total} \times \text{Complexity adjustment factor}$
- $\text{Function Point Estimation} = \text{Total FP estimated} / \text{No. of function point per day.}$

4.2.2.1 Complexity Matrix

Table 4.2: Complexity Matrix

EI	1-4 DETs	5-15 DETs	16 or more DETs
1 FTR	Low	Low	Average
2 FTRs	Low	Average	High
3 or more FTRs	Average	High	High

EO/EQ	1-5 DETs	6-19 DETs	20 or more DETs
1 FTR	Low	Low	Average
2 FTRs	Low	Average	High
3 or more FTRs	Average	High	High

ILF/ ELF	1-19 DETs	20-50 DETs	50+ DETs
1 RET	Low	Low	Average
2 to 5 RETs	Low	Average	High
6 or more RETs	Average	High	High

4.2.2.2 Complexity Matrix for UFP

Table 4.3: Complexity Matrix for UFP

Complexity	Transaction Function Type	
	EI/EQ	EO
L (Low)	3	4
A (Average)	4	5
H (High)	6	7

Complexity	Data Function Type	
	ILF	EIF
L (Low)	7	5
A (Average)	10	7
H (High)	15	10

Identifying complexity of transition function

Table 4.4: Identifying Complexity of Transition Function Point Count

Transition Function	Field/File involved	FTRs	DETs
Log in Admin(EI)	Field- email , password	1	2
Registration user (EI)	Field- name, email, mobile, password	1	2
Login user (EI)	Field- email, password	1	2
Package info (EO)	Field: Name, location, package number, number, date, quantity	3	3
User profile (EQ)	Field: name, address, email, password, Join date, mobile	3	7
Enquiry (EI)	Field: Name, email, password, subject, details.	3	9
Review (EQ)	Field: Name,, email, Rating, Review.	3	7
Admin Dashboa d(EI)	Field: Name, address, email, password,contact	2	7
Profile of user (EI)	Field: Name, phone, Id, NID, present address, permanent addressFile: Profile	2	6
Add Package (EI)	Field: package-name, location, date, price, description	2	3
Bookin g (EI)	Field: name, email, package-name, date, payment id.	2	4

4.2.3 Unadjusted function point contribution:

Table 4.6: Unadjusted function point contribution of transaction function

Transition Function	FTRs	DETs	Complexity	UFP
Register user(EI)	1	8	Low	3
Login user(EI)	1	3	Low	3
Login Admin(EI)	1	3	Low	3
View profile(EO)	3	8	High	7
Add tour packages(EO)	3	8	High	7
Package info(EO)	3	5	Low	6
Enquiry(EI)	3	8	High	6
Review(EQ)	3	12	Average	4
Admin Dashboard(EI)	3	12	Average	4
Profile of user(EI)	3	12	Average	4
Booking package(EI)	3	12	Average	4
Payment(EQ)	3	12	Average	4
Total:				84

Table 4.7: Unadjusted function point contribution of data function

Data Function	RETs	DETs	Complexity	UFP
User (ILF)	1	9	Low	7
Admin (ILF)	1	9	Low	7
Tour packages (ILF)	1	3	Low	7
Booking (ILF)	1	3	Low	7
Time Schedule (ILF)	1	3	Low	7

Package Name (ILF)	2	6	Low	7
Available Seat (ILF)	2	6	Low	7
Tour Time Schedule (ILF)	3	8	Low	7
Payment (ILF)	2	6	Low	7
Total				63

4.2.4 Performance and Environmental impact

Table 4.8: Complexity Adjustment Value Count

GSC(General System Characteristics)	DI
1.Data communication	4
2. Distributed data processing	0
3. Performance	4
4. Heavily used configuration	4
5. Transaction rate	3
6. Online data entry	0
7. End-user efficiency	4
8. Online update	0
9. Complex processing	4
10. Reusability	4
11. Installation Ease	3
12. Operational ease	3
13. Multiple sites	0
14. Facilitate change	3
Total Degree of Influence(TDI)	36

Value Adjustment Function (VAF) = $(0.65 + (0.01 * TDI))$

$$= 0.65 + (0.01 * 36) = 1.01$$

4.2.5 Counting Adjusted Function point:

Unadjusted Function Point (UFP) = UFP (Data Function) + UFP (Transition Function)

$$= 63 + 84 = 147$$

Adjusted Function Point Count (AFP) = UFP * VAF

$$= 147 * 1.01 = 148.47$$

Effort for EJS + MySQL + PHP = AFP * 10.6

$$= 148.47 * 10.6 = 1,574 \text{ Person hours}$$

$$= 1574 / 8 \text{ [Working hour is 8 hours per day]}$$

$$= 197 / 3 \text{ [3 people in a group]}$$

$$= 66 / 22 \text{ days}$$

$$= 3.38 \text{ months} \approx 4 \text{ months}$$

4.3 Process Based Estimation

Process-based estimating divides the process into a small number of tasks, and the work required to complete each one is calculated. In process-based estimating, the first step is to define the software functionalities based on the project scope. A set of software process actions must be completed for each function.

Table 4.9: Process based estimation

Activity	CC	Planning	Engineering		Construction		Implementation	Total
Function			Analysis	Design	Code	Test		
F1	0.062	0.093	0.156	0.218	0.25	0.123	0.093	
F2	0.083	0.083	0.176	0.208	0.25	0.125	0.083	
F3	0.075	0.075	0.15	0.2	0.3	0.1	0.1	
F4	0.083	0.083	0.176	0.208	0.25	0.125	0.083	
F5	0.031	0.062	0.125	0.25	0.375	0.093	0.062	
F6	0.062	0.093	0.156	0.218	0.25	0.123	0.093	
F7	0.053	0.053	0.142	0.285	0.339	0.071	0.053	
F8	0.031	0.062	0.125	0.25	0.375	0.093	0.062	
F9	0.075	0.075	0.15	0.2	0.3	0.1	0.1	
Total	0.555	0.679	1.352	2.037	2.689	0.953	0.729	8.99
Effort	6.17%	7.55%	15.03%	22.65%	29.91%	10.60%	8.10%	100%

4.4 Task Scheduling

Project scheduling is the process of distributing projected efforts over the course of a project's intended duration. There are a few basic guidelines to follow when it comes to project scheduling. Here is a list of some of them:

Partitioning - The project must be divided into a number of achievable activities and tasks.

Interdependency - Each segregated activity or task's interdependency must be identified. Some jobs must be completed in order, while others can be completed in simultaneously.

Time allocation - Each job that has to be planned requires a certain number of work units.

Validation of effort - Each project has a certain amount of employees. At any one moment, it should guarantee that no more than the designated number of persons are scheduled.

Clearly defined roles – Each job should be assigned to a specific team member.

Clearly stated outcomes - Every task should have a clearly defined outcome. Typically, the result is a workproduct or a portion of a work product.

4.5 Project Schedule Chart

The construction of a whole system involves a number of different tasks. These chores should be completed in a timely manner and in order. The system developer uses the project schedule as a guideline. The project's schedule is shown in the table below:

4.6 Cost Estimation

Cost estimation is the process of approximating a program's cost. The five aspects in this project that need to be analyzed in order to determine the cost are listed on the following page:

Personnel cost

- ★ Software cost
- ★ Hardware cost
- ★ Other cost

4.6.1 Personnel cost

- Number of days in a year = 365
- Number of government holidays in a year =24
- Number of weekly holidays in a year =52
- Total number of working days in a year = $365-(52+24) =289$ days
- Total number of working days per months = $289/12 =24.08 \approx 24$ days
- Organization working hours per day = 8 hours
 - Organization working hours per month= $24*8= 192$ hoursTotal working hour in 4 months = $24*8*4 = 768$ hours

Table 4.10: Personnel Cost

Designation	Person	Working Hours	Salary	Total Salary
System Analyst	One	768	20,000	10,5000 BDT
Developer and tester	One	768	85,000	

Hardware cost

Cost of a Computer = 50,000

Computer life = 3 years

Computer Usage = $3+2+1 = 6$

Year 1 = $3/6 = 0.5$ Year 2 = $2/6 = 0.334$ Year 3 = $3/6 = 0.1667$

Computer Cost in year 3 = $50000 \times 0.1667 = 8.33$ BDT

Table 4.11: Hardware cost

Hardware	Cost
Computer	50,000
Total	50,000 BDT

Software cost

Table 4.12: Software Cost

Software	Cost
Windows 10	Free
MS Office 2018	Free
Visual Studio code	Free

Other cost:

Table 4.13: Other cost

Field	Cost
Transport	5,000
House rent	18,000
Electric bill	1,500
Other	2,000
Total	26,500 BDT

Table 4.14: Account Table

Particulars	Amount(BDT)
Salary-	
• System Analyst and Designer	20,000.00
• Developer and Tester	85,000.00
	10,5000.00 /=
Hardware Cost-	50,000.00
• PC	
	50,000.00 /=
Other Costs-	
• Pen and Paper	1000.00
• Foods	5000.00
• Electricity and Net Bill	2000.00
	8,000.00 /=
Total Cost	1,63,000.00 /=

Chapter: 05

Risk Management

5.1 Risk Management

A group of tasks known as risk management and analysis help a system development team to comprehend and control uncertainty. While a system is being developed, many problems may occur. A risk is a prospective issue that could happen or not. The process of identifying and managing risks involves multiple steps. Finding the dangers is the first step. The likelihood that each danger will materialize and the damage it will cause are then calculated. Risks are identified once this data has been gathered. The management of high likelihood, high impact hazards is then planned.

5.1.1 Stages of risk:

There are different Stages of risks. They are:

- Risk Identification
- Risk Classification
- Risk Assessment
- Risk Analysis
- Risk Management Implementation

Risk Identification:

Risk identification is the process of identify possible dangers or risks through data collection. There are several tools and methods for gathering and manipulating data. The team is utilizing both automated and human methods to gather data and describe potential hazards to Web sites. One effective way to learn about the state of Web pages and sites is through web crawling.

Risk Classification:

Risk classification is the process of creating a modelling approach to classify risk and matching visible risk attributes and occurrences into the model. The team uses qualitative methodologies to characterize.

Risk Assessment:

Risk assessment is the process of identifying pertinent possible threats or occurrences that could cause harm or loss, as well as the likelihood that these events will occur. The focus of several sources is risk analysis.

"Fair and balanced, coherent, consistent, complete, thorough, unbiased, universal, equitable, persuasive, durable, flexible, and supported by adequate and sufficient instruction," says Rosenthal of a generic threat assessment standard.

Risk Analysis:

Risk analysis determines the probable consequences of risk patterns or scenarios, the potential size of the loss, and the direct and indirect costs of recovery. In this step, vulnerabilities are identified, the organization's risk tolerance is evaluated in light of the possible outcomes, and mitigation solutions are created.

The definition of policies, practices, and processes for managing and responding to discernible hazards is provided by risk management implementation. The value of assets and the direct and indirect costs of avoiding or recovering from damage or loss should be balanced by the program that is actually put into action.

We must take into account the following factors in order to properly maintain a web-based system: Hardware and software configuration, including any operating system and web server updates, security patch installations, unsecured service terminations, firewall usage, etc.

administrative processes, such as renewing domain name registration, signing contracts with respected service providers, etc.

configuration and upkeep of the network, such as load balancing, traffic management, monitoring of traffic, and use monitoring, etc.

Policies and procedures for backup and archiving, including the selection of backup media, the frequency of media replacement, the quantity of backups made, and the location of storage. There are different categories of risks that should be considered in any software project. The following categories of risks have been considered in this software project:

Project risks: The project plan is in danger from these dangers. It is possible that the project schedule will slip and costs will rise if these risks materialize. Project risks identify potential issues with the software project's money, timeline, staff, resources, customers, and requirements.

Technical risks: These dangers put the caliber and timeliness of the upcoming software production in jeopardy. Implementation could become challenging or impossible if a technological risk materializes. Technical hazards point out potential

Issues with design, implementation, interface, verification, and upkeep. Additionally, ambiguity in the specification, technical uncertainty, and technology obsolescence are risk issues. **Business risks:** These risks threaten the viability of the software to be built. The business risks can be –

- a) Market risks associated with creating a system that nobody truly wants.
- b) Strategic risks include developing a system that no longer aligns with the company's overarching business plan.
- c) Creating a system whose commercial requirements have altered.
- d) Management risks related to losing the backing of senior management as a result of a shift in priorities or a change in personnel. Budget hazards include losing financial or personnel commitment.

5.2 The RMMM Plan

- Risk mitigation: proactive risk avoidance planning.
- Risk monitoring: determining whether or not expected risks materialize, checking that preventative measures are being followed correctly, gathering data for upcoming risk analysis, and attempting to identify which risks were responsible for which issue.
- Risk management: Steps to be followed in the event that risk reduction efforts have been unsuccessful and the risk has materialized into a real-world issue.
- Impact severity: Critical, Catastrophic, Marginal, Tolerable, and Marginal (4).
- Probability ranges from very low (10%) to low (10–25%) to moderate (25–50%) to high (50–75%) to very high (>75%).

Table 5.1: Project Risk (P01)

Project Risk (P01)	
Name	Changes the requirements
Probability	Low (25%)
Impact	Marginal (2)
Description	Customer may change their requirements
Mitigation & Monitoring	The client redefines the requirements in response to time or business constraints. Regular meetings will be held with the client. This guarantees the quality of the goods I am making.
Management	Emergency client meeting to determine new project specifications and objectives.
Status	Not happen

Table 5.2: Project Risk (P02)

Project Risk (P02)	
Name	Lack of Experience in development .
Probability	Moderate (30%)
Impact	Catastrophic (1)
Description	Lack of developmental experience of the members.
Mitigation & Monitoring	Each team member should keep an eye out for potential weak spots in their teammates.

Management	To help solve issues that may occur with this risk, the team members with the highest experience in that area will be needed.
Status	We have not yet run into such problems.

Table 5.3: Technical Risk (TR01)

Technical Risk (TR01)	
Name	Computer Crash
Probability	Moderate (25-40%)
Impact	Catastrophic (1)
Description	Several factors can cause a computer to crash.
Mitigation & Monitoring	We need to properly monitor computers. Additionally, we regularly backup our data each day, and we have IPS to prevent sudden shutdown.
Management	If our computer crashes, we'll restore the backup.
Status	We have not yet come across such a problem.

Table 5.4: Business Risk (B01)

Business Risk (B01)	
Name	Budgetary constraints
Probability	Low (10%)
Impact	Marginal (2)
Description	Low funding may prevent the project from being finished.
Mitigation & Monitoring	The project requires a pricey to set up streaming server. To lessen the risk to the budget, we locate a number of substitute streaming providers.
Management	A more precise project goal. a fresh budget regulation strategy.
Status	never happened

Table 5.5: Business Risk (B02)

Business Risk (B02)	
Name	not paying the software cost installment.
Probability	Very Low (05%)
Impact	Catastrophic (1)
Description	Customers are not required to cover the cost of software installation.
Mitigation & Monitoring	We must assure effective customer communication and the completion of the entire installation.

Management	Finding the cause and offering a solution would be the only available course of action.
Status	Never happened

Chapter: 06

Analysis Modeling

6.1 Software Analysis Pattern

Software analysis patterns, also known as software engineering analysis patterns, are conceptual models that encapsulate an abstraction of a frequently occurring scenario in modeling. A domain-neutral analysis pattern is a collection of linked, generic objects (meta-classes) with stereotyped features (data definitions), behaviors (method signatures), and predicted interactions. Analytical modeling can be used to finalize the system specifications. It is required. -

- Describe the customer's requirements.
- To lay the groundwork for the establishment of a software design
- To specify a set of requirements that can be verified when the software is completed.

6.2 Activity Diagram

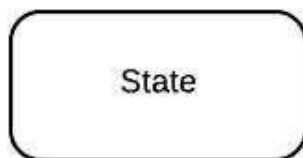
The behavioral diagram known as the activity diagram is used in UML diagrams to describe the dynamic properties of the system. A more detailed version of a flow chart that shows how information moves from one activity to the next is called an activity diagram.

Activity Diagram Symbols:

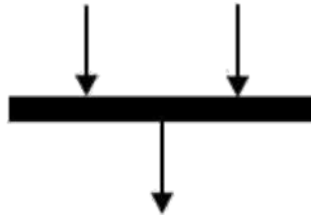
Start Symbol: This icon is used in activity diagrams to represent the beginning of a workflow. This may be used independently or in combination with a note symbol designating your starting point.



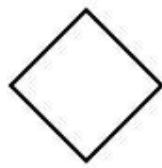
Activity Symbol: this symbol is one of the most important elements of an activity diagram. This shape shows the actions that make a modeled process to a conclusion.



Join Symbol: Using this symbol, two concurrent activities can be combined into a single activity.



Decision Symbol: The diamond shape used to represent this symbol stands for the branching of control flows.



Note Symbol: This symbol used to interact with other messages that do not fit within the diagram.



End Symbol: This symbol is used to represent the completion of a work flow of the activity.



6.2.1 Activity Diagram for User

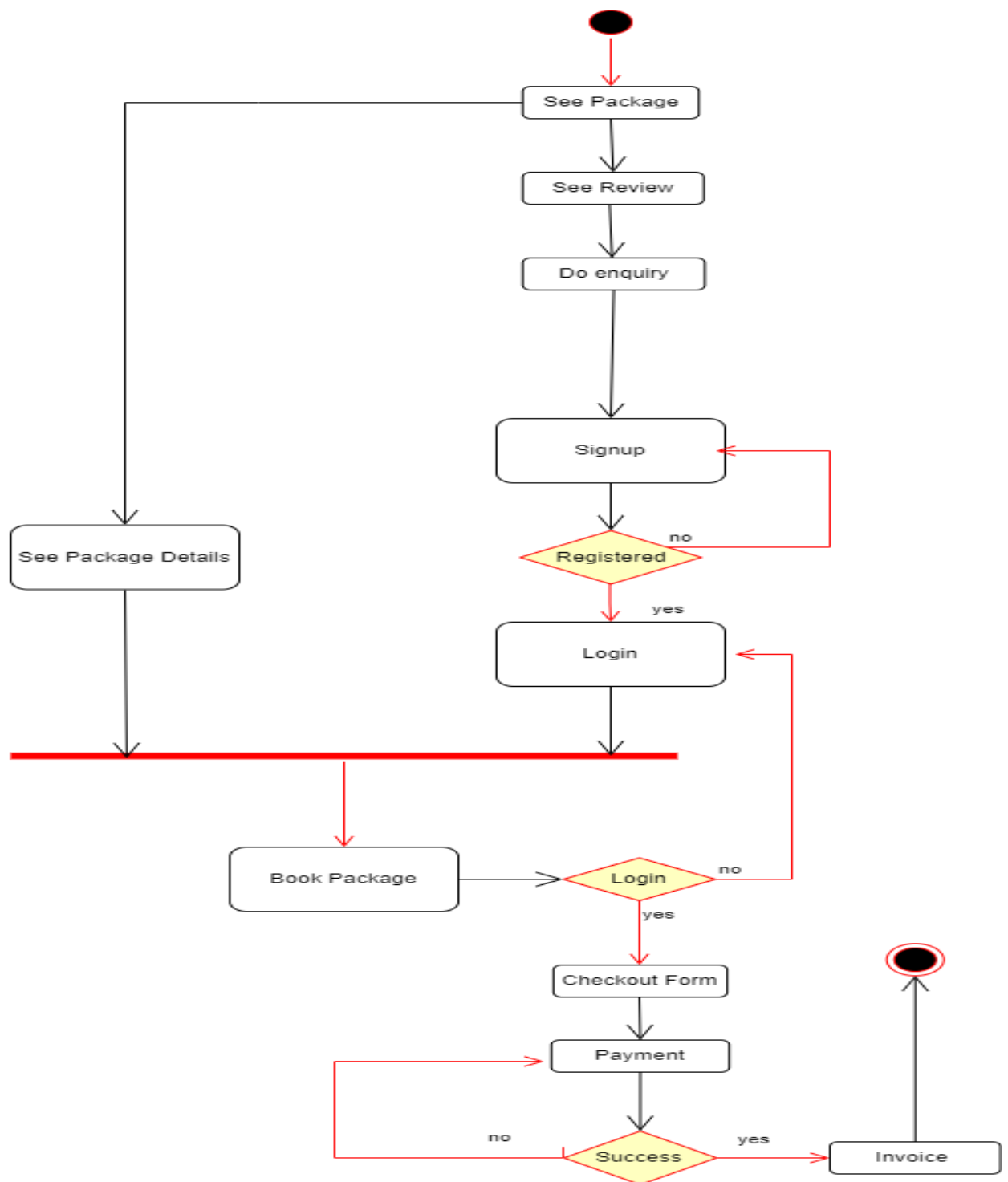


Figure 6.1: Activity Diagram for User

6.2.2 Activity Diagram for Admin

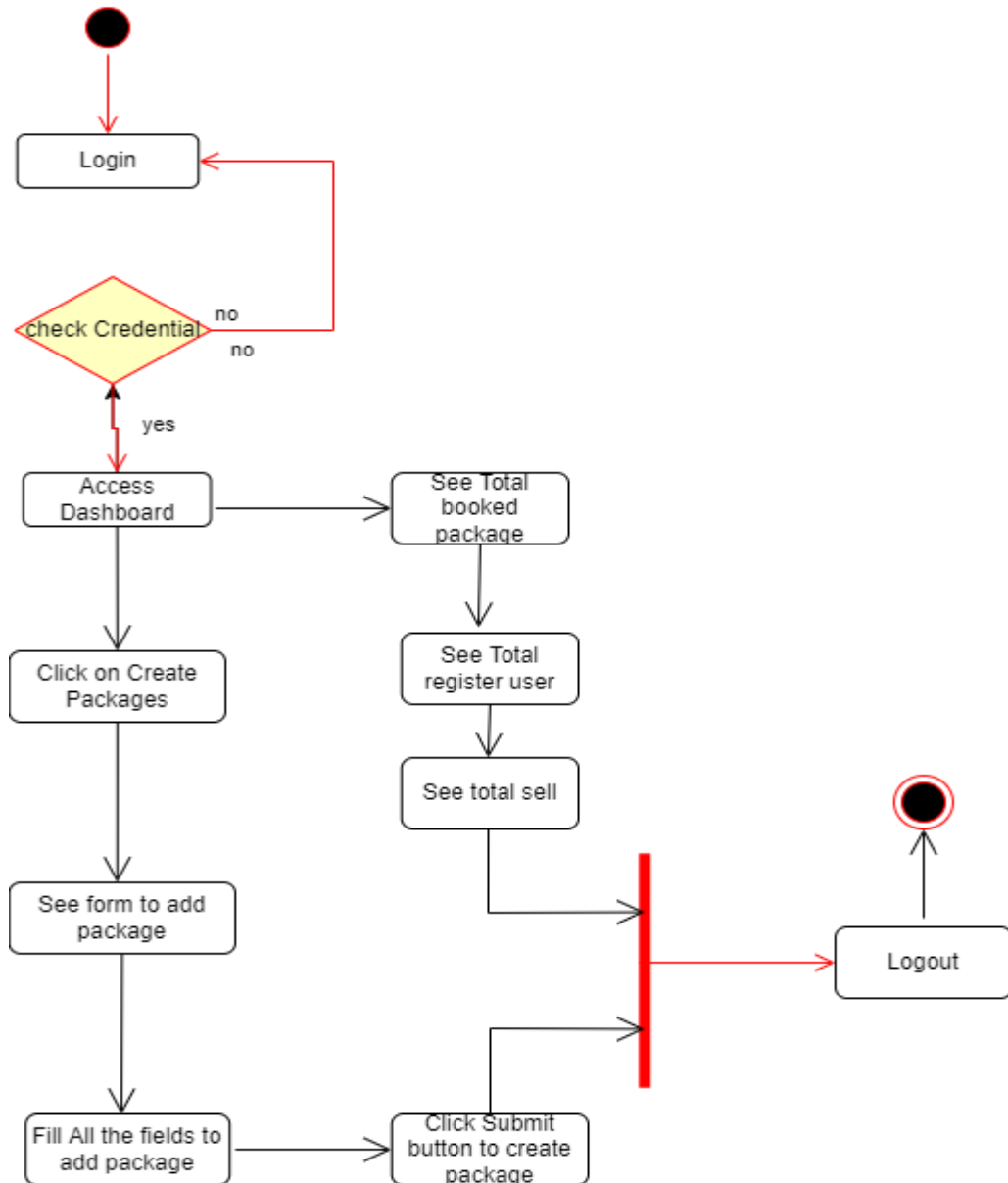


Figure 6.2: Activity Diagram for Admin

6.3 ER Diagram

A knowledge-specific entity-relationship model (ER model) represents connected things of interest. Entity categories (which categorize the objects of interest) and potential linkages between those entity types make up an ER model.

A graphical depiction of entities and their relationships to one another used in computers to organize data within databases or information systems is known as an entity relationship model (ERM), also known as an entity-relationship (ER) diagram. A piece of data is an entity—a thing or idea about which data is kept.

Identifying Entities

Identifying the entities according to the conceptual design-

- User
- Package
- Order
- Payments
- Review
- Booking
- Admin

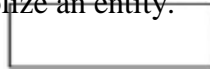
Entity Relationship Diagram:

An entity relationship diagram shows the connections between entity sets stored in a database (ERD). An entity in this instance is a data component. In other words, ER diagrams show the logical organization of databases.

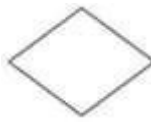
An Entity Relationship (ER) Diagram is a form of flowchart that shows how "entities" within a system, such as people, things, or concepts, interact with one another. In the fields of software engineering, business information systems, education, and research, ER Diagrams are most frequently used to construct or troubleshoot relational databases. Because they employ a predetermined set of symbols like rectangles, diamonds, ovals, and connecting lines to show the connectedness of entities, relationships, and their properties, they are also known as ERDs or ER Models. An ER diagram shows the relationship between the data produced by a system graphically.

Symbols for Entity Relationship Diagrams:

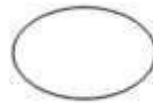
Entity: A defined thing, such as a person, object, concept, or event, about which data may be kept. Think of entities as nouns. Examples include a consumer, a student, an automobile, or a product. Typically, a rectangle is used to symbolize an entity.



Relationship: How things relate to one another or interact with one another. You may think of relationships as verbs. To represent relationships, diamonds or labels are typically drawn simply on the connecting lines.



Attribute: An attribute is a feature or feature of an object. A circle or oval is frequently used to represent it. A crucial trait is the entity's distinctive, differentiating quality.



Multiple Attribute: There can be several values for a multiple attribute. An employee entity, for example, can have multiple values.



Primary key: A relational database table column's primary key serves as the single, universal identification for all table records (or set of columns). The requirement that a primary key include a different value for each row of data is one of its fundamental requirements. It cannot contain any null values.

Foreign key: In relational databases, a foreign key is a field in one table that uniquely identifies a row of another table or the same table. Entity Relationship Diagram for the Agriculture Development System

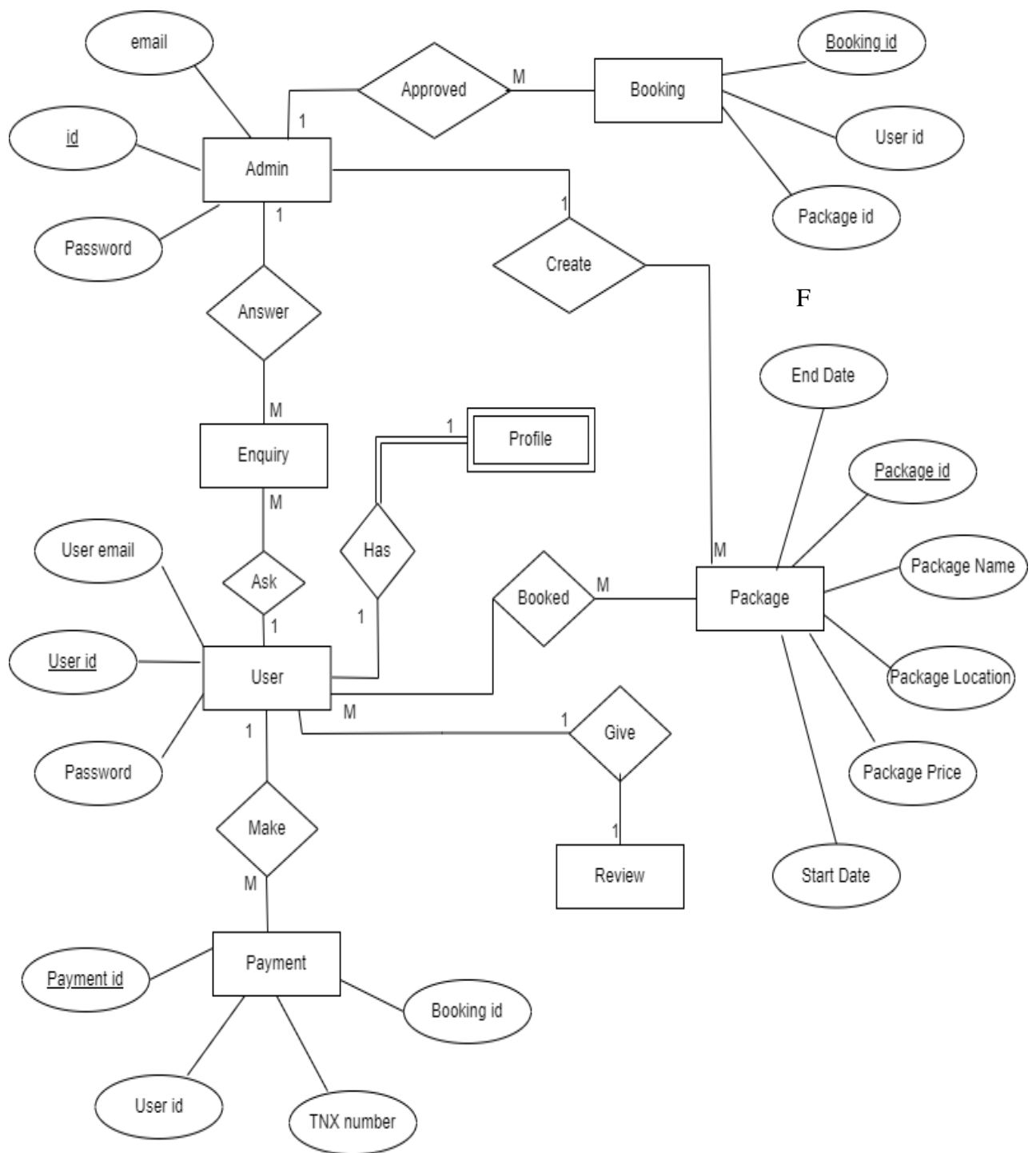


Figure 6.3: Entity Relationship Diagram

6.4 Data Flow Diagram

A data flow diagram depicts data flow and the transformations that occur when data moves from input to output. It is also known as a data flow graph or a bubble chart.

The DFD can be used to represent a system or program at any level of abstraction. DFD is divided into levels, each of which represents a different level of information flow and functional detail. As a result, the DFD provides a framework for modeling both functional and information flow.

In a level 0 DFD, also known as a basic system model or a Context model, the entire program or system element is represented as a single bubble, with incoming and exiting arrows indicating input and output data, respectively. After that, the context model bubble should be divided into several layers. There are four symbols in DFD:

- A square designates an external source or destination of system data.
- An arrow denotes data flow, indicating that the data is in motion. It's a channel for information to move through.
- A process that converts incoming data flow(s) into exiting data flow(s) is represented by a circle or a bubble (s).
- A data store or a temporary data repository is an open rectangle.

6.4.1 Context Level DFD

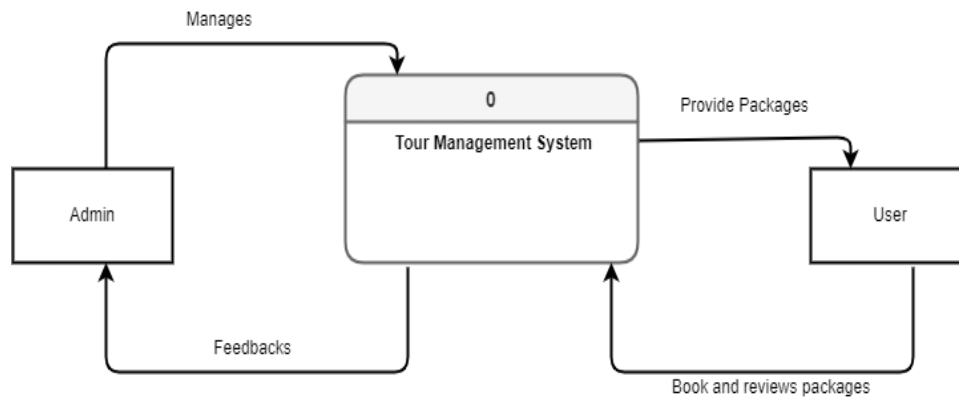


Figure 6.4: Context Level DFD

6.4.2 Level 1 DFD

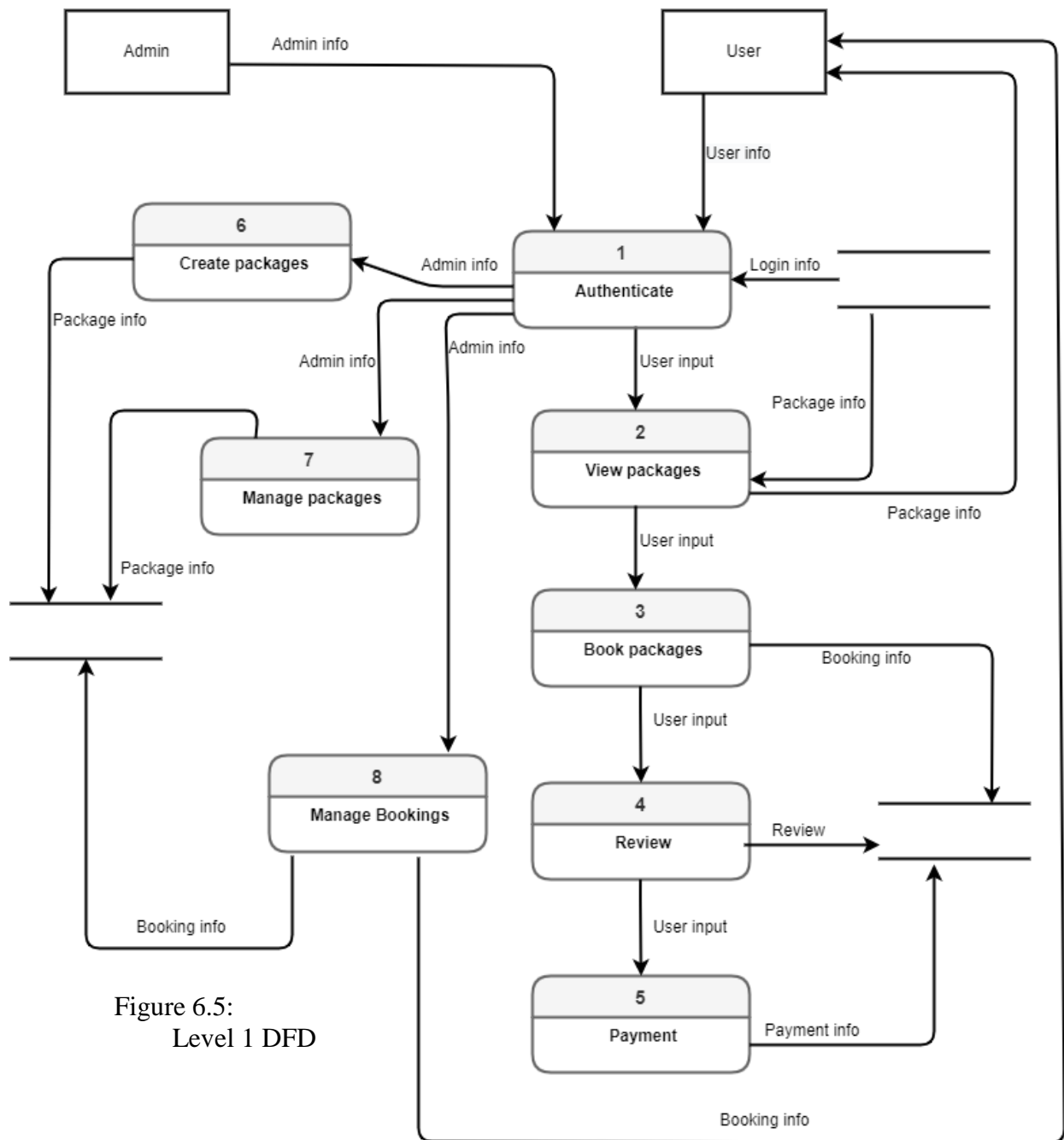


Figure 6.5:
Level 1 DFD

6.4.3 Level 2 DFD Process 1

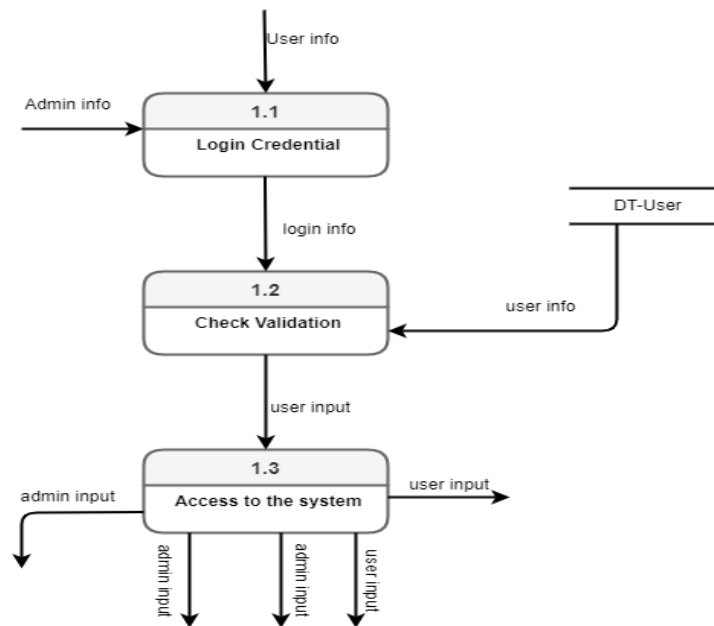


Figure 6.6: Level 2 DFD for process 1

6.4.4 Level 2 DFD for Process 2

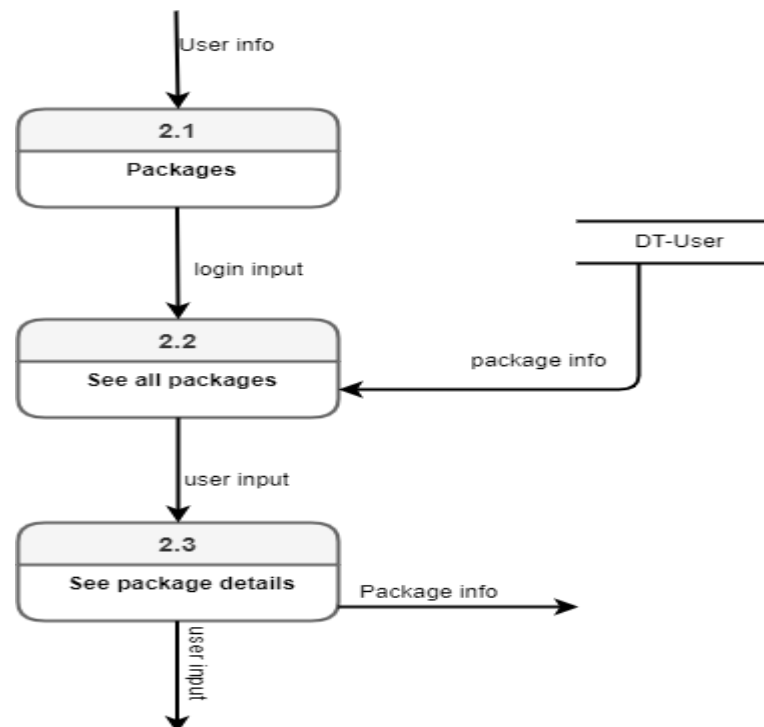


Figure 6.7: Level 2 DFD for process 2

6.4.5 Level 2 DFD for Process 3

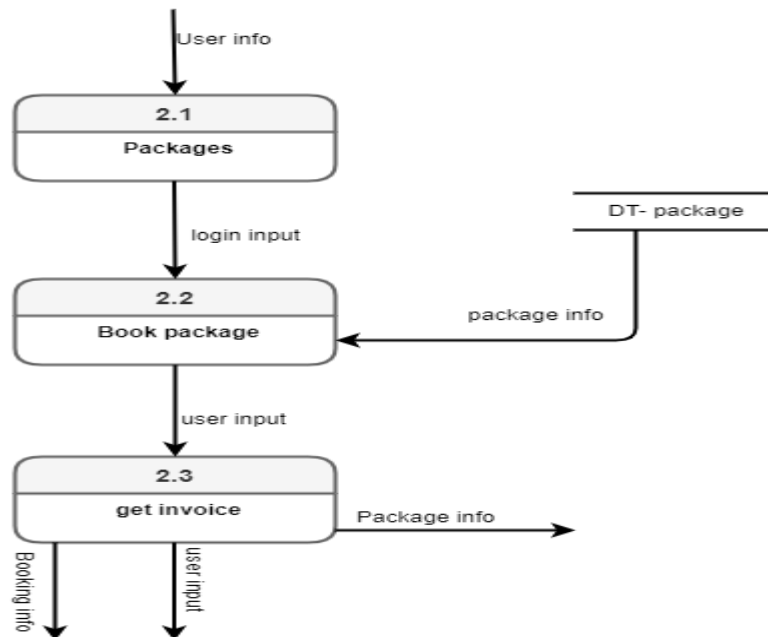


Figure 6.8: Level 2 DFD for process 3

6.4.6 Level 2 DFD for process 4

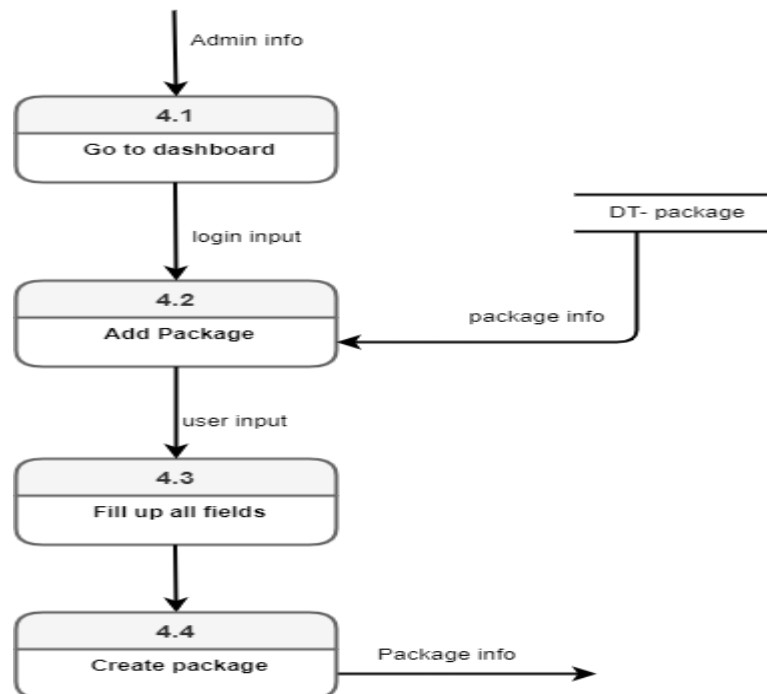


Figure 6.9: Level 2 DFD for process 4

6.4.7 Level 2 DFD for process 5

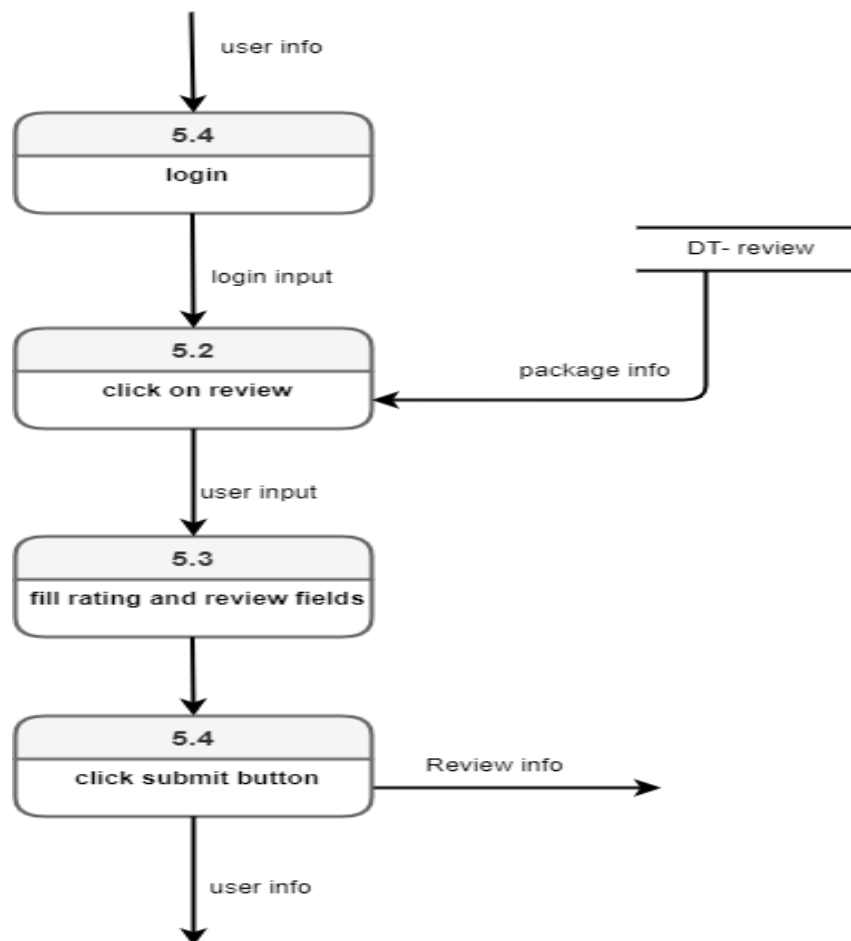


Figure 6.9: Level 2 DFD for process 5

Chapter: 07

Designing

7.1 Database Design

A database is a categorized collection of data. A relational database, in more detail, is a collection of schemas, tables, queries, reports, views, and other components. Database designers frequently arrange data to model features of reality in ways that facilitate information-intensive activities, such as modeling hotel room availability in such a way that locating a hotel with vacancies is possible.

The process of creating a detailed data model for a database is known as database design. The physical storage properties, logical design options, and physical design options needed to establish a design in a data definition language, which may then be used to create a database, are all included in this data model. A correctly attributed data model has many attributes for each entity.

Designing a database is a two-step process:

1. User needs are obtained and a database is developed to satisfy these objectives as clearly as feasible at the information-level design stage. Information Level Design is the name of this stage. Any DBMS is not required to complete the information level design.

Method of Information-Level Design:

For each user's perspective:

- Normalize these tables
- Identify all keys in these tables
- Represent the user view as a set of tables

2. Physical-level design: The information-level design is translated into a design for the database management system (DBMS) that will be used to construct the system. This step is known as Physical Level Design, and it is concerned with the specific DBMS's characteristics.

- Adapted information-level design for the specific DBMS to be used
- Must consider characteristics of the specific DBMS
- Completed after information-level design
- Most DBMSs support primary, candidate, secondary, and foreign keys

- DB programmers must include logic in their programs to enforce restrictions.

In the field of relational database architecture, normalization is a methodical way to ensure that a database structure is suitable for general-purpose querying and free of certain undesirable characteristics, such as insertion, update, and deletion anomalies that could result in data integrity loss.

Database Field

DesignDatabase

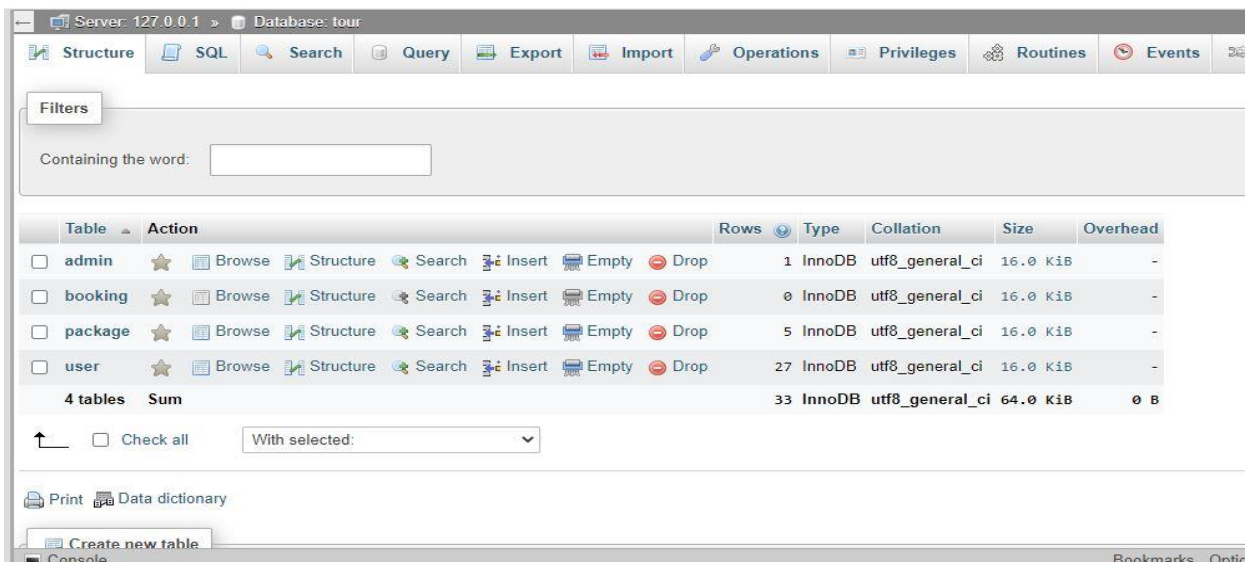


Figure7.1: Database

Admin Table

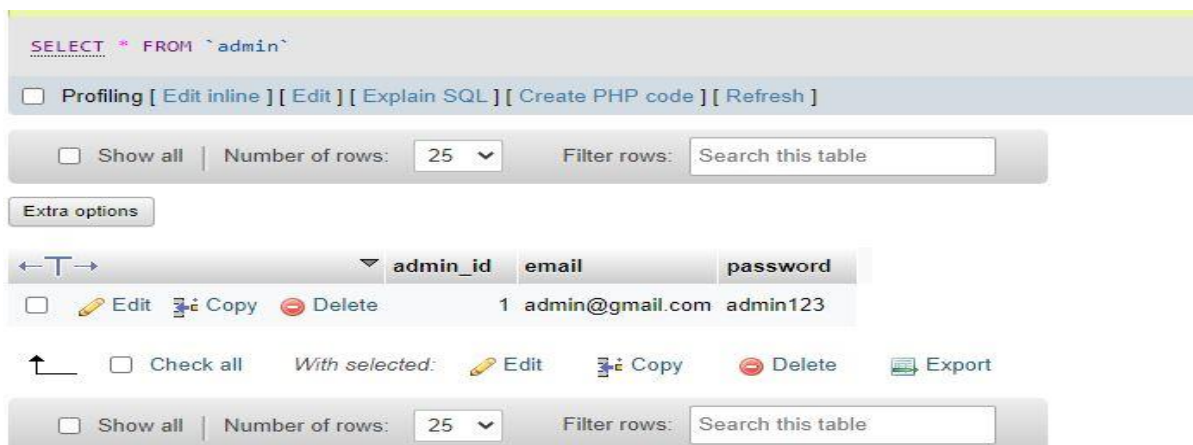


Figure7.2: Admin Table

User Table

`SELECT * FROM `user``

☐ Profiling [[Edit inline](#)] [[Edit](#)] [[Explain SQL](#)] [[Create PHP code](#)] [[Refresh](#)]

1 > >> ☐ Show all Number of rows: 25 Filter rows: Sort by key: None

Extra options

		user_id	first_name	last_name	mobile	email	password	create-date
<input type="checkbox"/>	Edit Copy Delete	1			1521411947	ai22524@gmail.com	0	0000-00-00
<input type="checkbox"/>	Edit Copy Delete	4	ashraf	jhdwjkcd	2656232	Admin@gsjhjd	0	0000-00-00
<input type="checkbox"/>	Edit Copy Delete	5	ashraf1	islam	2656232	Admin@gsjhjddqjhqj	0	0000-00-00
<input type="checkbox"/>	Edit Copy Delete	6	Md Ashraf	Islam	2147483647	ai12238@gmail.com	12345678	0000-00-00
<input type="checkbox"/>	Edit Copy Delete	7		lkjef	0	2386732@gmail.com	0	0000-00-00
<input type="checkbox"/>	Edit Copy Delete	11	Md Ashraf	ihdfg	155558555	Admin@gmail.com	0	0000-00-00

Console Press Ctrl+Enter to execute query

Bookmarks Options His

Figure 7.3: User Table

Package Table

```
SELECT * FROM `package`
```

☐ Profiling
 [\[Edit inline \]](#)
[\[Edit \]](#)
[\[Explain SQL \]](#)
[\[Create PHP code \]](#)
[\[Refresh \]](#)

☐ Show all
 Number of rows: 25
 Filter rows:
Sort by key: None

Extra options

	package_id	package_name	type	location	start_date	end_date	price	image	description
<input type="checkbox"/> Edit Copy Delete	5	Sundarban	Student Package	Khulna	2022-08-01	2022-08-05	6000	bandorban.jpg	**Day-1:** Our journey will start from Dhaka to T...
<input type="checkbox"/> Edit Copy Delete	12	Sadapathor	Regular	Shyhlet	2022-08-26	2022-08-31	10000	sadapathor.JPG	edfghj
<input type="checkbox"/> Edit Copy Delete	13	Tanguar Haor	Student	Kishorganj	2022-08-30	2022-09-05	6000	tanguar.jpg	Our journey will start from Dhaka to Teknaf at **6...
<input type="checkbox"/> Edit Copy Delete	14	Saint Martin	Regular	Teknaf	2022-08-30	2022-09-06	10000	package1.jpg	This tour is a regular tour package. You can get u...
<input type="checkbox"/> Edit Copy Delete	15	Remakri Fall	Regular	Bandorban	2022-09-08	2022-09-13	9000	remakri.jpg	Tour package coverage the transport cost, meal cos...

Console

Bookmarks Options History Clear

Figure 7.4: Package Table

7.2 Interface Design

➤ Home page

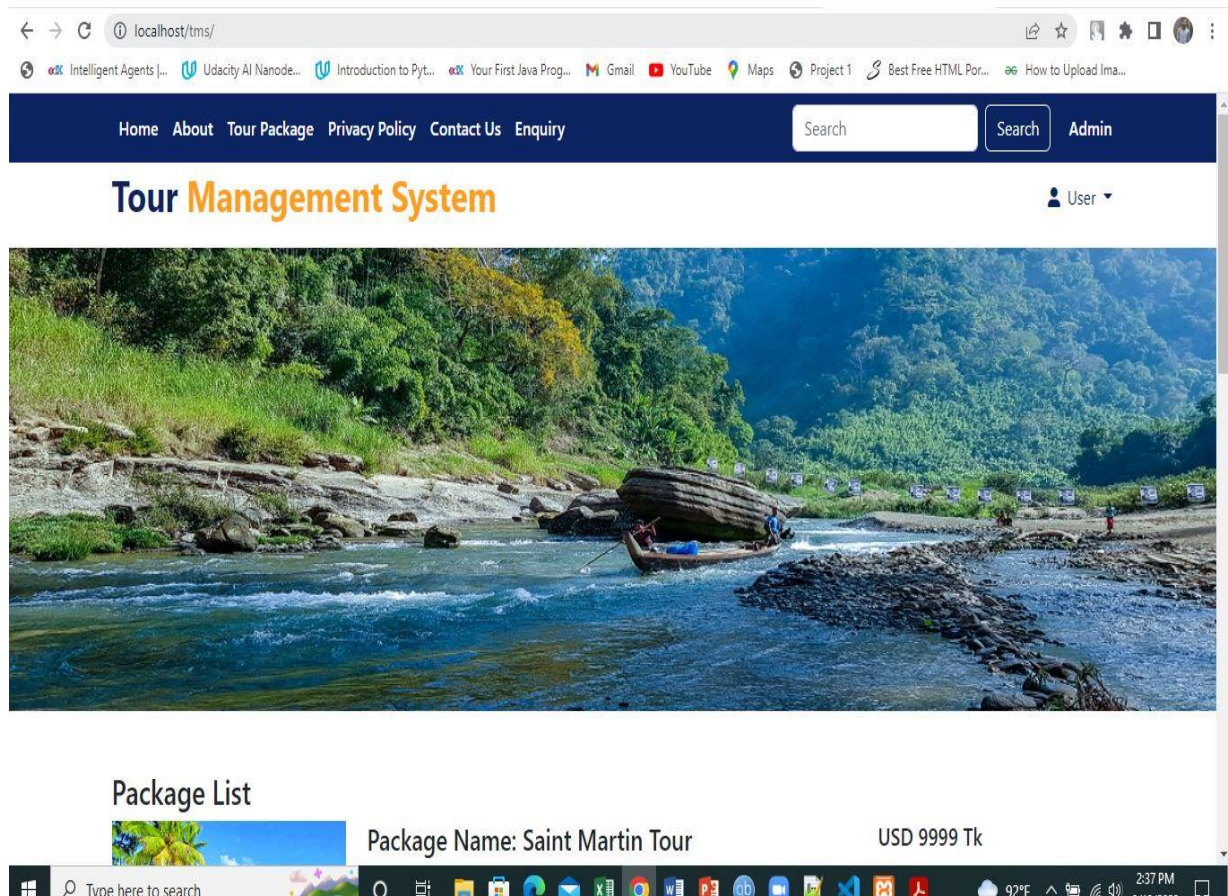


Figure 7.7: Home Page

➤ Package List





Home About Tour Package Privacy Policy Contact Us Enquiry <input type="text" value="Search"/> <input type="button" value="Search"/> Admin			
	Package Name: Remakri Fall Package Type : Regular Package Location : Bandorban Date : 2022-09-08 - 2022-09-13	9000 Tk <input type="button" value="Details"/>	
	Package Name: Saint Martin Package Type : Regular Package Location : Teknaf Date : 2022-08-30 - 2022-09-06	10000 Tk <input type="button" value="Details"/>	
	Package Name: Tanguar Haor Package Type : Student Package Location : Kishorganj Date : 2022-08-30 - 2022-09-05	6000 Tk <input type="button" value="Details"/>	

Figure 7.8: Package List

➤ Package Details

[Home](#) [About](#) [Tour Package](#) [Privacy Policy](#) [Contact Us](#) [Enquiry](#) [Admin](#)



Remakri Fall

Package Type : Regular

Package Location : Bandorban

Tour Date : From 2022-09-08 To 2022-09-13

Price: 9000 Tk

Package Details

Tour package coverage the transport cost, meal cost, Cottage cost and BBQ party cost. Any kind of personal cost will not be include in this package. This is a extreme tracking tour so prepared yourself mentally for tracking.

©Md Ashraful Islam

Figure 7.9: Package Details

➤ User Registration Form

User Registration

First Name

Last Name

Mobile Number

Email address

We'll never share your email with anyone else.

Password

☐ I am agree to privacy policy

Figure 7.10: User Registration Form

➤ Enquiry Form

[Home](#) [About](#) [Tour Package](#) [Privacy Policy](#) [Contact Us](#) [Enquiry](#)

Tour Management System User ▾

Email address

Subject

Description

Figure 7.10: Enquiry Form

➤ Admin Dashboard

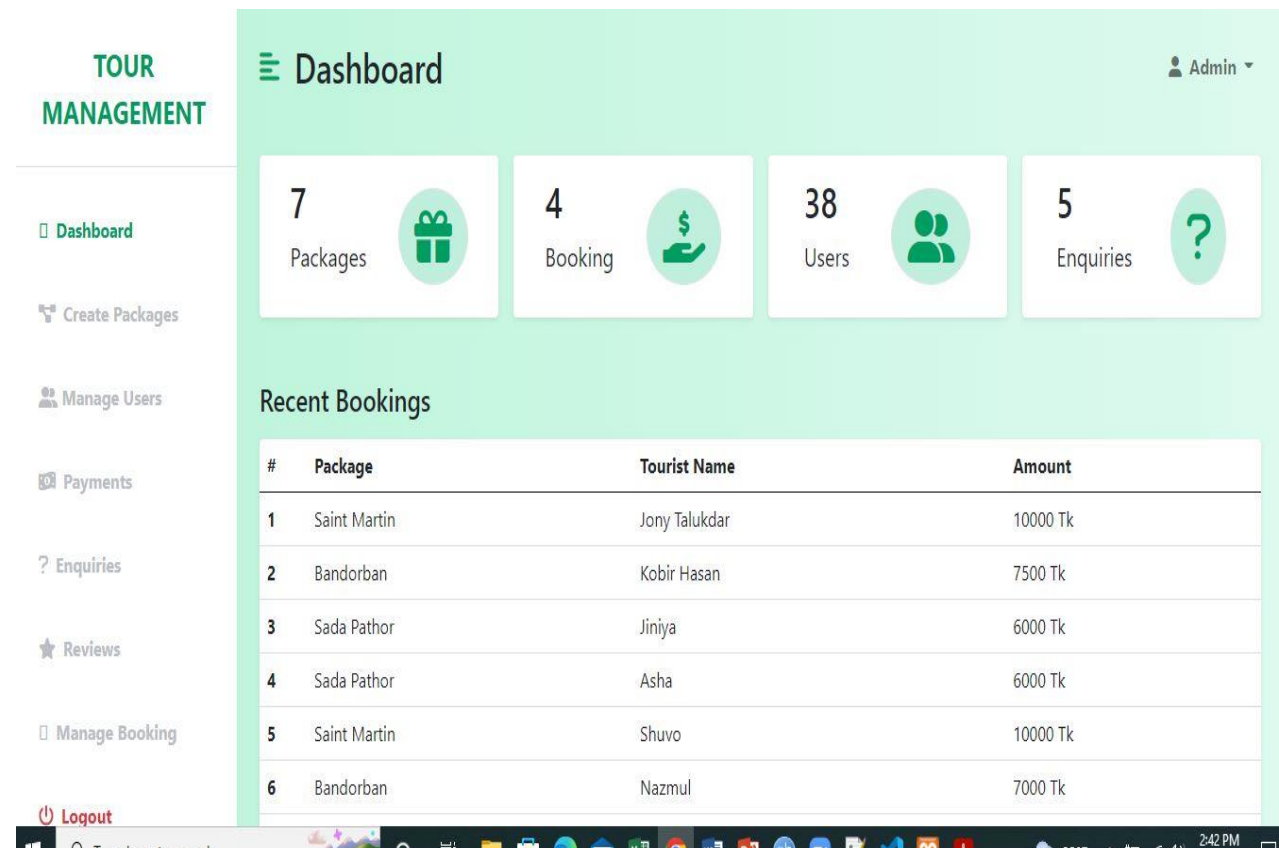
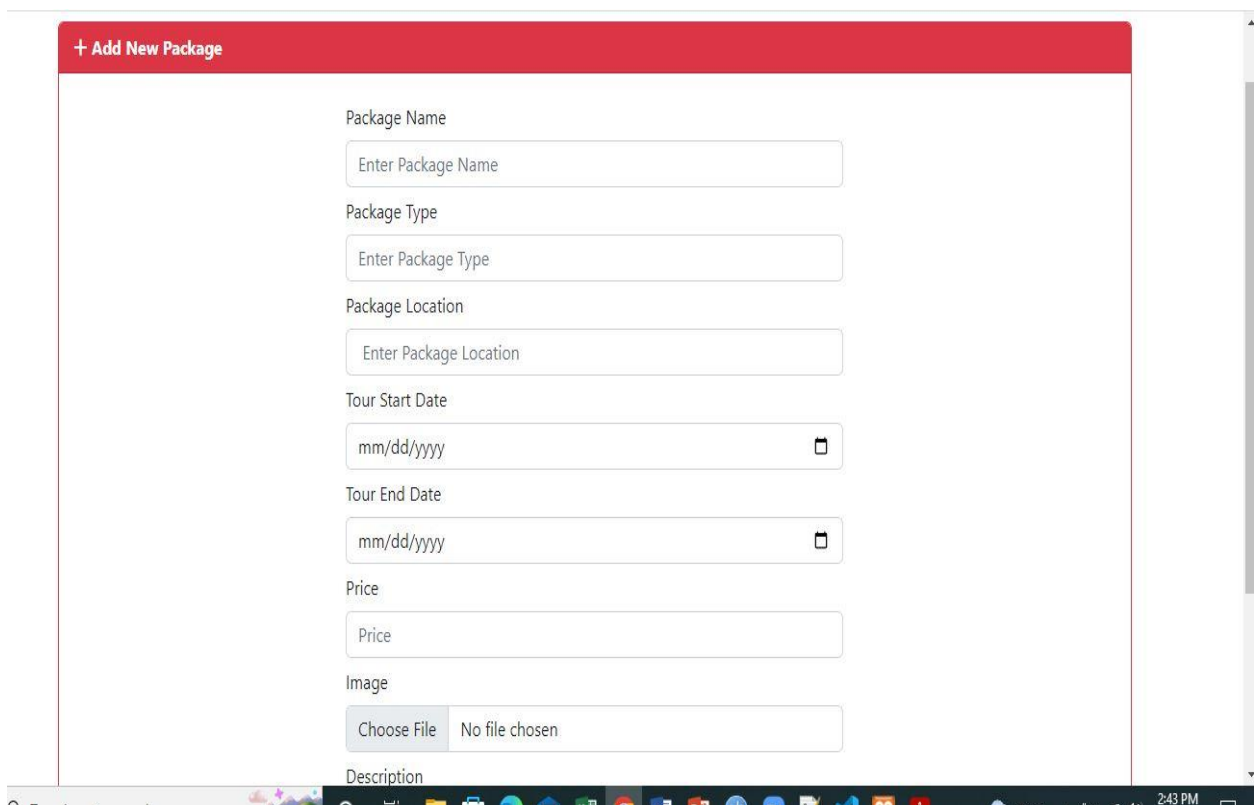


Figure 7.12: Admin Dashboard

➤ Create Package



The screenshot shows a web application window with a red header bar containing the text "+ Add New Package". Below the header is a form with the following fields:

- Package Name:** A text input field with the placeholder text "Enter Package Name".
- Package Type:** A text input field with the placeholder text "Enter Package Type".
- Package Location:** A text input field with the placeholder text "Enter Package Location".
- Tour Start Date:** A date input field with the placeholder text "mm/dd/yyyy" and a calendar icon on the right.
- Tour End Date:** A date input field with the placeholder text "mm/dd/yyyy" and a calendar icon on the right.
- Price:** A text input field with the placeholder text "Price".
- Image:** A file upload area with a "Choose File" button and the text "No file chosen".
- Description:** A text area for entering the package description, located at the bottom of the form.

The form is displayed within a window that has a Windows taskbar visible at the bottom, showing various application icons and the system clock indicating 2:43 PM.

Figure 7.12: Create Package

➤ User Profile



My Tour History

#	Package Name	Location	Date
1	Saint Martin	Teknaf	25.7.22
2	Bandorban	Bandorban	13.5.22
3	Sadapathor	Sylhet	10.2.22

My Details

Name: ash islam

Mobile Number : 1254586363

Email address : i@gmail.com

Password : 123456

Figure 7.13: User profile

Chapter: 08

Testing

8.1 System testing

Software testing is the process of evaluating a software item to find differences between provided input and expected output. In addition, to assess the functionality of a software item. The quality of a product is determined by testing. Software testing is a necessary step in the development process. To put it another way, software testing is a verification and validation process.

Verification: Verification is the procedure used to make sure the product complies with the specifications laid out at the beginning of the development phase. To put it another way, we want to guarantee that the product performs as intended.

Validation: At the end of the development phase, validation ensures that the product meets the given criteria. To put it another way, to ensure that the product is created to the specifications of the client.

- The following are the goals of software testing:
 - A good test case is one that has a good chance of spotting a flaw that hasn't been found yet.
 - The design of software testing can be just as challenging as the initial design of the product.
- Software testing can be done in two ways:
- Tests that fully demonstrate each function while also checking for issues in each function can be done if the intended function of the software is understood. This approach is known as "black-box testing."
 - Tests can be done to ensure that internal operations are carried out in accordance with requirements and that all interior walls have been appropriately exercised by knowing how software functions internally. This technique is known as "white-box testing."

8.2 Testing Design

In my project, I used the black-box testing methodology and the following test scenarios to verify the accuracy and compatibility of the project's requirements.

Table 8.1: Test Scenario 1

Scenario	Login testing for Admin and User
Inputs	Email, Password
Desired Outputs	When a password is entered after entering a valid email, the user and admin will have access to the respective modules.
Actual Outputs	Access their Corresponding modules using a valid email address and password for the user and the admin.
Verdict	Both the desired and actual output show that the system login is functional.

Table 8.2: Test Scenario 2

Scenario	User Registration
Inputs	First Name , Last Nmae, Id, Mobile, Email, join date, password
Desired Outputs	When get all the output employee successfully registered
Actual Outputs	Employee successfully registered and redirect to login page
Verdict	Actual Output and Desired Output show that the system registration is effective.

Table 8.3: Test Scenario 3

Scenario	Add Package
Inputs	Package name, package type, location, price, start date, end date, photo, description
Desired Outputs	Successful messege in the screen
Actual Outputs	Package has successfully create.
Verdict	Actual Output and Desired Output show that the Create package is functioning as intended.

Table 8.4: Test Scenario 4

Scenario	Show package
Inputs	Package name, package type, location, price, start date, end date, photo, description
Desired Outputs	Package name, package type, location, price, start date, end date, photo,
Actual Outputs	User can see all information
Verdict	Desired output and actual output show that the system is functioning as intended.

Table 8.5: Test Scenario 5

Scenario	Package details
Inputs	Package name, package type, location, price, start date, end date, photo, description
Desired Outputs	Package name, package type, location, price, start date, end date, photo, description
Actual Outputs	User can see all
Verdict	Desired output and actual output show that the system is functioning as intended.

Table 8.6: Test Scenario 6

Scenario	Booking
Inputs	Name, how many person
Desired Outputs	Invoice form
Actual Outputs	User can see invoice form
Verdict	Desired output and actual output show that the system is functioning as intended.

Chapter: 09

Conclusion

9.1 Preface

The development of more efficient operational and management processes is essential in the age of modern science, information, and internet communication. delivering Pioneer Alpha Ltd. employee services that are better and more reliable. A team of software experts is cooperating to maintain the service constantly. I was lucky and blessed to receive this opportunity to work with some of these capable, amiable engineers. From the bottom of my heart, I extend my sincere gratitude, thanks, and pleasantries to these lovely folks.

9.1.1 Practicum and Its Value

There is a direct correlation between effort and reward in our job advancement, as there is in the majority of life's challenges. Practicum, in my opinion, can serve as a bridge between engineering college study life and a real-world workplace by providing hands-on exposure to engineering processes.

A student who studies engineering at the undergraduate level for four years gains both theoretical and practical expertise. The practicum program brings those topics' matters to a new level of clarity while giving students the opportunity to see genuine operational systems and use their newly acquired practical working skills. Given this information, it gives us great pleasure to declare that my practicum was a success.

There is no substitute for actual work experience. Students should have practical work experience in their major fields of study prior to starting a job. Today's recruiters give an applicant's work experience just as much weight as their academic performance, interpersonal skills, and part-time employment. The employment opportunities for students with better work experience are better.

I was given the chance to work in a professional environment by Pioneer Alpha Ltd. I have done everything possible during the internship to make my system effective. I applied the concepts, approaches, strategies, and tools I had gained while pursuing my studies at IUBAT. Standard development procedures, the appropriate theoretical understanding, and the developer's creativity all go into creating successful software.

Students in the College of Engineering and Technology (CEAT) at IUBAT enroll in this 6-credit-hour practicum program, which lasts for an entire semester and is often done following the end of the coursework. a report that is submitted following the practicum competition, followed by a presentation of the project work.

9.2: Conclusion

Being a part of the software design and implementation process is, in fact, the most rewarding aspect of working at Integrated Software Technologies Limited. My most extensive experience was in the area of designing. I've discovered several new things that I didn't know much about. I've also picked up some technical skills that will help me succeed in the future. The following indicator will show some of the technical problems I've encountered and solutions I've learned through working on this project.

- The designing strategy of a web based project.
- The analyzing strategy of a web based project.
- New environment of programming languages.
- Developing a new project using the existing project.
- How to coding SQL and designing by PHP, HTML and CSS.

In Bangladesh, we encountered several restrictions in this area. The majority of Bangladeshis do not comprehend the advantages of web systems. It is a significant issue for our upcoming generation. Government should therefore take appropriate action to inform citizens of the benefits of online systems.

9.3: Limitation

- No option for google or facebook login
- User cannot contact with the admin through the system
- No payment system is integrated

9.4: Future Plan

- Making the system more user friendly
- Add payment system
- Implement chatting system

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