# Travel and Tourism Management System Bangladesh (Beriye Pori)

by

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A Report submitted to the Department of Computer Science and Engineering
in partial fulfillment of the requirements for the degree of
B.Sc. in Computer Science

Department of Computer Science and Engineering
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# Declaration

It is hereby declared that

1. The Thesis/Project submitted is my/our own original work while completing degree at BRAC University.

2. The thesis does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.

3. The thesis does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.

4. We have acknowledged all main sources of help.

**Student's Full Name & Signature:**

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# Approval

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# Ethics Statement

I, hereby declare that this Project report is the result of my research. All other materials used, have been referenced with appropriate manner. This paper is completely, not even a single part, is original work and has never been submitted by anyone to any other university or institution for the award of any degree.

# Dedication

I would like to dedicate this research analysis report to my dearest parents. I could not have come this far without their absolute support and incentive. I also would like to thank my supervisor Mr. Tanvir Rahman for his constant aids and assist in finishing this project and report in time to present in front of the thesis panel.

# Acknowledgement

I would like to offer my heartfelt gratitude and sincerest respect to everyone who has supported and assisted me throughout this report. First and foremost, I would want to thank Almighty Allah (SWT) which allowed me to complete my project successfully. I feel very fortunate and privileged to respected teacher and supervisor Mr. Tanvir Rahman for believing in me and allowing me to work on this project. It would not have been possible to complete this project without his good advice, constructive criticism, and helpful recommendations, as well as inspiring me to create something useful for everyone. Despite his hectic schedule, he provided me with outstanding guidance. Last but not the least, I'd want to thank my family and friends, who have consistently supplied important support. I am also thankful to all of my other relevant University instructors for their assistance and collaboration, which helped me keep focused on the project, whether directly or indirectly.

# Abstract

As tourism is becoming more and more popular, the requirements of the tourists are getting more complicated. Now, as the traditional travel websites with basic information or a pricing list of hotels, transportation tickets, and so on are quite informative but they cannot fulfill the demand of emerging number of tourists and their requests. That is why, this type of information is no longer sufficient to satisfy passengers. Also, the presentation of unique and original trip ideas and locations is a problem for travel websites. This study describes a new system aimed at generating inventive trip itineraries in order to achieve this goal, based on software reuse and abstraction approaches. This project " Travel and Tourism Management System Bangladesh (Beriye Pori)" is used to automate all travel and tourism processes including creative package options, customize-able packages, booking, and confirmation, as well as preserving user data. The project is built entirely in JavaScript and thus compatible with all browsers. A travel and tourism management system are used to book a tour from anywhere in the globe through a single dynamic point that allows the user to learn about the sites and tour specifics all in one place. The administrator has the ability to add or remove packages to the website. Then the users can sign in and book each package, which will be verified by the administrator on the manage booking page. The user can see the confirmation on the booking page and also with a confirmation mail from the site mail address. It is a simple platform for all travelers to book and learn about all the details of their vacation destination.

**Keywords:** Travel and tourism management, fixed packages, customized package, tourism, package booking, confirmation mail.

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# Chapter 1

# Introduction

## 1.1  Introduction

Online Travel Management is a very user-friendly project. With this, the user can easily understand and book all packages. In this project, there are various types of forms, like all types of packages, custom package user, registration page in which user can insert his/her personal needs and facilities then upload their form by which users can register in the web site. Furthermore, user can also pay money through credit card from the comfy chair of their home. This site provides different tour packages, customize-able packages, corporate tour, study tour, site information, tour information, review and ranking system. The travel agencies that currently exist make packages around popular places Where people can easily go to and there is nothing new in their packages. Most of the packages of other systems, do not include hotels, resorts, meals and above all customers' happiness. At present, tourists need to go to travel agencies' office to book the packages and make the payment which is very time consuming comparing with the current fast paced lifestyle. "Beriye Pori" provides online booking system through which users can book their desired travelling packages and they also can view the map of their destination unlike a lot of websites which misses some of these features.This system provides facilities to users to plan their trip according to their budget. This web application also gives discount on some travelling packages that are booked through this portal.

## 1.2 Motivation

People now-a-days are quite busy in their daily lives since they are always involved in various forms of employment or entertainment. So, people are most likely to search for tourist spots online. Because of the huge expansion of information and communication technology, this system is offered in Travel and Tourism Management System Bangladesh and also the physical world is gradually becoming more and more connected with the online system. We can save time by using this system on a PC or an android phone. It also saves us money on transportation and other expenses that we would have lost searching for the best tourism office. Thus, people's lives are made easier, faster, and more reliable by the system provided by internet. It will be a prosperous venture to get all the information we need on locations in our "muthophone". The key benefits of this system is providing tourists with vital information, that improves the quality of people's life, and encourages people to get familiar with technology. People will be able to observe many different types of places at a higher level of accuracy thanks to the modern 4g technology.

## 1.3 Problem Statement

1. Details are not provided in Manual Travel Agency
2. Time wastage
3. Customized package is not available
4. Corporate tour and Study tour facilities are not available
5. Too many adds
6. Difficulty in booking system
7. More expensive
8. Missing map

## 1.4 Aims/Objectives of Travel and Tourism Management System Bangladesh (Beriye Pori)

1. To overcome the problems of manual system and Time wastage.
2. To overcome difficulty in booking traveling packages.
3. To the availability of customized packages.

## 1.5 Features of Project

The following fundamental functions would be provided by this portal:

1. Admin has the ability to add new Packages to the existing list of available trip Packages.
2. Admin can access to all of a user's information.
3. The administrator can view the user's requests or queries.
4. Items can be removed by the administrator.
5. Admin has the ability to change the pricing of each Traveling package.
6. Admin can change the description of each city and location.
7. Users can examine all of the travel packages that are available.
8. Users can add or cancel booking requests.
9. Users can book any available travel package (Packages Booking online) Users can access their profile.
10. User Can customized package as their needs.
11. Users can contact the administrator if they have any problems or questions.
12. Users can view map of their destination.
13. Users can access detailed information about the destinations they want to visit.
14. Users can organize their journey based on their budget.
15. Users can rank the areas they've visited and provide feedback about their journey. (Review and ratings)
16. Users can read and rate other people's reviews and ratings.

# Chapter 2

# Existing System Review and Existing application review

## 2.1   Existing System Review

In the existing system, each task is completed manually and processing is also a time- consuming effort. Previously, travelers manually maintained time table data on pen and paper, which was time consuming and costly. The travelers are unable to meet their needs on time, and the outcomes may be inaccurate. The system has a lot of challenges and limitations as a result of human maintenance. The travel agencies that currently exist make packages around popular places Where people can easily go to and there is nothing new in their packages. There is not much detail in the packages. Most of the packages do not include hotels, resorts, meals and customers are embarrassed. At present travel agencies have to go to their office to book the packages and make the payment which is very time consuming for the time being. There is no opportunity to create packages as traveler's needs.

## 2.2   Existing Application Review

**Vromonguide**[8]

**Features of Vromonguide:**
1. Details Place Information
2. Responsive

**Limitation of Vromonguide:**
1. Packages are not included
2. Map missing
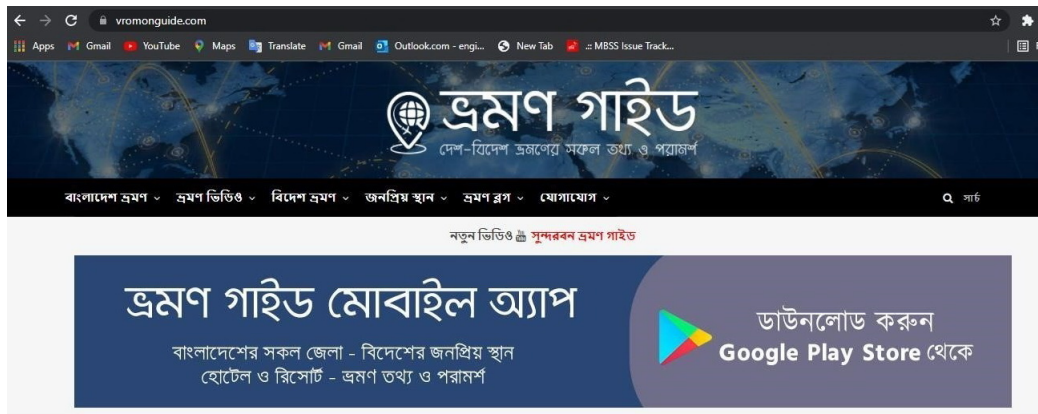
Figure 2.1: Screenshot vromonguide.com

**Toursntripsbd**[12]

**Features of Toursntripsbd:**
1. They have different kinds of tour package
2. Responsive and User friendly

**Limitation of Toursntripsbd:**
1. Customized packages facilities is absent
2. The payment should pay in dollar.
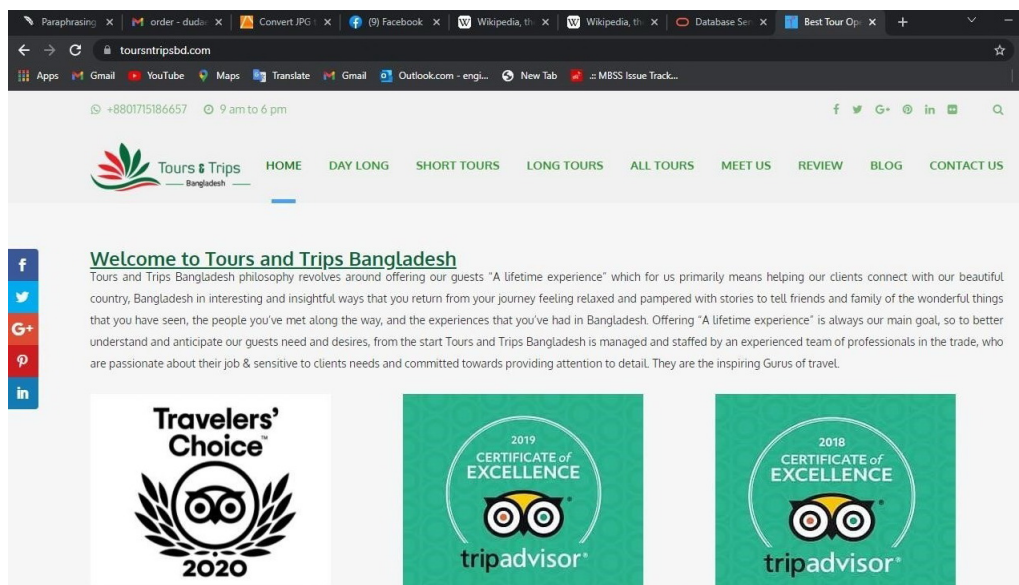

Figure 2.2: Screenshot toursntripsbd.com

**Bangladesh Ecotours**[7]

**Features of Bangladesh Ecotours:**
1. Different categories of packages have been categorized
2. Bangladesh Based Travel Management System

**Limitation of Bangladesh Ecotours:**
1. Booking System is not Responsive
2. Customized package facilities is absent
3. There is no payment Method



Figure 2.3: Screenshot Bangladesh Ecotours

**Travel Bangladesh**[9]

**Features of Travel Bangladesh:**
1. Details Place Information
2. Responsive

**Limitation of Travel Bangladesh:**
1. Packages are not included
2. Map missing

**Travel Guru Bangladesh** [6]
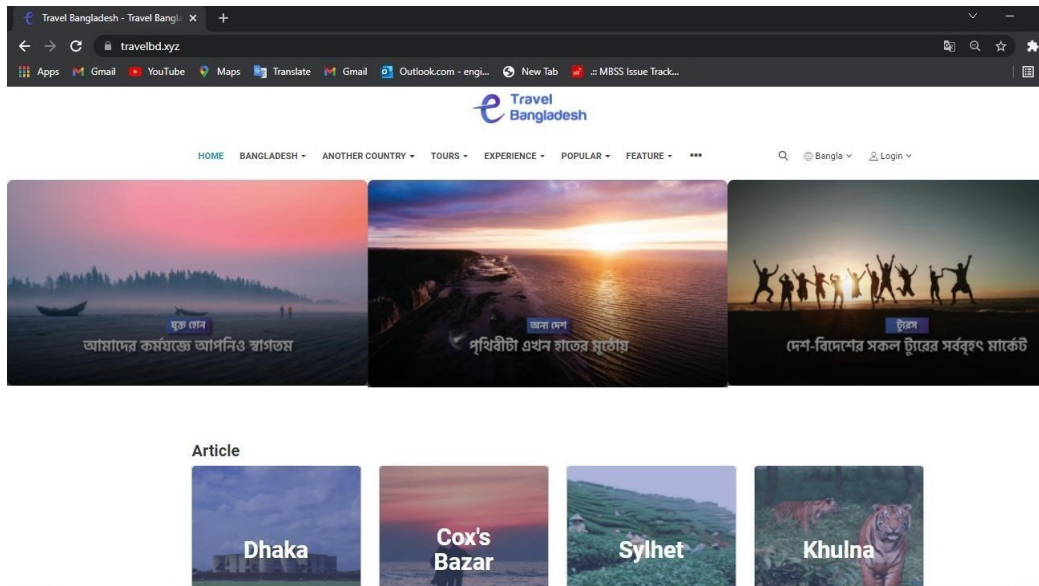
Figure 2.4: Screenshot Travel Bangladesh

**Features of Travel Guru Bangladesh :**
1. Responsive
2. Various kinds of offers have included

**Limitation of Travel Guru Bangladesh :**
1. Unnecessary blogs have present
2. Customized package facilities is absent
3. Too many adds
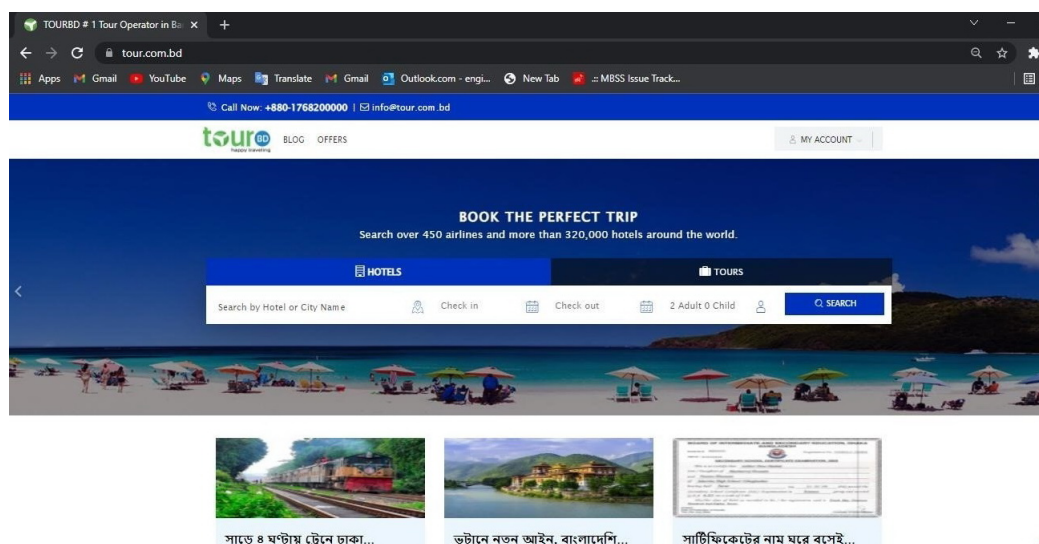


Figure 2.5: Screenshot Travel Guru Bangladesh

## 2.3 Comparisons among Existing Systems and proposed System

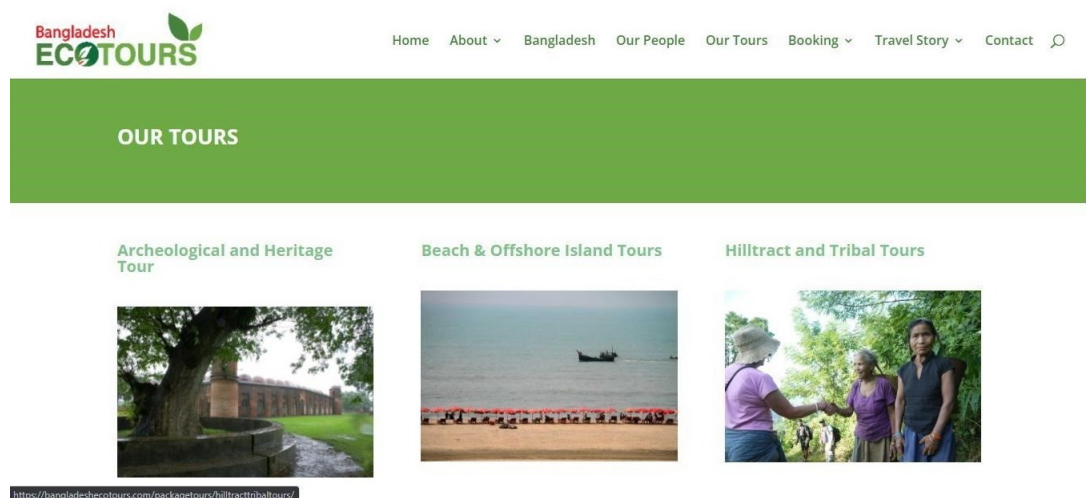| Web Site | Features | Limitation | Proposed system Features |
|---|---|---|---|
| Vromonguide | 1. Details Place Information 2. Responsible | 1. Packages are not included 2. Map missing | 1. Details Place Information 2. Responsible 3. Different kinds of tour package 4. Bangladesh Based Travel Management System 5. Various kinds of offers have included 6. Customized packages facilities are available 7. Using Maps 8. Corporate tour and Study tour facilities are available |
| Toursntripsbd | 1. They have different kinds of tour package 2. Responsive & User friendly | 1. Customized packages facilities is absent 2. The payment should pay in dollar. | |
| Bangladesh Ecotours | 1. Different categories of packages have been categorized 2. Bangladesh Based Travel Management System | 1. Booking System is not Responsive 2. Customized package facilities is absent 3. There is no payment Method | |
| Travel Bangladesh | 1. Details Place Information 2. Responsible | 1. Packages are not included 2. Map missing | |
| Travel Guru Bangladesh | 1. Responsible 2. Various kinds of offers have included | 1. Unnecessary blogs have present 2. Customized package facilities is absent 3. To many adds | |

Figure 2.6: Table of Comparisons among Existing Systems and proposed System

# Chapter 3

# Methodology

## 3.1  Definition

A technique is a methodical way to implement SDLC (i.e., a set of processes and deliverable). There are several approaches to system development, and each one is unique due to its emphasis on process vs data, as well as the order and importance put on each SDLC phase.

## 3.2  Methodology's Importance

To maintain the consistency of a system, I must follow a certain technique when developing it. The entire program is being created in a methodical, step-by-step process known as methodology.
Methodology is the planning and supervision of the development process. A method, on the other hand, provides principles, strategies, and tools for developing software/systems. To generate output, a collection of tools must be employed in concert with procedures and processes.

## 3.3  Rapid Application Development (RAD)

Rapid application development modifies the SDLC stages to expedite the development of a portion of the system. This methodology employs specialized techniques and technologies to expedite the analysis, design, and implementation processes. I used phase development for this project.

## 3.4  Phase Development

The phased development split the overall system in to a series of versions. The analysis phase identifies the system concept.
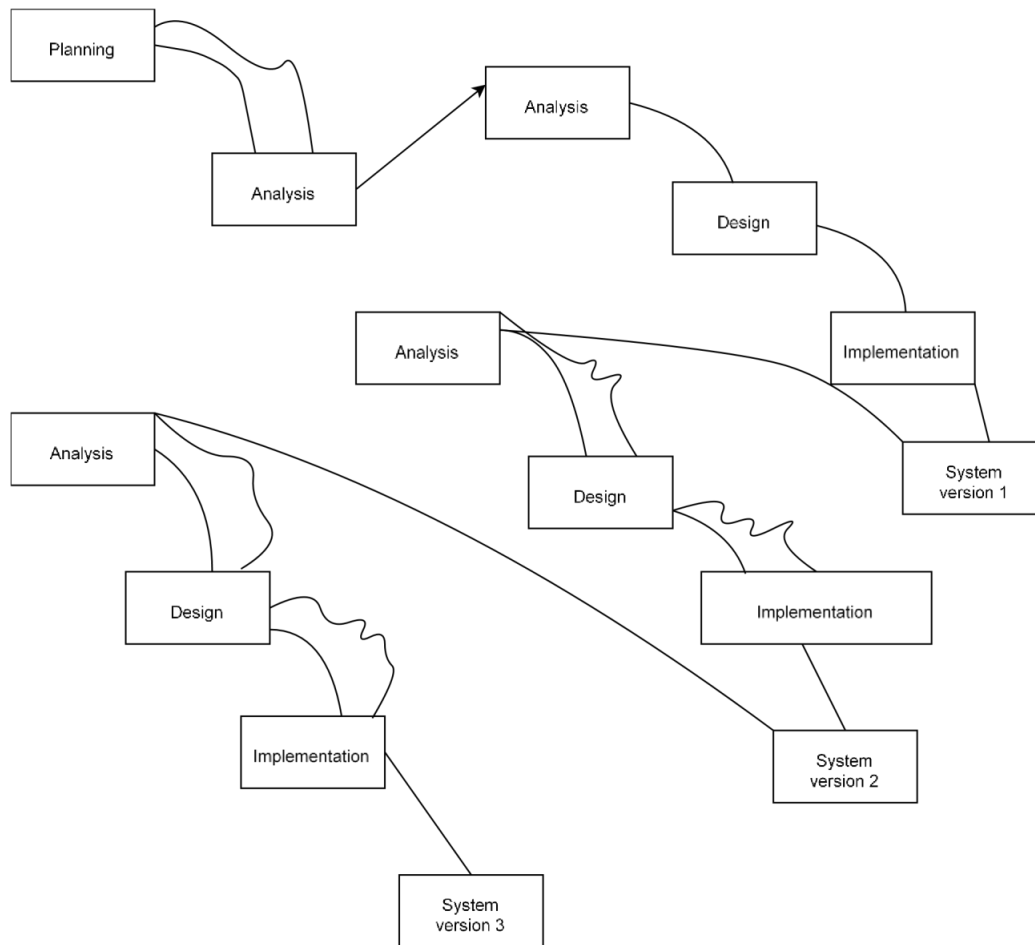
Figure 3.1: Phase Development Methodology

## 3.5 Advantages of Phase Development

1. Phase development is more consistent and less complicated
2. This technique enables users to interact with the system right from the start
3. This approach is simple to use and comfortable with the new system
4. It accelerates development and shortens the timetable, and it allows the project team to modify system functionality

## 3.6 The methodology I followed

I followed waterfall methodology to develop Travel and Tourism Management System Bangladesh (Beriye Pori)
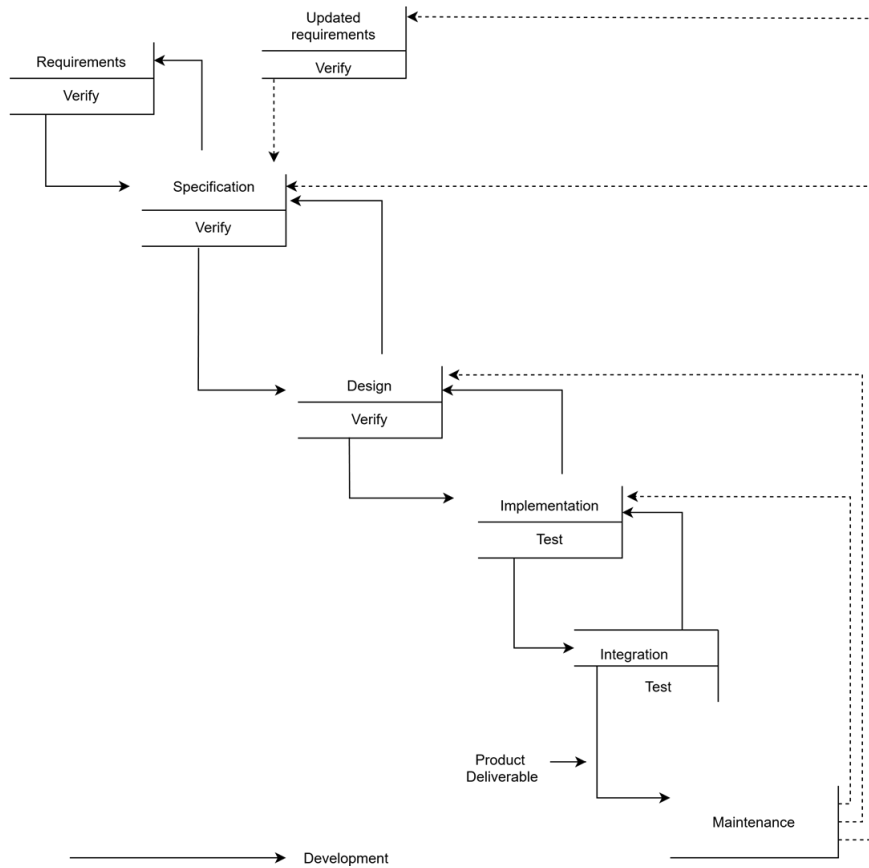
Figure 3.2: Schematic Illustrations the waterfall model

## 3.7   System Development Life Cycle

The SDLC contains four essential phrases that are similar.
They are:
i. Planning
ii. Analysis
iii. Design and
iv. Implementation

**A partial Process model for Travel and "Tourism Management System Bangladesh (Beriye Pori)"**[5]
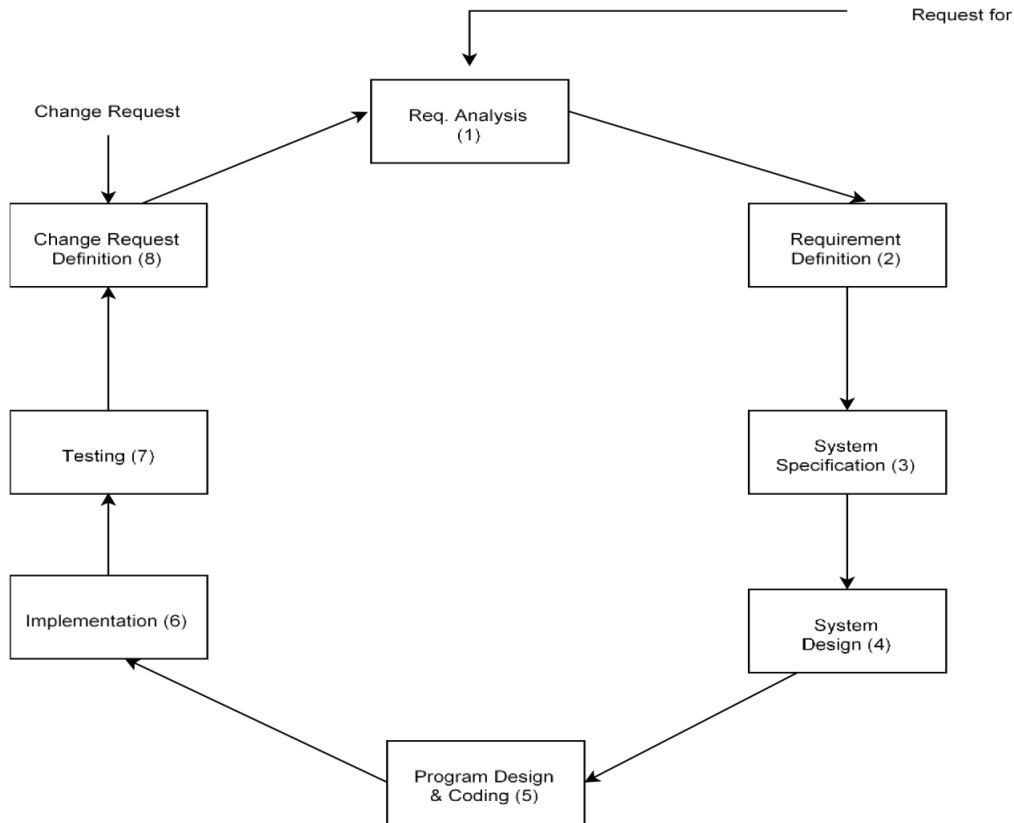
Figure 3.3: : Software Development Life Cycle

## 3.8  Feasibility Study

The feasibility study entails information assessment, data collecting, and report drafting. The feasibility study helps the organization decide whether or not to proceed with the project. The feasibility analysis also reveals critical project hazards that must be addressed. Ultimately, the analysis provides unambiguous direction on whether to submit a system request or not.

## 3.9  Requirement Definition

The specification of requirements is a tourist-oriented explanation of what the system should perform. This is also considered as an abstract statement of the services that the system should deliver as well as the limitations that the system must function under. The specification of requirements is focused with the system's outward behavior rather than the system's design features. This should be expressed in a way that people who are unfamiliar with specialist notation may understand. The definition of requirements should be complementary and consistent.

i. To be complete, all services requested by visitors must be defined.

ii. In order to be consistent, requirements should not have contradicting definitions.

## 3.10   System specifications

System specifications is written in a language with rigorously specified vocabulary, syntax, and semantics. Specification language cannot be based on normal language but must be based on mathematics. Architecture design, interface design, database design, file definition, and program design are all included in the specification. And those are used for implementation by the programming team.

## 3.11   System Design

Design is the process of converting the specifications of what the system must perform into the specifications of how the system will do it. The design is also included in the project documentation and is used to configure the program. Designers must be aware of what defines a good design, keeping in mind that the system might become highly complicated. A variety of aspects must be considered by the designer, including performance, dependability, convenience of use, maintenance requirements, and so on.

## 3.12   Programming and Coding

If the preceding process stage went well and the coding was not too tough, the coding results in the actual program being produced in a programming language are surprising. Coding is simply the process of transforming program specifications as a design into program specifications in a programming language. There are also several CASE tools and code generation tools available that can produce code based on requirement specifications.

## 3.13   Testing

Testing is the step at which developers seek to identify potential bugs in the program. It also checks to see if the program fits the requirements. I.e., it behaves as intended. There should be no unpleasant surprises from the program. I.e it behaves in all-natural situations. Testing is a surprise challenge. Even with simple software, it is hard to test every potential combination of input and variables. Uncertainty can be reduced but not
eliminated by good test plan design and specification. Testing merely detects faults; it does not ensure that any errors will remain after testing.

# Chapter 4

# Feasibility Study

## 4.1 Definition

The preliminary inquiry, also known as a feasibility study or a system survey, is the first research into the problem. It supplements the preliminary work required to assess whether or not the project should be pursued. As a system analyst, you must establish what the problems are and how to solve them. The end result will be a basic strategy for moving forward with the system.

## 4.2 Gantt Chart

The Gantt chart is one of the oldest and most practical methods of conveying scheduling information. In the subject of scientific management, the Gantt chart is a pioneer. The Gantt chart displays planned and actual progress for a number of activities against horizontal time lines.

| Serial | Development Procedure | 1st week | 2nd week | 3rd week | 4th week | 5th Week | 6th week | 7th week | 8th week | 9th week | 10th week | 11th week |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Initial Study | ■ | | | | | | | | | | |
| 2 | Feasibility Study | ■ | ■ | | | | | | | | | |
| 3 | Requirement | | ■ | ■ | ■ | | | | | | | |
| 4 | Design | | | ■ | ■ | ■ | | | | | | |
| 5 | Review Report | | | | | ■ | ■ | ■ | | | | |
| 6 | Coding | | | | | | | | | ■ | | |
| 7 | Testing | | | | | | | | | ■ | ■ | |
| 8 | System & user manual | | | | | | | | | | ■ | ■ |

## 4.3 Objective of Feasibility Study

After examining the present method, it is clear that the project " Travel and Tourism Management System Bangladesh (Beriye Pori)" would solve many of the tourist's maniacs' concerns. I selected three key requirements for my project based on the feasibility research of my proposal. As I am aware of a suitable project supplement effectively, my project is completed successfully, and I discovered three aspects.
i. Technical Feasibility
ii. Economic Feasibility
iii. Operational Feasibility/Organizational Feasibility

## 4.4 Is It Technically Feasible?

A system request is technically viable if the organization owns or has access to the necessary equipment to design, build, and operate the system. The questions that follow highlight those that must be answered.
i. Is the combination of hardware and software capable of delivering performance?
ii. What effect would the proposed system have on end-users when it is implemented?

With current and proven techniques, a technically viable system may be realized. As far as technical feasibility is concerned, the software's hardware and software requirements are concerned.

**Hardware and Software Requirement for the System:**

**Hardware Requirements:**

- Processor: Intel Pentium or More
- Ram: 4 GB Ram
- Hard Disk: PC with minimum 500GB
- Operating System: Microsoft Windows 10/ Microsoft Windows 11

**Software Requirements:**

- Front End and Backend: html[1], tailwindcss[11], Daisy UI[10], git bash[13], React JS[4], Express JS[3]
- Database: MongoDB[2]

## 4.5   Economically Feasible

A system request is "economically feasible" if the proposed system's project benefits surpass the expected costs of creating, implementing, and operating it. I look at the following factors to evaluate economic feasibility. i. Calculate the cost of

the employees required to create the system. For example, consider the cost of programmers, developers, analysts, and so on.
ii. Estimate the cost of required equipment, or the hardware required to construct the system. A personal computer, for example, is required by the user.
iii. Calculate how much it will cost to get the software you need.
iv. Calculate the benefits that will be gained as a result of the proposed system.

Cost-benefit analysis is commonly used to determine economic viability. The goal of cost estimation is to categorize what the system will perform.

## 4.6   Operationally Feasible

With the organization's current resources, a project that is operationally feasible can be completed. The operational feasibility study is concerned with how the software will be accepted by the user. If the program does not satisfy the user's expectations, the user may choose not to use it. If there is a chance that the system will not be adjusted to work with the new system, they may refuse to accept the software. I designed the system and did my best to make it so that people of all levels could simply utilize it.

## 4.7   Feasibility in the Operational Field

When dealing with any enquirer, the operation of the system will need knowledge of the sorts of equipment. The system will carry out the tasks specified based on the information provided. i. Creating a project strategy and a project timetable.

ii. Complete the project on schedule and within budget. System for managing resources.
iii. Boost team productivity.
iv. Increase the likelihood of project success.
v. Save a large amount of time and resources.

It will also boost the tourist's output. When it is necessary to evaluate earlier findings, the matter will be addressed thoroughly. Here, operational feasibility evaluates how well the system will fit into the organization's present context. The suggested system will be simple to use, well-planned, and offer the necessary information in the proper location.

## 4.8 Cost Benefit Analysis

The goal of cost-benefit analysis (CBA) is to help enhance judgment by ensuring that resources are provided efficiently to support institutional activities.

## 4.9 Time Period

The CBA time period should correspond to the system life cycle. The following major stages/phases are included in the system life cycle: i. Feasibility analysis

ii. Design
iii. Development
iv. Implementation
v. Operation
vi. Maintenance

## 4.10 Identifying and Measuring Benefits and Costs

Estimates of project benefits and costs for all alternatives must be included in the CBA. Benefits that cannot be ascribed as taka value (intangible benefits) should be mentioned alongside tangible benefits and expenses.

## 4.11 Result

I eventually decided to proceed with the project after considering every aspect of the feasibility assessment.

# Chapter 5

# Requirement Collection and Analysis

## 5.1   Requirement Collection

The data gathered during the 'Fact Finding' stage is concerned with the initial difficulties of the present system as well as what the future system needs are. I have identified and documented these two elements. It is critical to explain the problem as accurately as possible in user words. A solution cannot be produced until the problem is expressed and understood clearly. The restrictions section defines the problems. Once the choice to use a system has been taken, far more thorough research may begin. The goal is to get a thorough grasp of both the present system and the new system's requirements.

Investigation of the present system is required in order to:

i. Identify a method that is required for an organization's proper operation.
ii. To learn about the types of data contained by the present system.
iii. To gain a deeper knowledge of the organization's difficulties and requirements.
iv. To learn about the personnel who are experiencing problems with the present system.
v. Establishing the organizational structure and user roles.
vi. Outline the fundamental tasks.
vi. Specify how tasks interact with one another.

## 5.2   Process of Requirement Collection

**1. Fix System Boundaries**
This preliminary stage aids in determining how the new application will interface with business operations, how it will fit into the wider picture, and what its scope and constraints will be.

**2. Identify the Tourists or Users** In recent years, there has been an emphasis on determining who the 'users' or 'tourists' of an application are. The term "stakeholders" refers to the group or groups of individuals who will be directly or indirectly touched by the new application. By specifying the intended user in precise terms, the requirements analyst knows where to seek for solutions in advance. The requirements elicitation process should concentrate on which of these designated locations should be included in a legitimate requirements list.

**3. Requirements Elicitation** The data is gathered in order to identify the various stakeholders. The requirements analyst collects information from each of these groups to identify the application's needs and what the application is expected to accomplish. Given the number of stakeholders involved, the list of needs gathered using this technique might be several pages long. The depth of the requirements list is determined by the number and size of user groups, the complexity of business processes, and the size of the application.

**Problems encountered throughout the requirements elicitation process**

i. A hazy knowledge of processes
ii. Inconsistency among numerous users inside a single process
iii. Inadequate input from stakeholders
iv. Diverging stakeholder interests
v. Changes in needs after the project has started

**Tools for Eliciting Requirements** i. Models and prototypes

ii. Application scenarios
iii. Data flow diagram
iv. Diagrams of transition processes
v. Graphical user interfaces

## 5.3 Requirement Engineering

Requirement engineering is the systematic process of creating requirements through an iterative and collaborative process that includes analyzing the problem (Requirement analysis), documenting the observations in a variety of representation formats (Requirement specification), and validating (Validation) the accuracy of the understanding and gaining
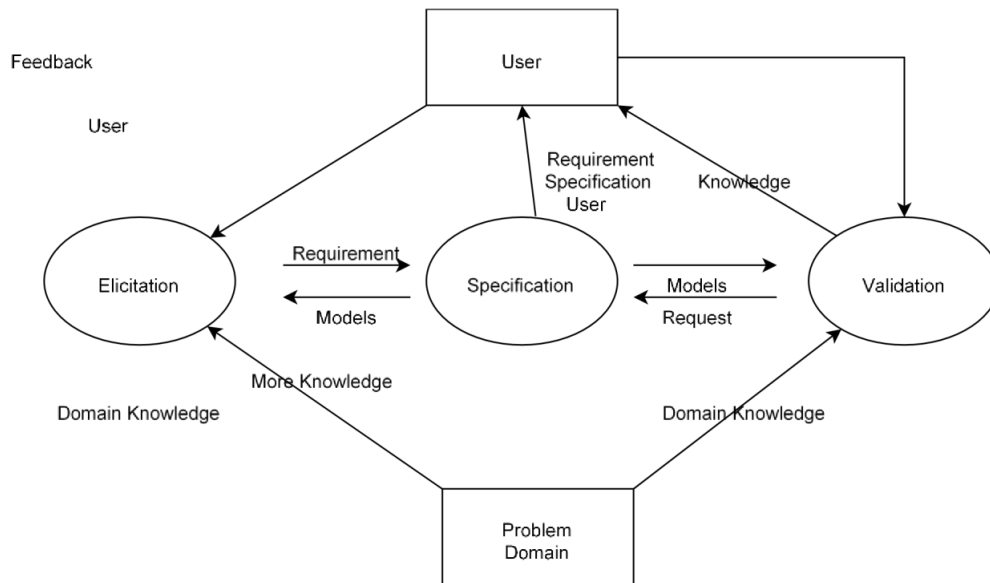


Figure 5.1: Requirement Engineering Process

## 5.4 Requirement Analysis

The process of analyzing the tourist needs and expectations from a proposed system or application is known as requirements analysis, and it is a well-defined step in the Software Development Life Cycle model. A need is a description of how a system should act, as opposed to a description of system traits or attributes. It might also be a description of 'what' an application is supposed to achieve. Given the different layers of contact between users, business processes, and gadgets in today's global businesses, there are diverse and complicated expectations from a single application, from various levels inside an organization, as well as from outside sources. The Software requirements analysis process addresses the challenging work of eliciting and documenting the needs of all these users, as well as modeling, evaluating, and documenting these requirements as a foundation for system design.
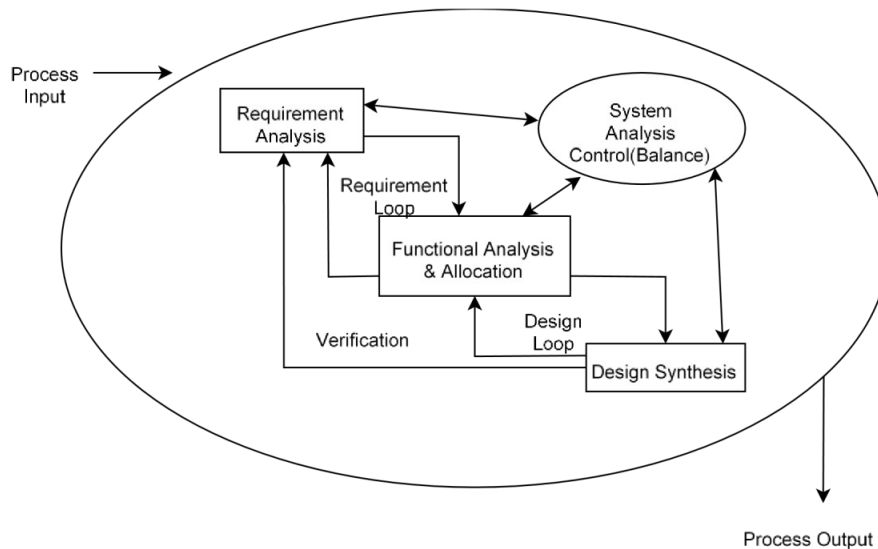
Figure 5.2: Requirement Analysis Process

## 5.5 Stakeholders of Travel and Tourism Management System Bangladesh (Beriye Pori)

**Stakeholders** i. Registered User/Tourists

ii. Non-Registered User/Tourists
iii. Administrator

**Service**

i. To give information about the country's tourism attractions.
ii. To tell people (tourists) from all over the globe about the country's naturally attractive and great areas.

**Data Entry** i. The administrator must first register his information, after which

he will be allowed to login for any information change, insertion, and deletion. ii. He has just the ability to insert, update, and remove.
iii. Tourists or users can search for information on the country's lovely sites by name and division.

**Exception**
Only information from locations saved in the database may be searched.

# Chapter 6

# System Specifications

## 6.1   Requirement Specifications

Requirement specifications provide a more detailed explanation of the system's functionality and operational restrictions. Typically, system models are developed during requirement analysis and so the specification and the model explain the system to be built and implemented. It is more appropriate to think of the specification process as yielding a variety of models that correspond to various perspectives on the challenges. Because requirement specifications are designed to define the system for software design, they are also known as functional specifications. It might be interpreted as a basis for a contract between system creators and visitors. Because of this, it should not be vague or casual.

## 6.2   Input to Requirement Specification

Requirement specifications need prior understanding of the issue domain. This information is provided by the analysis.

**Input to requirement Validation**

Any requirement model is validated and so serves as input to the process. Knowledge about the issue domain must be verified (that is, examined for correctness, consistency, and relevance) to the project. A mathematical routine's specification must be validated for accuracy while also being tested against the rest of the specification model to ensure that it gives the result requested by the other elements of the specification.

**Result of requirement validation**

In this program, I validated the requirements in a variety of methods, including

**1. Validity Check**

A user may believe that a system is required to do particular tasks. However, further investigation may reveal that additional or alternative tasks are necessary. The system has many users, and the set of criteria must eventually compromise

across the user population. In this program, I have included all of the many types of required features that are required for the execution of the "Travel and Tourism Management System Bangladesh (Beriye Pori)."

**2. Consistency Check**

The document's requirements should not be in contradiction with the users' needs. I believe there are no contradicting constraints various descriptions of the same system functions in this program.

**3. Specification Check**

All functions and limitations anticipated by system users should be defined in the requirement specifications.

# 6.3   Data Flow Diagram (DFD)

DFD is a graphical description of the actions that take place within a system. It also depicts the data and presumably material flows between the processes and repositories in the region under inquiry. There are other diagramming rules and standards, but we'll stay with the SSADM variety.

**DFD Symbols**
Data flow diagrams include a minimum number of symbols and extremely simple standards, making them easily accessible by analysts, designers, and consumers. As a result, they can facilitate highly valuable discussions with users in order to clarify nuances of the work being presented.
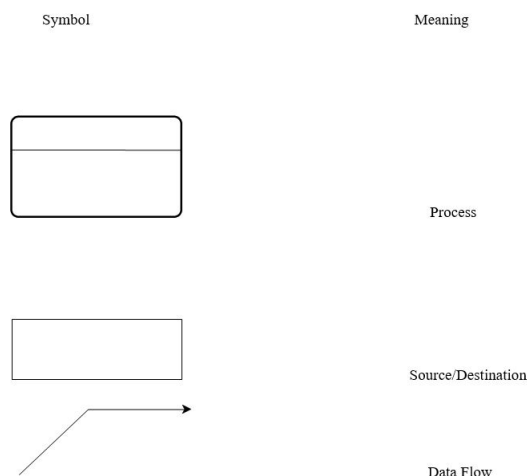
Figure 6.1: DFD Symbols

**The Diagram Components are as follows:**

i. Process.
ii. Data Store.
iii. External Entities
iv. Data Flow.

**Process**
There is at least one input and one output in a process. A "bubble" is commonly used to represent the process.

**Data Store**
The term "data store" refers to a data structure or logical data file. They are frequently portrayed as an open-ended form.

**External Entities**
External Entities are interfaces that exist outside of the system. These are frequently shown as a tiny form, such as a diamond.

**Data Flows**
Data flow denotes the interchange of data between processes, data stores, and external entities. The direction of data flow determines how data flows through the system. Arrows indicate the direction of data flow.

# 6.4   Context Diagram

A top-level data flow diagram is a context diagram. It just has one process node (process 0), which generalizes the whole system's function in reference to external entities.
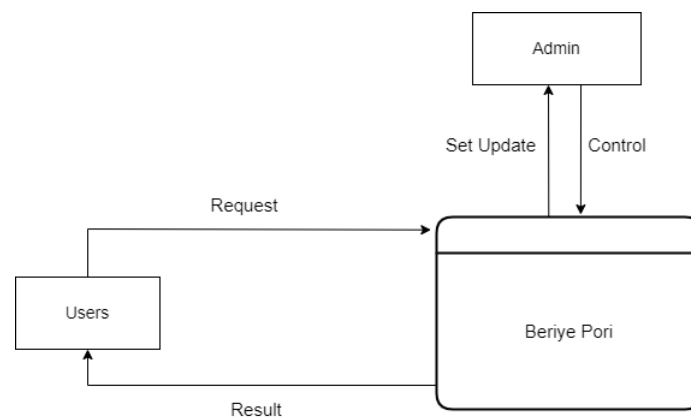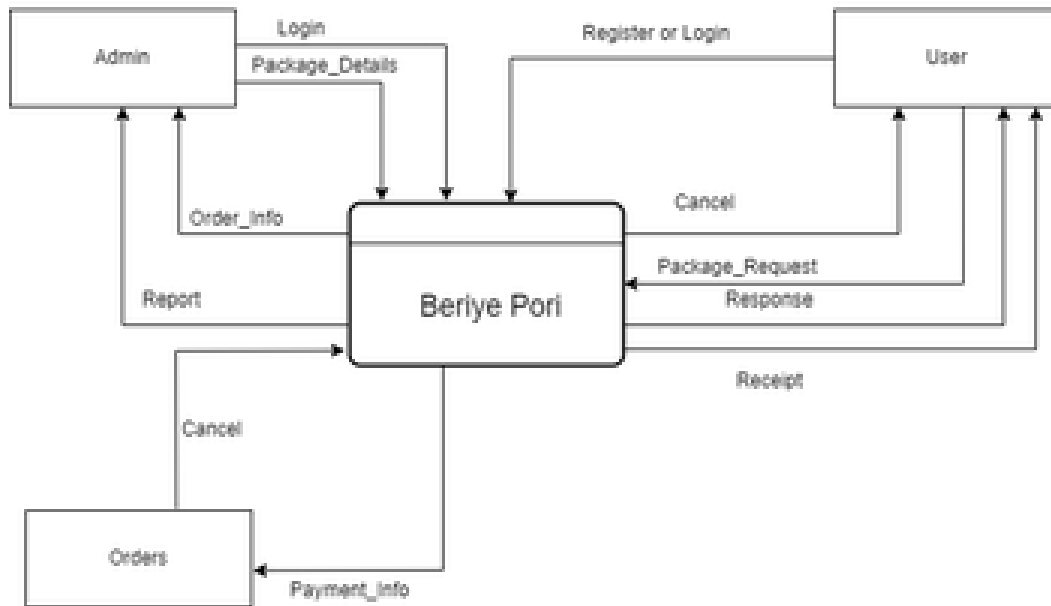


Figure 6.2: Context Diagram

## 6.5 Level 0 DFD



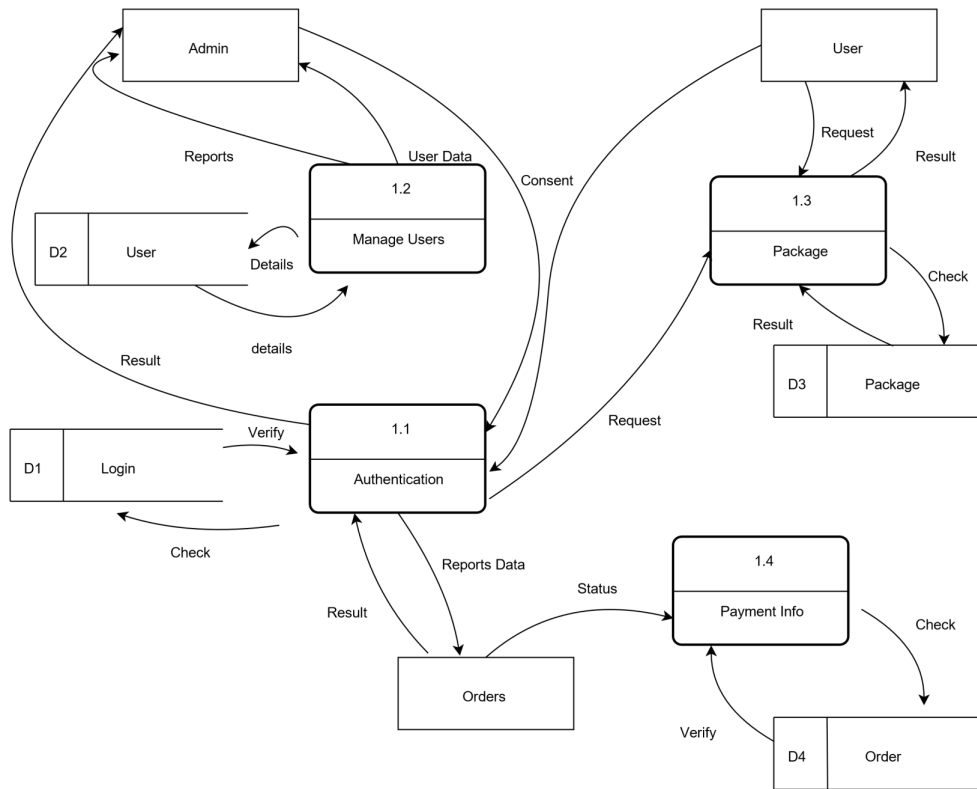Figure 6.3: Level 0 DFD

## 6.6 Level 1 DFD



Figure 6.4: Level 1 DFD
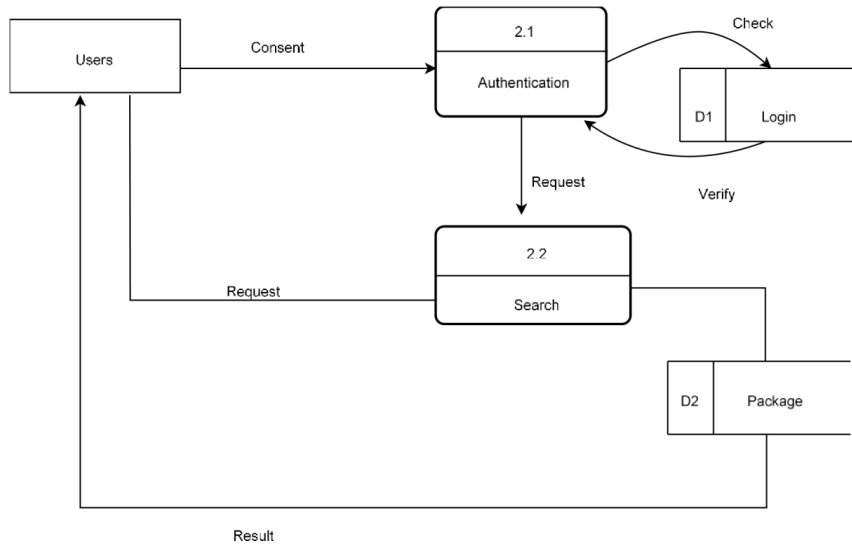
## 6.7   Level 2 DFD



Figure 6.5: Level 2 DFD

# Chapter 7

# System Design

## 7.1 System Design

The activity of system design is separated into two sub-phases:
i. Preliminary design — the analyst develops a new system idea.
ii. Detail design – the analyst establishes the precise design specifications.
This phase is separated into two sections because an analyst wants to ensure that management supports the broad concept before spending time and money on the specifics of the new system.

**Preliminary Design**
The first step of preliminary design is to analyze the system requirements and then consider some of the system's primary elements. The following are examples: i. Is it better to have a centralized or decentralized system? ii. Is it possible to operate the system on the user's own computer? iii. What method will be used to collect input data? iv. What type of data will be required? v. We attempted to adhere to the primary points raised recently.

**Detail Design**
Once the design proposal has been accepted by the users, it is advised that the developer produce information regarding design specifications or a detail design. This is the most time-consuming aspect of the project, but it is also the simplest. During this phase, every aspect of the system is thoroughly examined. During the detail design process, and elements of the system are typically evaluated in this sequence.

**Output Requirements**
The output requirements include knowing precisely the client's demand, which is the system's output. In this regard, I obtained the needed output of each little system from a well-known firm. I also attempted to learn about the medium of output. I have also established the sort of report that is required.

**Input Requirements**
After defining the outputs, I assessed the type of input necessary to generate them. I also assessed the modality of input. I defined the required field as well as the information that they satisfy, and so on. I've also designed some sort of input validation procedure and a check to ensure that the data is both fair and correct.
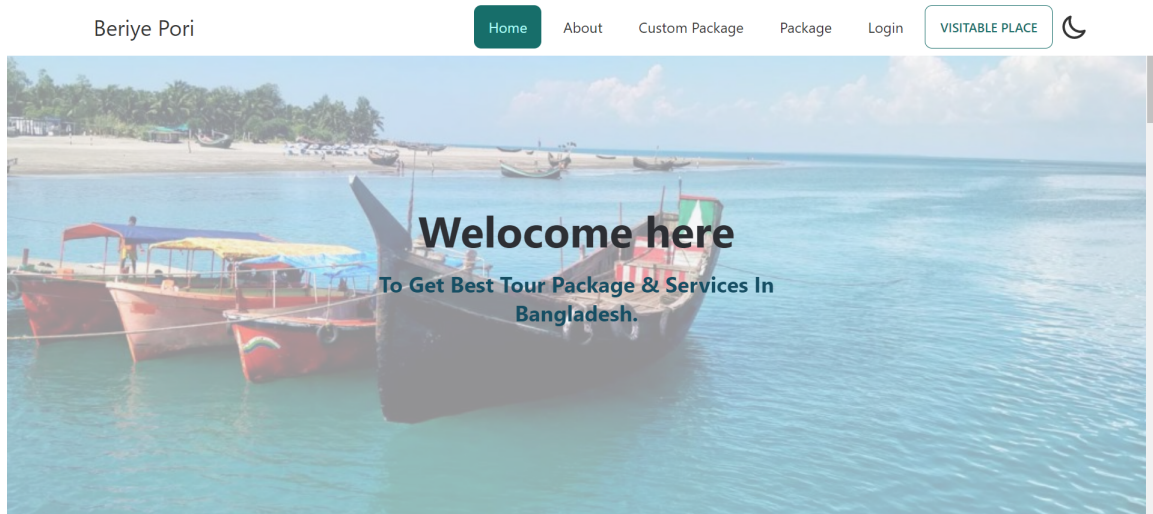
## 7.2  Physical System Design
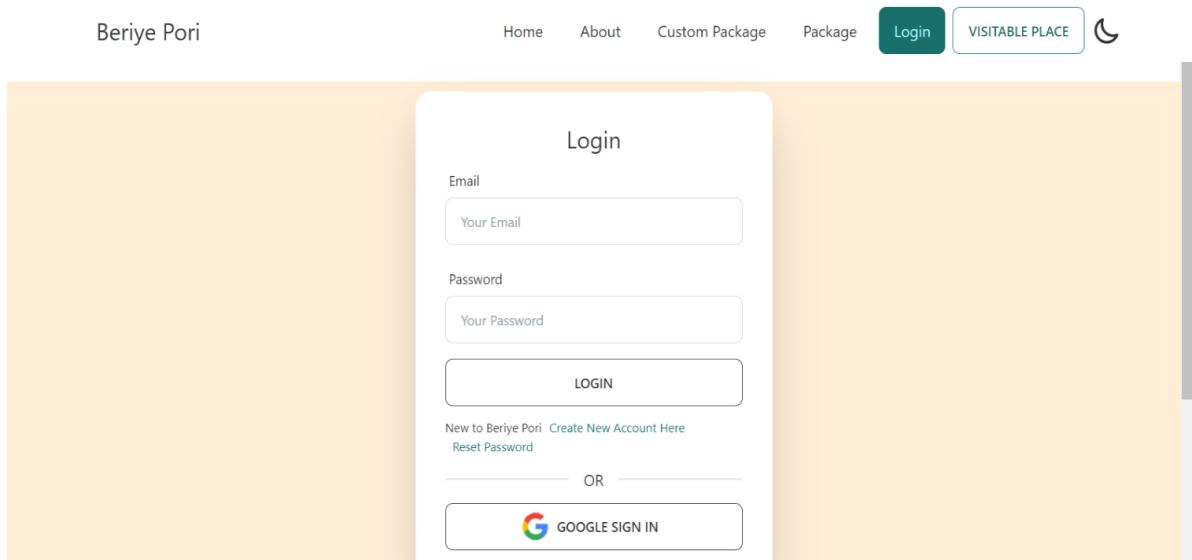

Figure 7.1: Screenshot of Home page
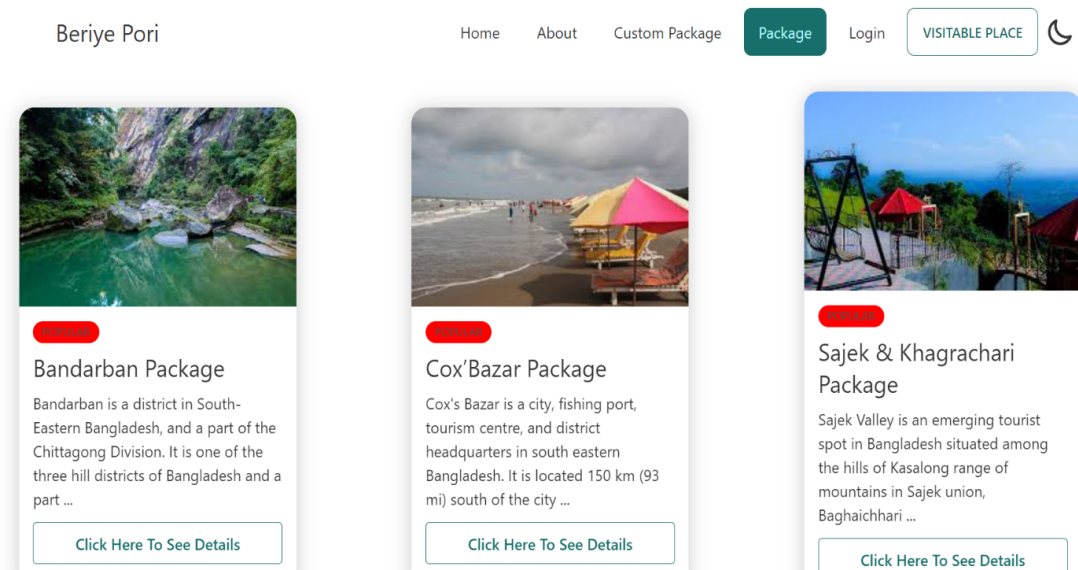

Figure 7.2: Screenshot of Admin login/sign up

Figure 7.3: Screenshot of Packages

Figure 7.4: Screenshots of custom Package from

Home    Dashboard    About    Custom Package    Package    SIGN OUT    VISITABLE PLACE



Chattogram

Chittagong is large port city on the southeastern coast of Bangladesh. The Ethnological Museum has exhibits about the many different ethnic tribes across the country. Zia Memorial Museum, inside the former Old Circuit House, displays items belonging to former president Ziaur Rahman, who was assassinated on the site in 1981.

**Visitable Places:**

- পতেঙ্গা সমুদ্র সৈকত
- চন্দ্রনাথ পাহাড় ও মন্দির
- মহামায়া লেক
- সীতাকুণ্ড ইকো পার্ক
- গুলিয়াখালী সমুদ্র সৈকত
- বাঁশবাড়িয়া সমুদ্র সৈকত
- কুমিরা ঘাট
- চেরাগি পাহাড়
- ছাগলকান্দা ঝর্ণা
- নজরুল স্কয়ার
- ক্যাত্রী কুন্ড

# Result

The total effect of this step is that I know how input data should be recorded, what sort of information is necessary, the client's required output, and the required input based on that.
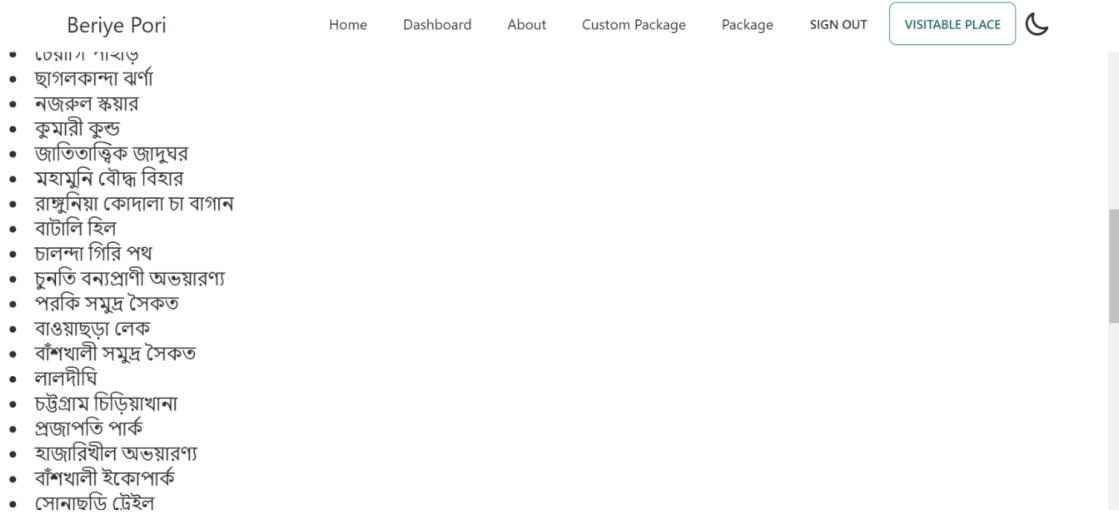
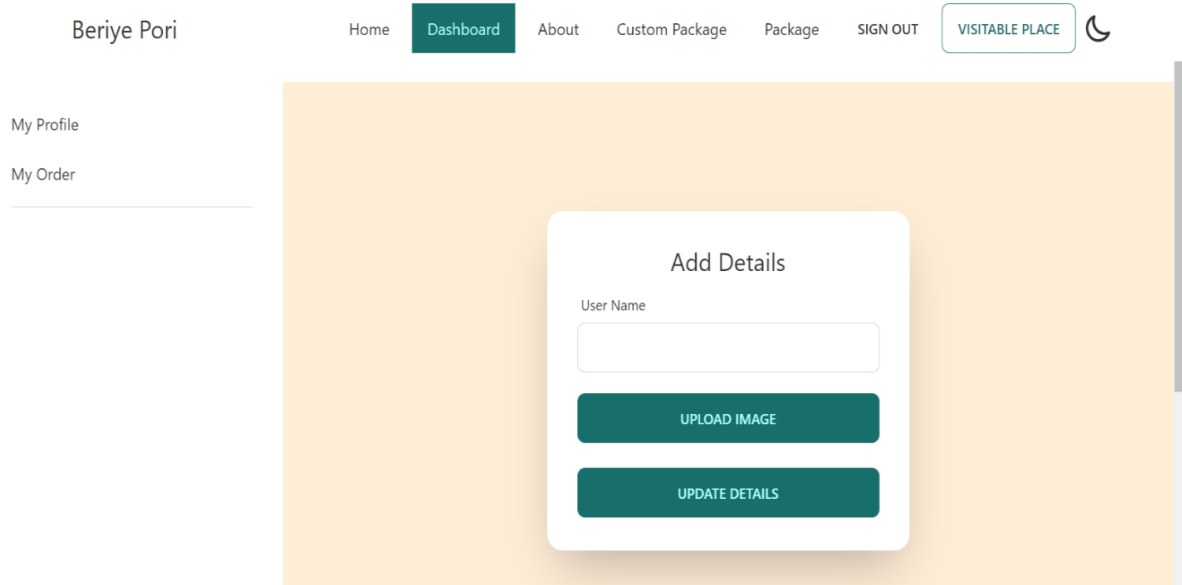Figure 7.5: Screenshots of Visitable Place
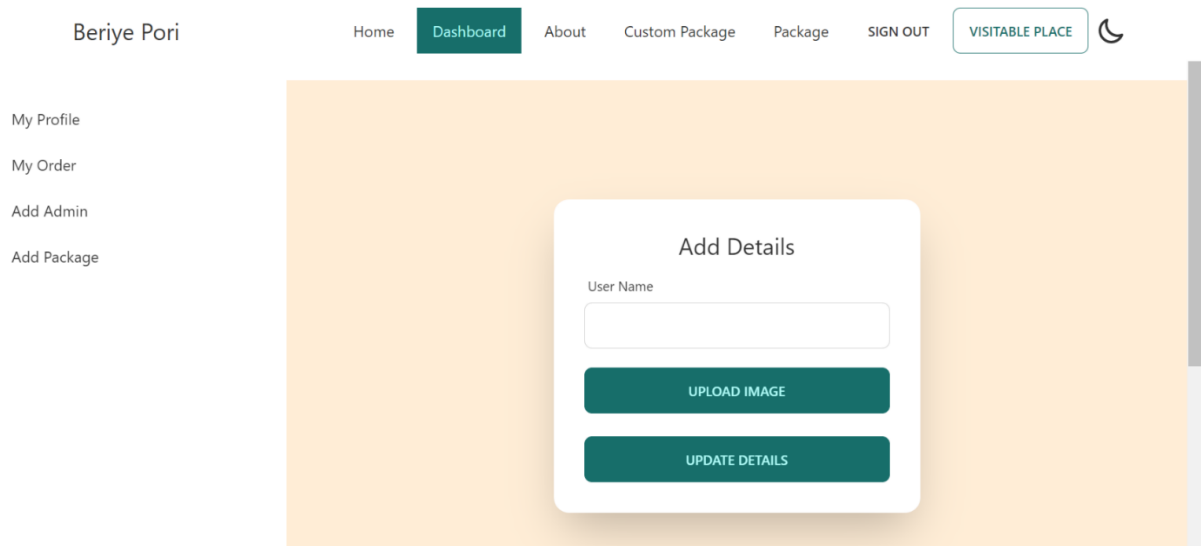


Figure 7.6: Screenshots of User Dashboard

Figure 7.7: Screenshots of Admin Dashboard

# Chapter 8

# Testing

A software testing investigation is conducted to offer information to stakeholders regarding the quality of the product or service being tested. Product testing may also give businesses an objective, unbiased picture of the software, allowing them to grasp and comprehend the risks that come with software implementation.

## 8.1   Objectives of Testing

There are various goals and objectives in software testing. The following are the primary goals:
1. It satisfies the requirements that influenced its design and development.
2. It performs as expected.
3. It is possible to implement with the same characteristics.
4. To avoid defects.

## 8.2   Types of Testing

The following techniques for application testing are provided:
- Unit testing
- Black box testing
- White box testing

**Unit Testing**
Individual code modules are tested before they are combined with other modules in this procedure. A function, subroutine, process, or method may be the subject of unit testing. Units can be tiny groupings of interconnected modules that are always performed together. Before modules are integrated into a bigger software unit, unit testing seeks to find and correct as many faults as possible. When several modules are merged, finding and fixing errors becomes significantly more complex and expensive.

**White Box Testing**

White box testing relies on understanding of an application's core logic. For this form of testing, internal software and code should be well-known. The coverage of code statements, branches, pathways, and conditions is the foundation of the tests. It is done by the following tests: • Each statement in the code is paired with a test case, thus each statement must be run at least once throughout the testing cycle.

• At least once during the testing life cycle, decision instructions are performed.
• Conditions in a specific decision tested for proper working at least once.
• Combination of the possible conditions within a specific decision for all the decisions tested.

**Black Box Testing**

Internal system design is not considered in this type of testing. Tests are based on requirements and functionality. Black box testing is a software testing technique in which functionality of the software under test (SUT) is tested without looking at the internal code structure, implementation
details and knowledge of internal paths of the software. This type of testing is based entirely on the software requirements and specifications. It is done by the following tests:

• Initially requirements and specifications of the system are examined.
• Software tester constructs test cases with the selected inputs.
• Software tester compares the actual outputs with the expected outputs.
• Defects if any are fixed and re-tested.

## 8.3 Validation Check (Black Box Testing)

**Login**

If a username and password are not provided, an error message will appear, requesting you to provide your username and password. If the username is correct but the password is not, the error message will appear. If the password is correct but the username is incorrect, an error message will appear, prompting you to provide your username. If both the username and password are invalid, the error message invalid username and password will appear. If both the username and password are legitimate, they will be able to log in and access their profile's home page. The following is a screenshot:
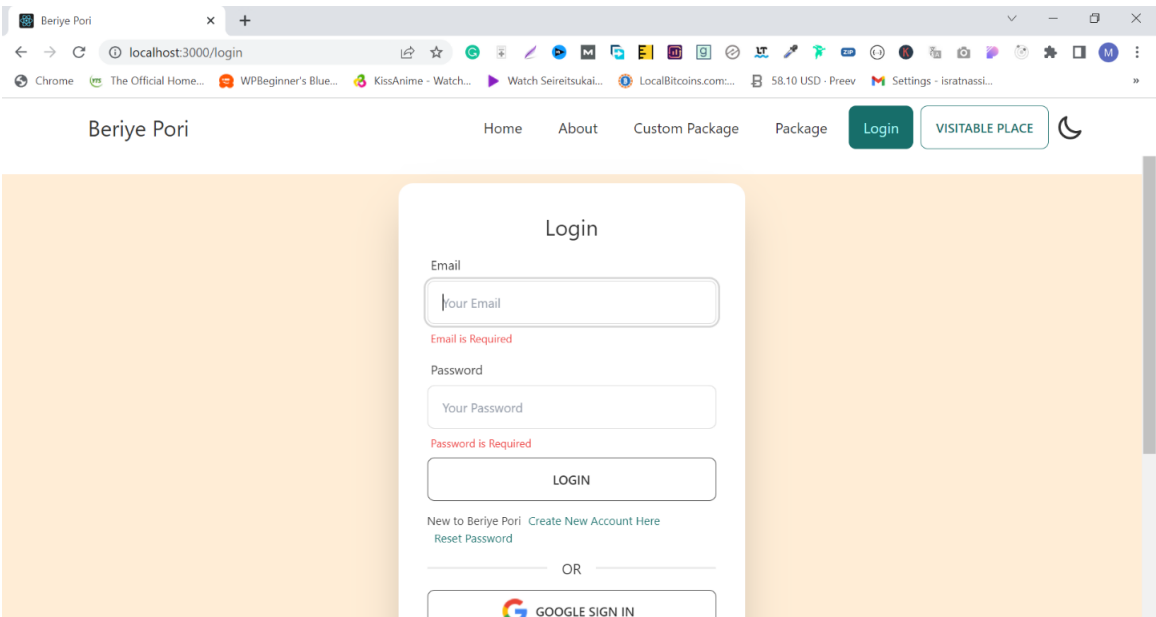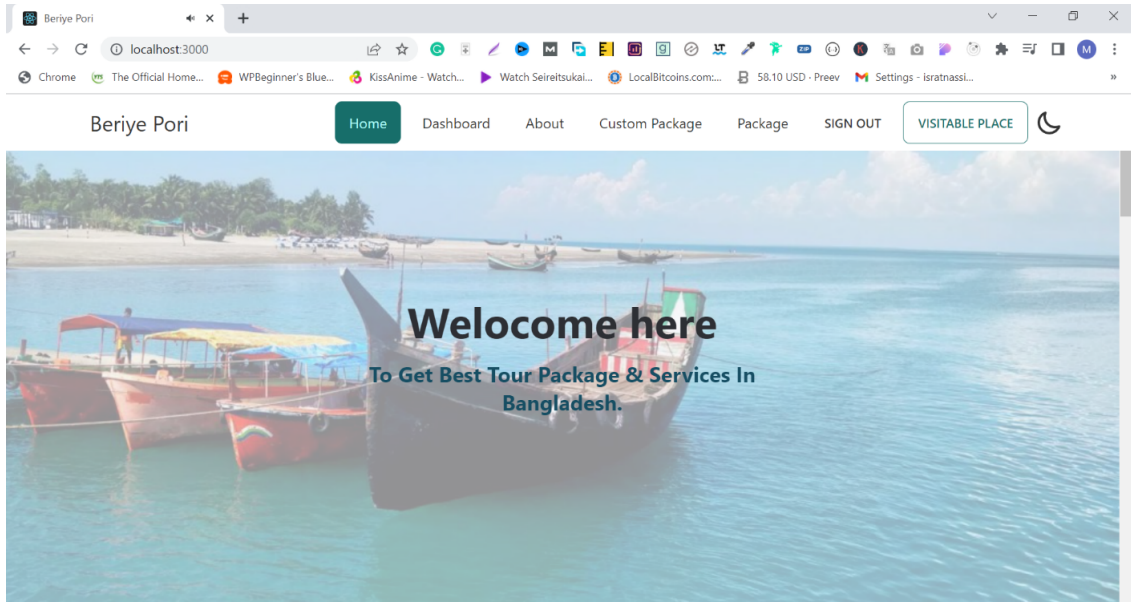
## 8.4 Unit testing

**Custom Package Unit Testing:**



I will see unit testing on entering package form if it is working correctly according to my functions, process.

I give all values. Then Package is created which shows in the next page:

## Beriye Pori

Home   Dashboard   About   **Custom Package**   Package   SIGN OUT   VISITABLE PLACE

carchingseafish44@gmail.com

Phone Number

01628563260

Total Person

45

Places

rangamati

How many Days

45

Pick up point

dhaka

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= M Gmail

Search in mail

? ⚙ ⋮⋮⋮

Compose

Inbox 65
Starred
Snoozed
Sent
Drafts
More

Labels +

← ⊡ ⓘ 🗑 | ✉ ⏱ ☑ | 📁 ▷ ⋮                2 of 110   <   >

**Your Book for rangamati is taken**   Inbox ×                    🖨 ⧉

nassirctg1234@gmail.com via sendgrid.net          Sat, Aug 20, 1:22 PM (1 day ago)   ☆   🎧   ↩   ⋮
to me ▾

Hello Catching Seafish,

**We contact you through your number 01712781300**

↩ Reply    → Forward
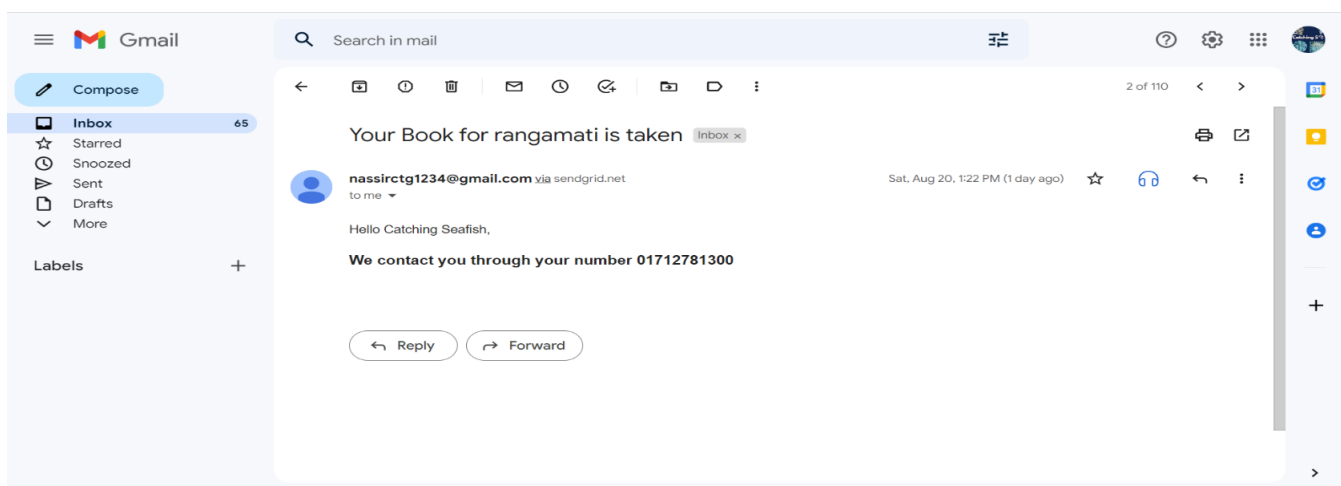
# Chapter 9

# Discussion and Conclusion

## 9.1 Discussion

This system will sort and display all of the district's visitable places. This technology will allow customers and administrators to communicate directly via the Internet. This system will allow for the modification and deletion of tourist and client data. If possible, I can include a feedback mechanism for tourists in this system. This system will manage and control the tourist information database. This system will offer appealing locations and will also include a blog list to provide location specifics. Users can customize packages to their needs. Users can rate their visited places and give reviews about their trips. (Review and ratings) Users can view others' reviews and ratings.

## 9.2 Conclusion

I am known that a project like Travel and Tourism Management System Bangladesh (Beriye Pori) is now challenging. Despite these challenges, I do my best to introduce additional functionalities as they become available. Based on the aforementioned conversation and functionalities, I can conclude that my project is capable of meeting the current problem. Later, I will attempt to put my future planned functions into action.

Here I briefly discuss the project's benefits.

i. Simple to use

ii. Saves time and allows tourists to simply look for information

iii. Sturdy, secure, and dependable

iv. Customized package is available

v. Economical and time-saving

vi. Simple to maintain for average computer experts

vii. It is a totally automated system,

viii.My system is productive and efficient.

## 9.3  Future plan

As this is the first time, no expectations can be met. It is, in fact, a true proverb. As a result, I am unable to meet all of my expectations regarding the addition of functionality to my program. I believe that I will be able to remove the limitations of my project in the following step, and that this project will be improved to a professional level. I have currently implemented some of the functionalities that I had planned. I also have some long-term intentions for my project. Those plans are listed below-
i. Include all visitable places of Bangladesh.
ii. Take the tourism industry of Bangladesh forward

## 9.4  Limitation of my project

Despite the fact that I have executed my planned functionalities, I still have certain project drawbacks. I have noted those constraints here-
i. Tourists and individuals can search for information provided by the administrator and saved in the database.
ii. The size of the database grows by the day, putting more strain on database backup and data management activities.

## 9.5  Contribution of this Project

Firstly, in the field of Travel Management System Bangladesh. I have tried to make this project unique by providing information of all visitable places of Bangladesh in one place. This will help the travelers to enjoy their tours. Secondly, I added custom package available in my webapp. This System will provide feedback mechanism for tourist, if possible, I can add  will display attractive places and also add blog list to show the details to places. Hope that this project helps the country's tourism industry will move forward.

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