

Design, Development, and Implementation of Web Portal and a Tourism Database

1st Phase

System Requirement Specification (SRS)

Version 1.0.1

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Submitted To:



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Revision History

REVISION	DATE	NAME	DESCRIPTION
Version 1.0.1			

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I. Introduction

I.1 Purpose

The aim of this document is to gather and analyze and give an in-depth insight of the complete **web portal and a Tourism Database** by defining the problem statement in detail. The detailed requirements of **Bangladesh Tourism Board** are provided in this document.

The purpose of the document is to collect and analyze all assorted ideas that have come up to define the system, its requirements with respect to the users. Also, we shall predict and sort out how we hope this portal will be used in order to gain a better understanding of the project, outline concepts that may be developed later, and document ideas that are being considered, but may be discarded as the product develops.

The document has been prepared after detailed communications with the project team and stakeholders. It includes a set of use cases that describe interactions the users will have with the system. It will also explain the system constraints, interface, and interactions between the portal and the users.

In short, the document will provide a detailed overview of the portal, its parameters and goals. This document describes the project's target audience and its requirements. It defines how our client, team and audience see the product and its functionality. Nonetheless, it helps any designer and developer to assist in software delivery lifecycle (SDLC) processes.

I.2 Project Objective and Scope

Bangladesh Tourism Board has chosen to redo its current two sites www.visitbangladesh.gov.bd and www.tourismboard.gov.bd, of which www.visitbangladesh.gov.bd will be overhauled and created as the single passage gateway for the travel industry of Bangladesh and www.tourismboard.gov.bd will be created as the educational and useful and intuitive site through required changes, adjustments and refreshing with cutting edge specialized and practical compatibilities. So, the authority has chosen to procure a Web designer/Software Developer Firm for this task.

1. To create www.visitbangladesh.gov.bd as the single gateway and destination promotion and Management portal of Bangladesh.
2. Design, develop a destination management software with web-based semantic database
3. Overhaul corporate site of Bangladesh Tourism Board with State-of-Art utilitarian offices.
4. Data accumulation and substance for the Portal and the corporate site and productive upkeep.

1.3. References

IEEE. IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications. IEEE Computer Society, 1998.

1.4. Overview of Document

The System Requirement Specification document is divided into two phases. First phase is described below and the second phase will be published soon after finalizing the requirements.

Chapter 1 overall description section, of this document gives an overview of the document.

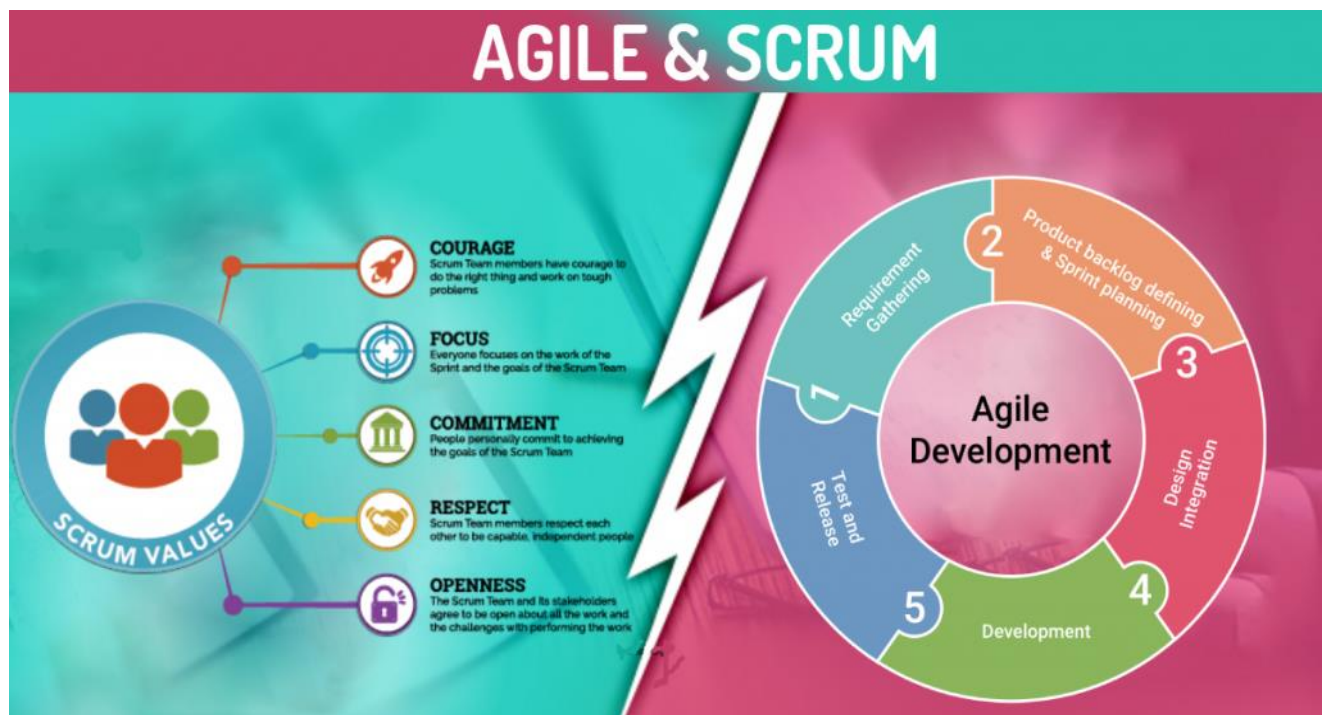
Chapter 2 describes the software development methodology.

The third chapter, Requirements Specification section, of this document is written primarily for the developers and describes in technical terms the details of the functionality of the product.

The fourth chapter describes the architectural design of the system and the external interface of the system

2. Software Development Methodology

In this project, Business Automation Limited will follow the Agile Scrum methodology. In the Scrum methodology, it is easier to communicate with the Product owner and deliver the project within the right time according to their demand.



An agile Scrum process benefits the organization by helping it to:

- Increase the quality of the deliverables.
- Cope better with change (and expect the changes).
- Provide better estimates while spending less time creating them.
- Be more in control of the project schedule and state.

The agile software development process has been used by Business Automation repeatedly for many of its previous projects. Based on numerous experiences, Business Automation maintains the best practices of agile for developing various projects of varying size and complexity.

Only the combination of consulting services to support and complete the Product Backlog at the professional design, system analysis and preparation of specifications/requirements specifications with a standardized software development, can satisfy the requirements of flexibility along with high-quality.

Scrum as an agile process will allow its beneficiaries to focus on delivering the highest business value in the shortest time. It will also allow us to rapidly and repeatedly inspect actual working software after every scrum cycle. We propose the subsequent model, which is characterized by the following features:

- The complete development lifecycle will consist of 8 phases of Functional specification, System design, System realization, System Introduction, Process & System stabilization and Operation.
- BA will take care of the 2nd to 5th process (System design, System realization, System Introduction, Process & System stabilization respectively).
- Each individual sprint will have having 21 days focusing on Bug fixing and next sprint planning.

3. Requirement Specification

This chapter will briefly describe the specific functional and non-functional requirements of each major module for each stakeholder.

3.1 Major Functional Requirements

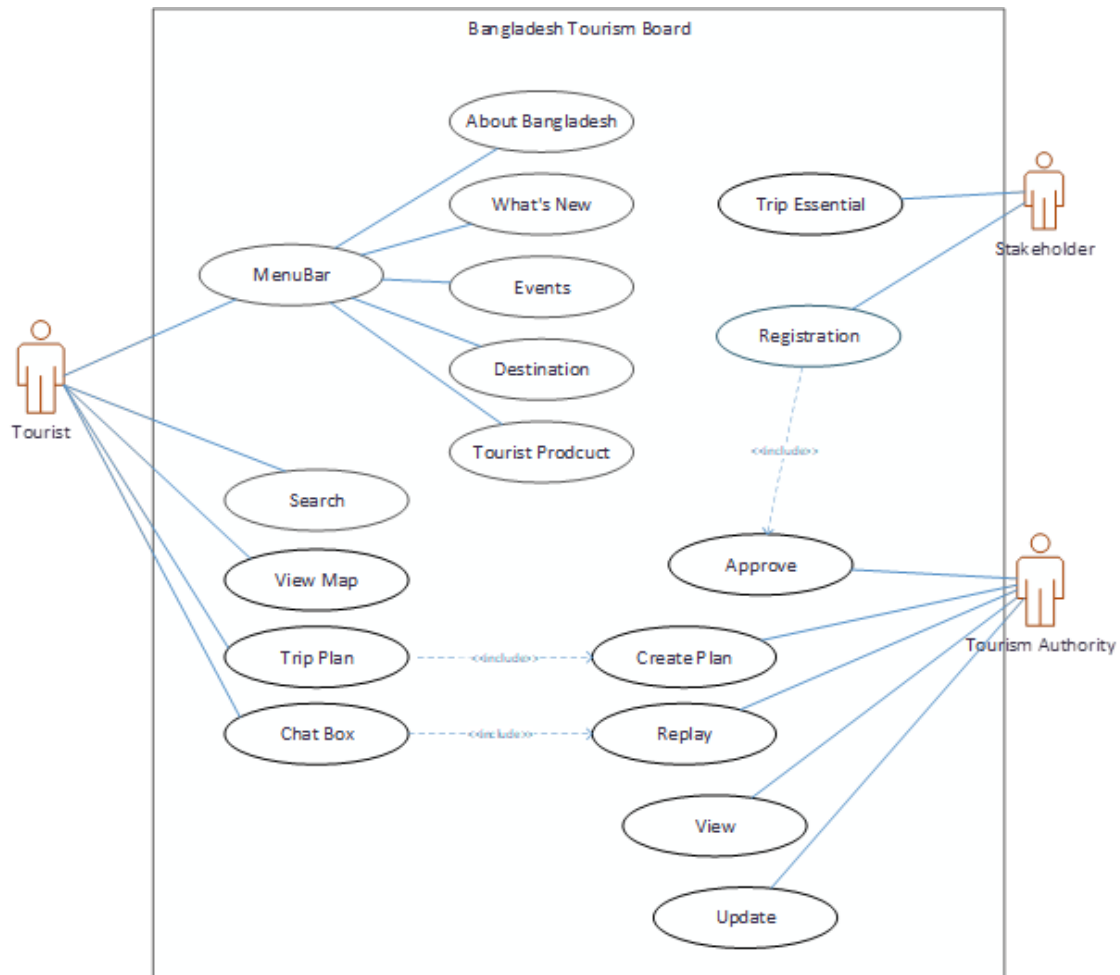


Figure-1: The major functionalities of the Tourism Board Portal.

The System must provide the following functionalities -

- Keeping records of Tourists
- Dynamic Search option
- Prepare Trip plan
- Recommend Destination

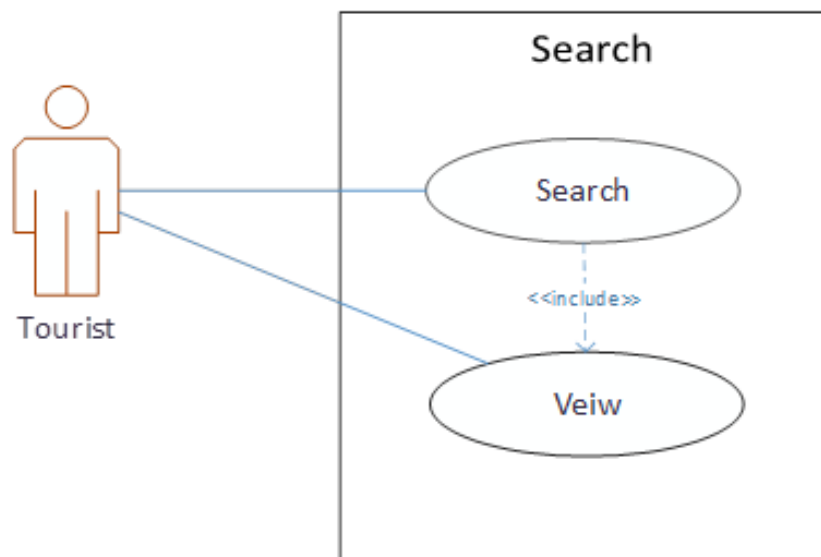
- Explore Bangladesh through Map
- Chatbot
- Stakeholder registration
- About Bangladesh
- Prepare Event
- Destination List

3.2 Use Cases of the Major Modules

This section outlines the use cases for each of the active users separately.

3.2.1 Use case: Search

Diagram:



Brief Description

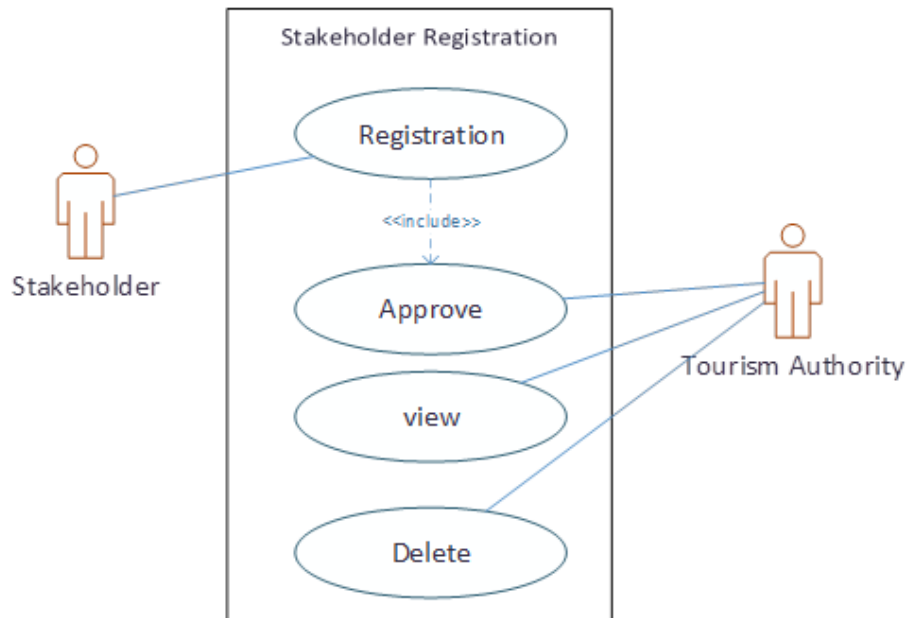
Tourists will appear search in the search function. Tourist can search through any keyword or category or by location. This search will help tourist to get any type of tourism information which is available here.

Initial Step-By-Step Description

1. Tourist browse www.visitbangladesh.com
2. Write category or location or any keyword and press search key
3. Show the search result in a new window

3.2.2 Use case: Stakeholder Registration

Diagram:



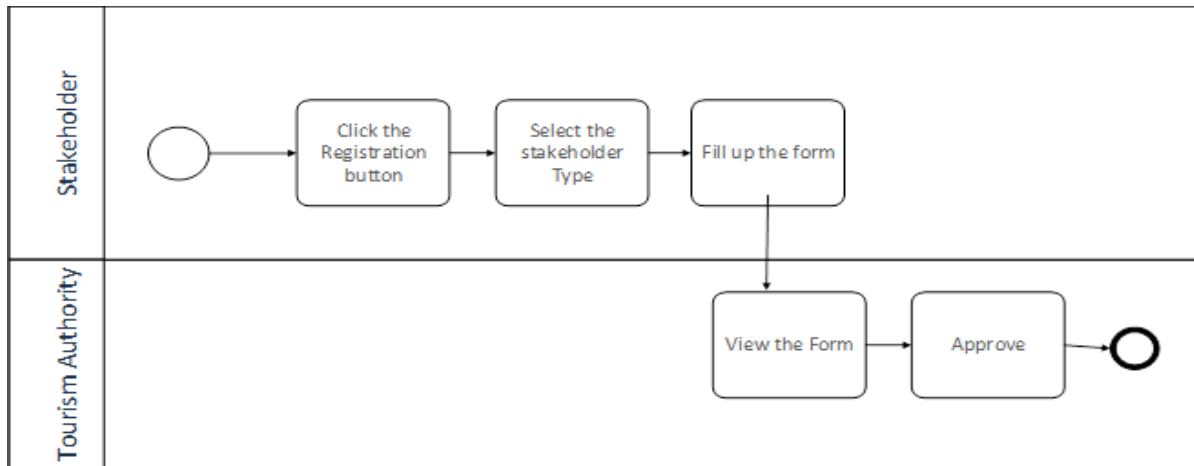
Brief Description

Tour operators, Ticketing agencies, hotel & resorts are the stakeholders of this system. Stakeholders of the system have to register through this function. By registering in this portal stakeholders will have access to this system.

Initial Step-By-Step Description

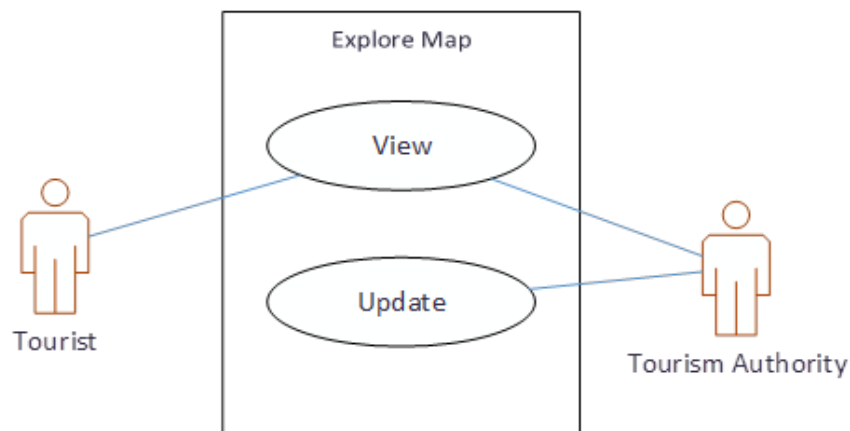
1. Tourist browse www.visitbangladesh.com
2. Click the stakeholder register button
3. Fill up the registration form
4. Submit the button
5. Get approval from tourism board authority
6. Successful registration

Process:



3.2.3 Use case: Explore the Map

Diagram:



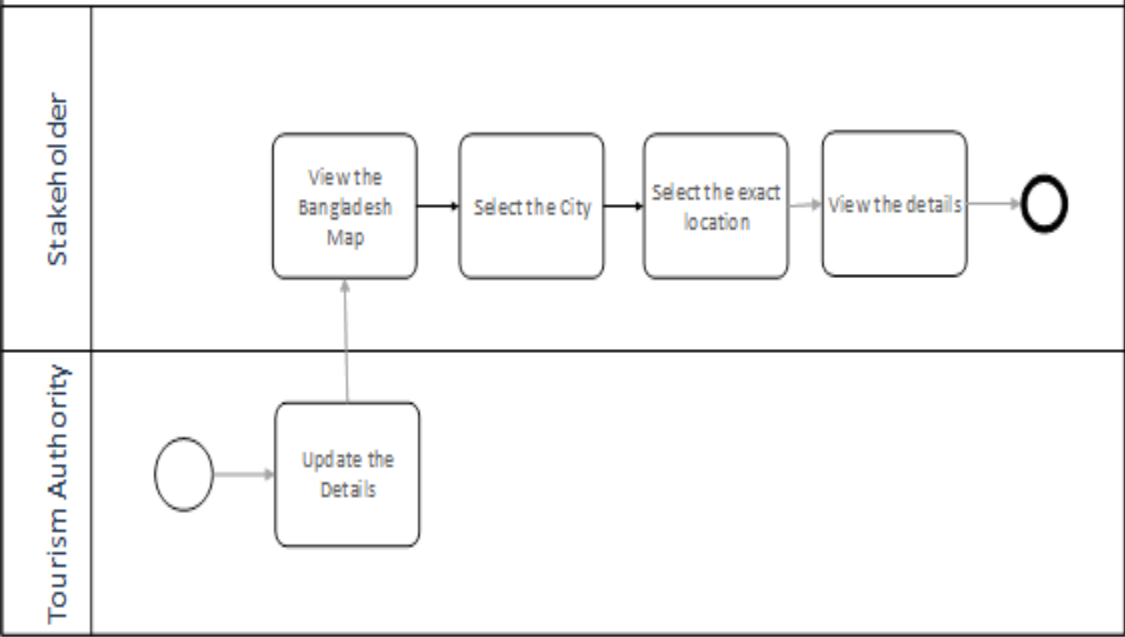
Brief Description

Tourist will see the map division wise. User can see the tourist places through the map. First the major tourist places will show in the division wise view then when a user will select the division the pins will indicate the district wise tourist places.

Initial Step-By-Step Description

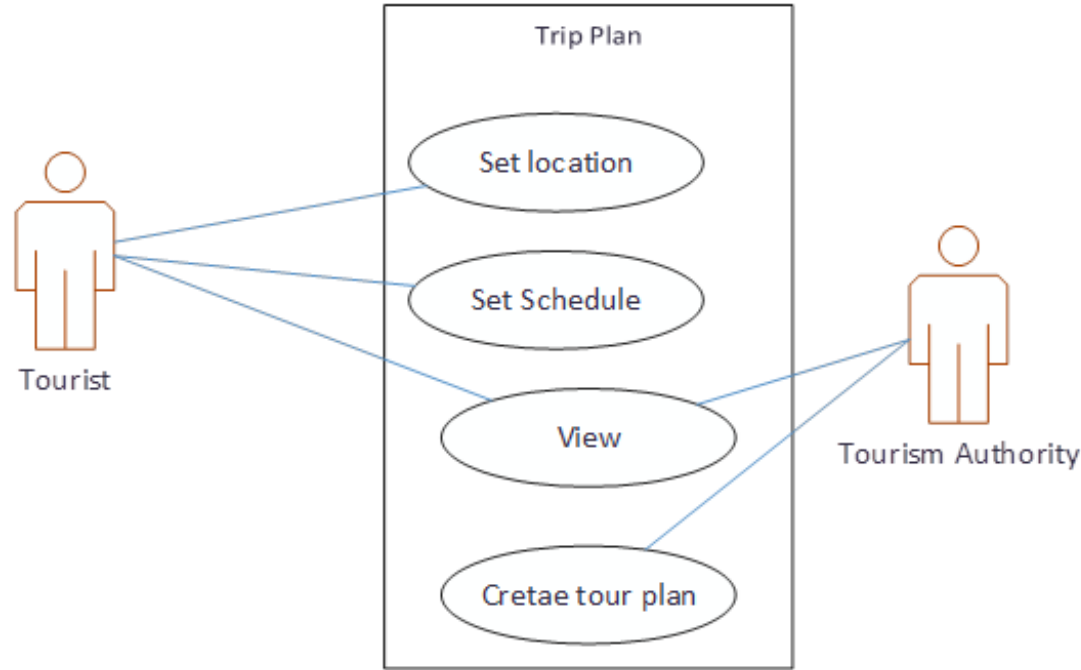
1. Tourist browse www.visitbangladesh.com
2. See the pin pointed tourist places
3. Select the division and district and see the places details

Process:



3.2.4 Use case: Trip Plan

Diagram:



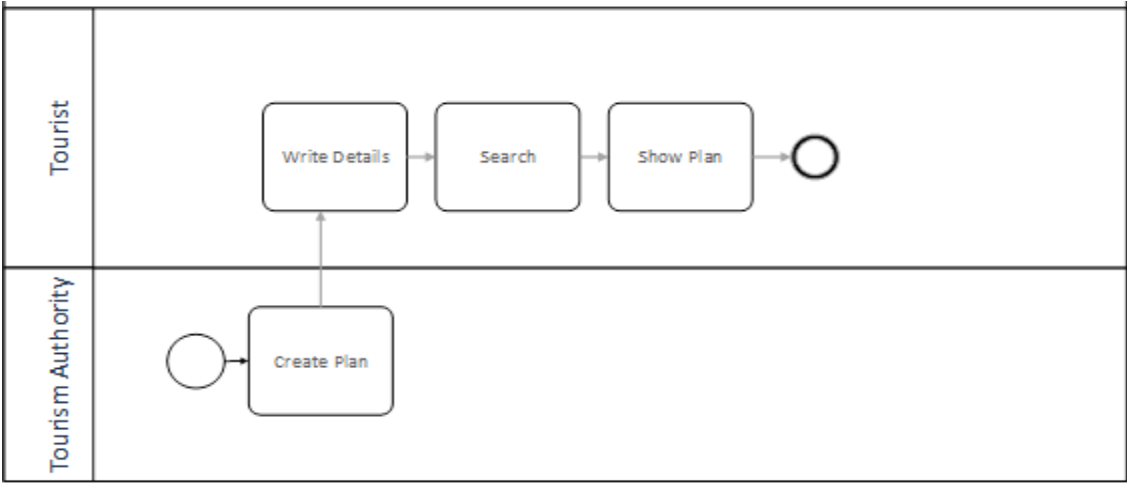
Brief Description

By inserting the check in and check out date tourism might get a pre-planned trip details from the tourism.

Initial Step-By-Step Description

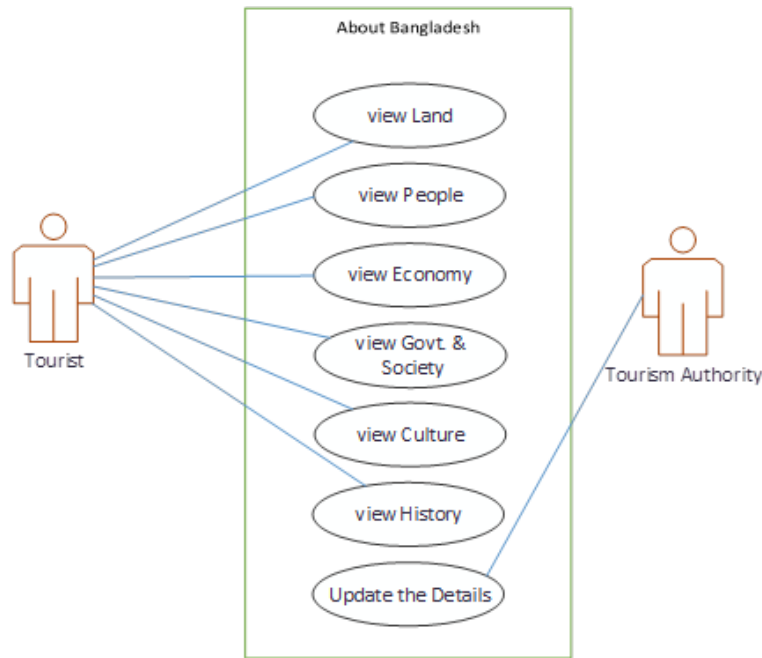
- 1. Tourist browse www.visitbangladesh.com
- 2. Tourism authority creates different tour plan
- 3. Input check in, check out date and location
- 4. Press trip plan button
- 5. Show available pre-planned trips from

Process:



3.2.5 Use case: About Bangladesh

Diagram:



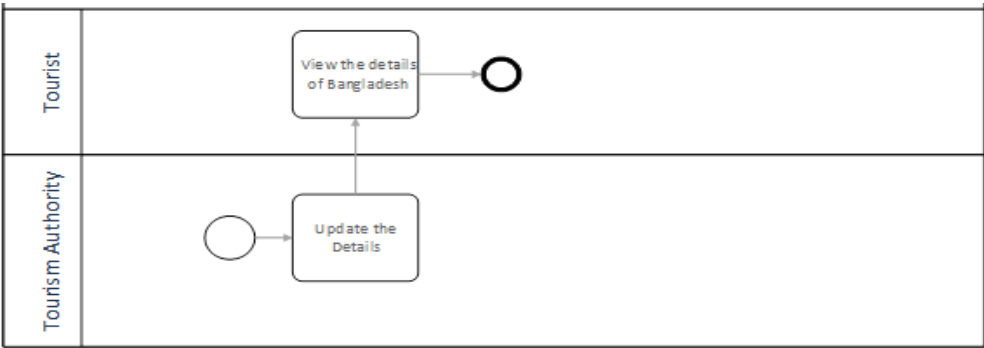
Brief Description

View information about Bangladesh.

Initial Step-By-Step Description

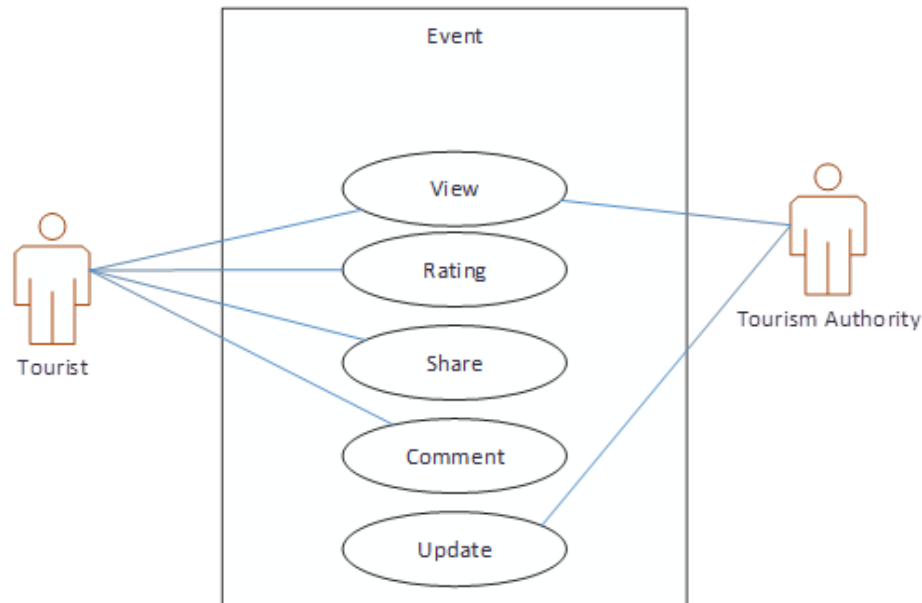
- 1. Tourist browse www.visitbangladesh.com
- 2. Tourism authority insert detail information about Bangladesh
- 3. Tourist see the information about Bangladesh

Process:



3.2.6 Use case: Event

Diagram:



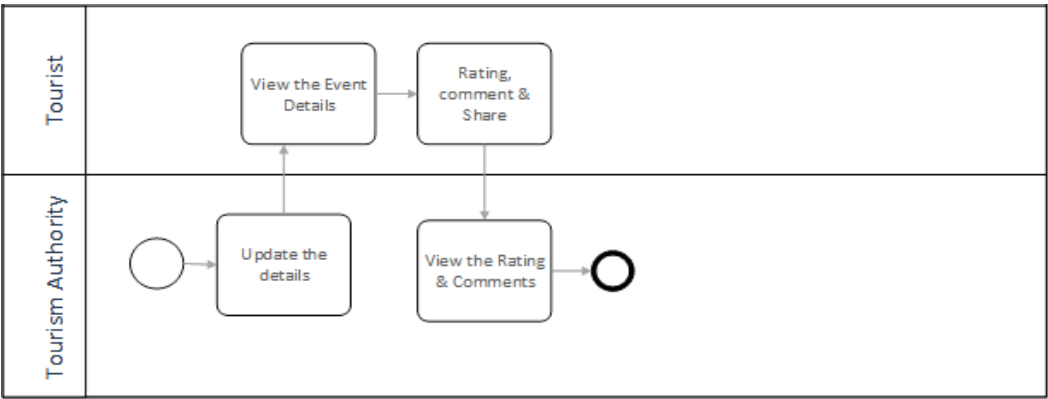
Brief Description

By this function tourist get information about different events.

Initial Step-By-Step Description

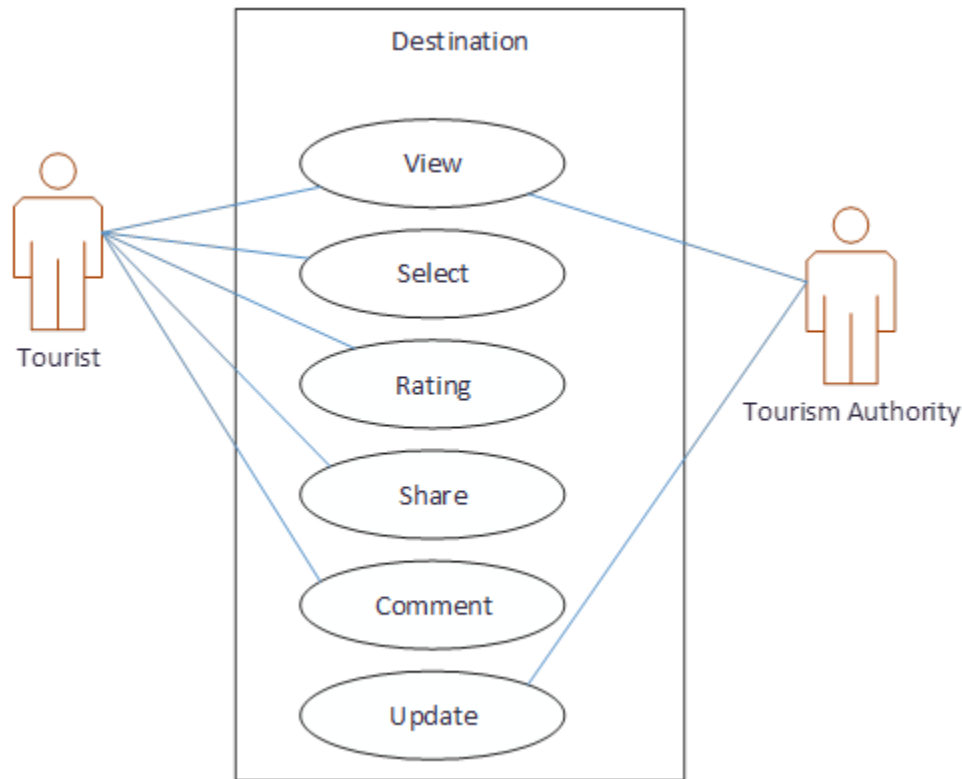
- 1. Tourist browse www.visitbangladesh.com
- 2. Tourism authority create events
- 3. Tourists got event information

Process:



3.2.7 Use case: Destination

Diagram:



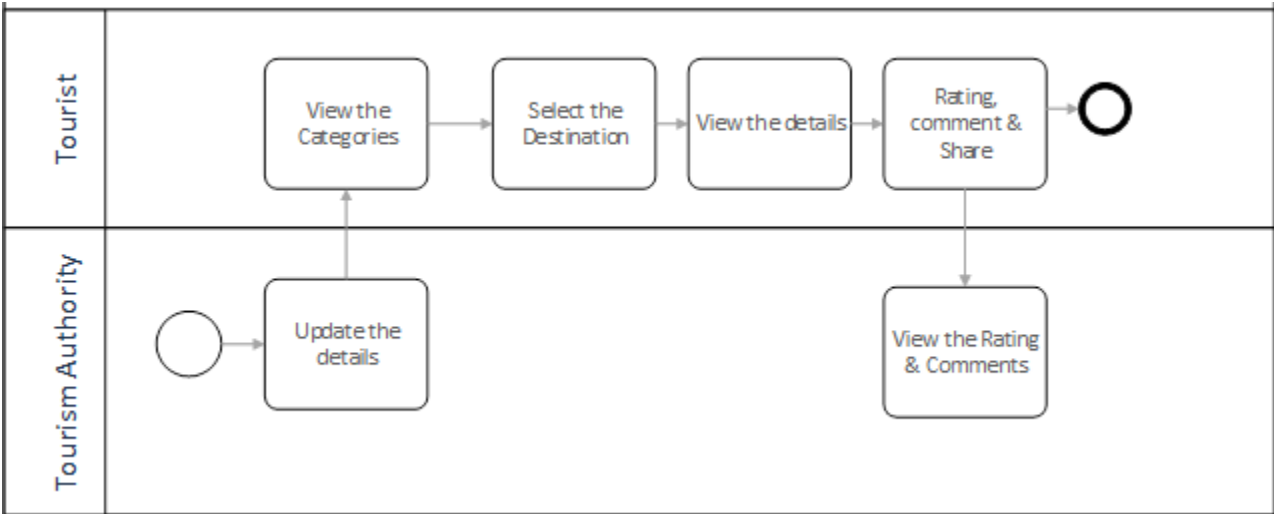
Brief Description

From this tourist will get information about different tourist locations. they can also Reviews of the location and comment and also see the rating and comments of others.

Initial Step-By-Step Description

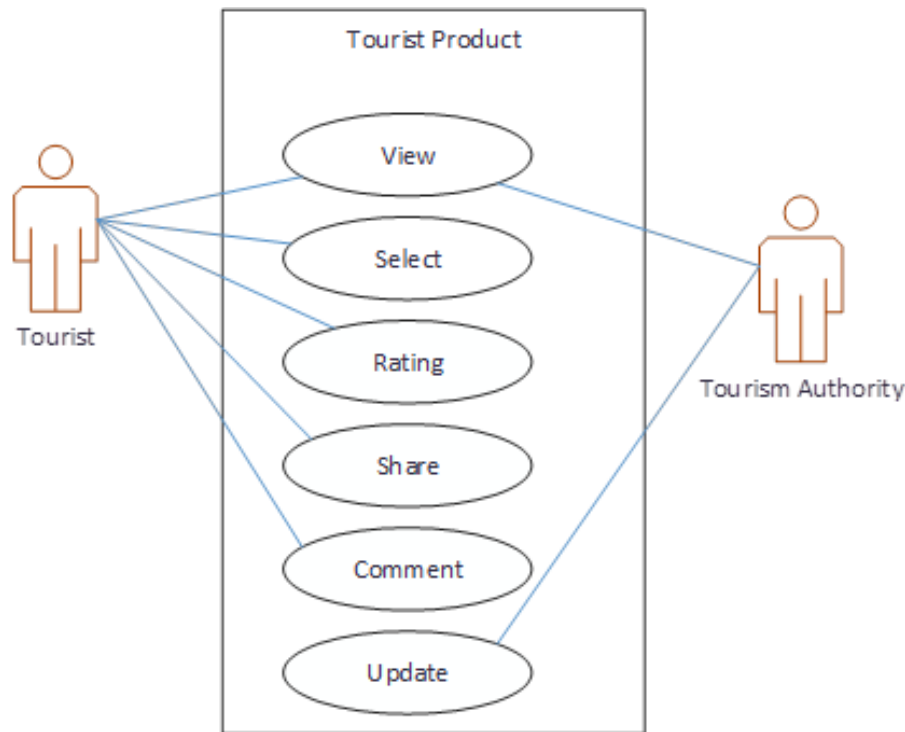
1. Tourist browse www.visitbangladesh.com
2. Tourism authority update the destination information
3. Tourist see the location information
4. Rate and comment the about destination
5. View others rating and comments

Process:



3.2.8 Use case: Tourist Product

Diagram:



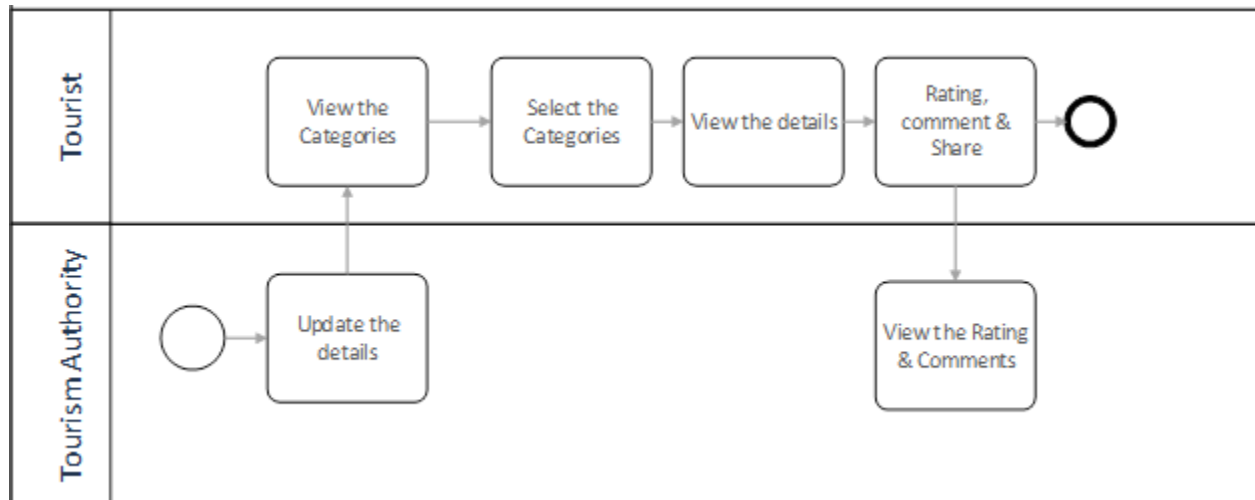
Brief Description

By this function tourist can see the tourist products of Bangladesh. They can also rate and comment the product and get detail information of the products.

Initial Step-By-Step Description

1. Tourist browse www.visitbangladesh.com
2. Tourism authority creates tourism products
3. Click tourist product
4. Select product
5. Show product details
6. Rate and comment the comment

Process:



3.3 Non-Functional Requirements

There are some non-functional requirements that are pointed below:

1. Secure access to confidential data (user's details).
2. 24 x 7 availability.
3. User Centric Design
4. Rich Media content
5. General Information
6. Weather information and forecast
7. Contact

Non-functional requirements define system properties and constraints. It arises through user needs, because of budget constraints or organizational policies, or due to the external factors such as safety regulations, privacy registration and so on.

In order to assess the performance of a system, the following must be clearly specified:

- Response Time
- Workload
- Scalability
- Platform

For maintaining better response time, we use optimized the queries.

We can choose the system platform to be a cloud-based solution so that the scalability and workload have also been ensured.

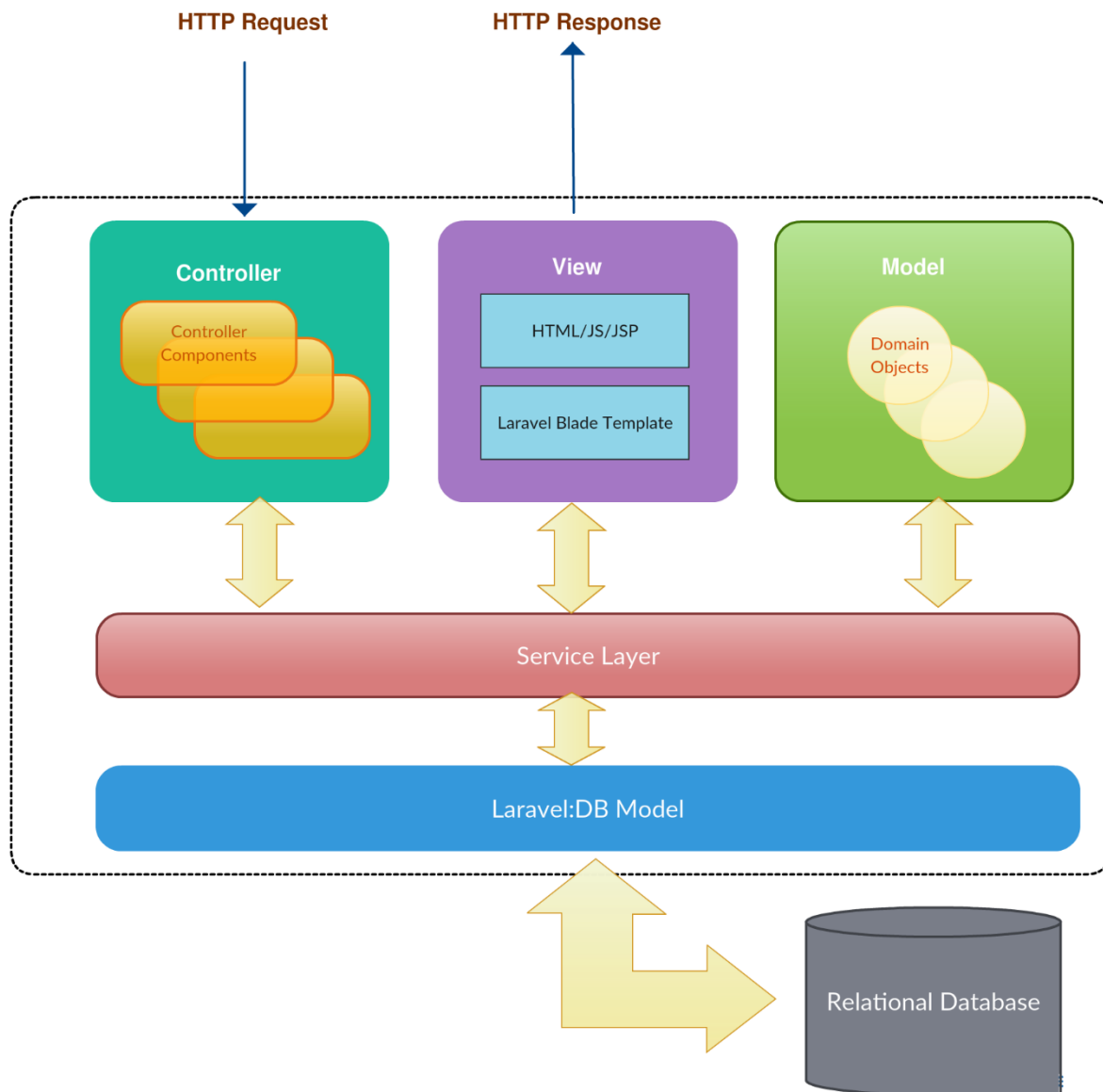
Quality Attributes of the System Level Security

- Measure against Online Threats
 - SQL Injection
 - Broken Authentication
 - Sensitive data exposure
 - Cross Site Scripting (XSS)
 - Insecure Deserialization
 - Session hijacking
 - Using Components with known vulnerabilities
- User Group-level Security
- Accountability
- Maintainability
- Testability
- Scalability
- Authenticity
- Confidentiality
- Availability
- Usability

4. Design of the System

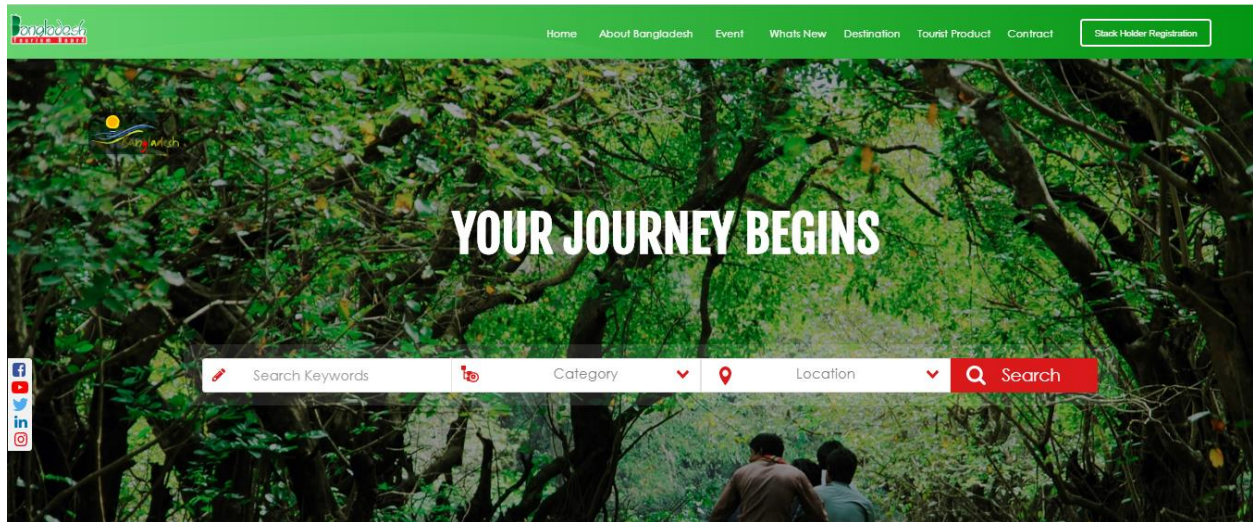
4.1 Architectural Design of the system

This portal will be implemented as a modular platform based on a Service-Oriented Architecture (SOA), integrated with the existing electronic services and portals by implementing interoperability, rich web & mobile application interface and online services as illustrated in Figure

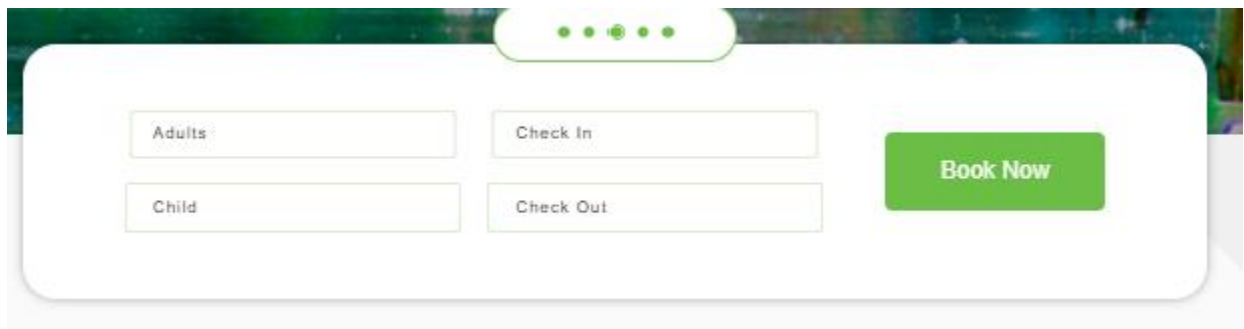


4.2 External Interface of the system

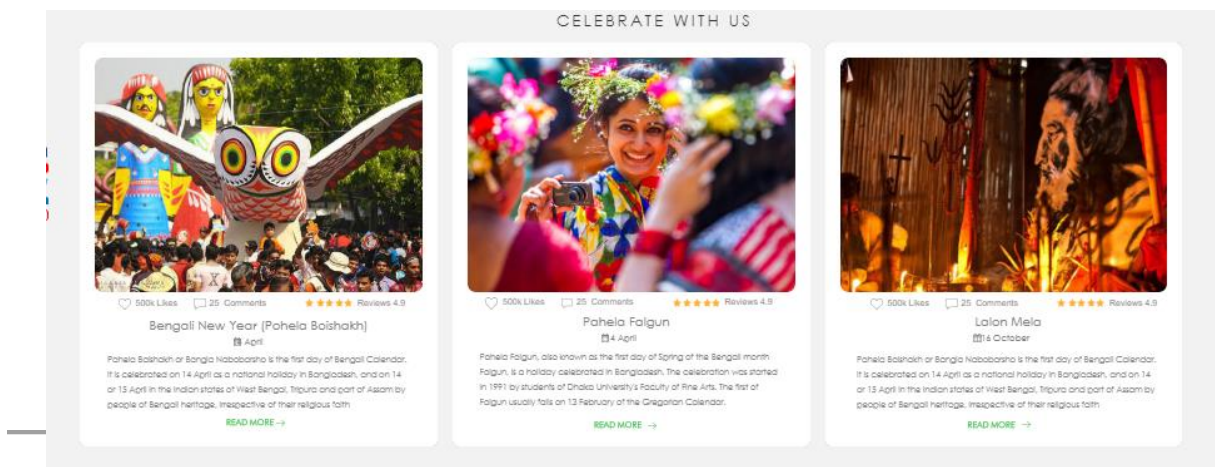
Home Menu & Search



Trip Plan



Celebrate with us

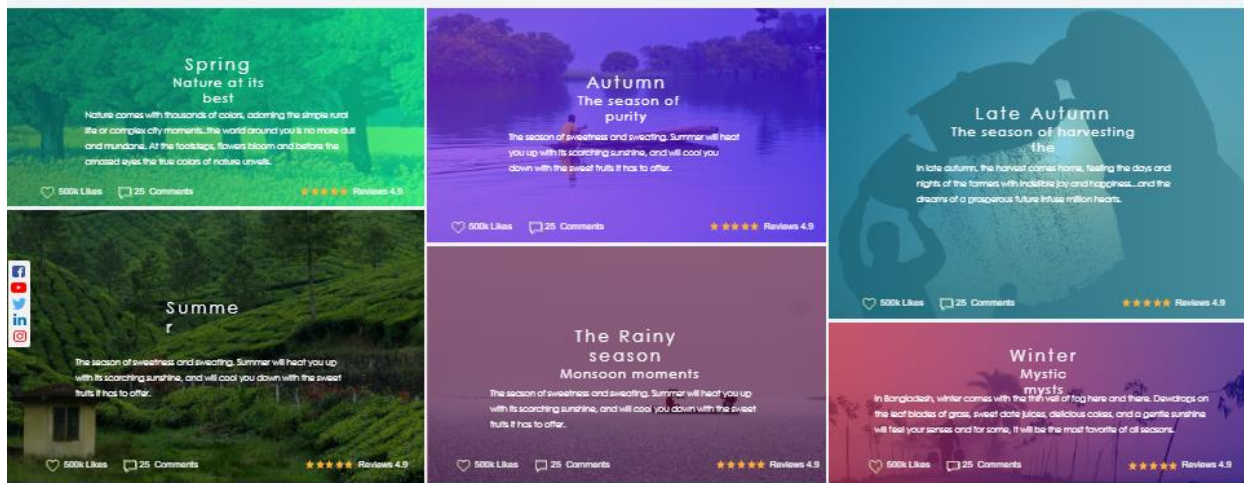


Confidential

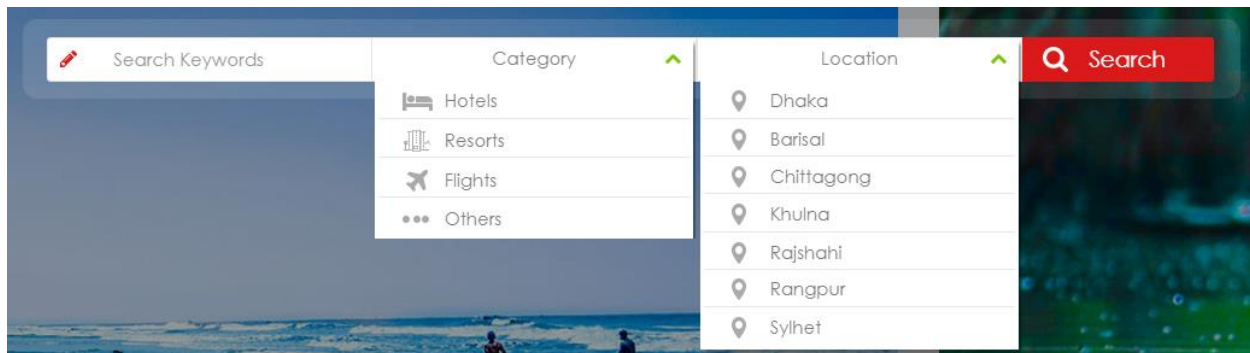
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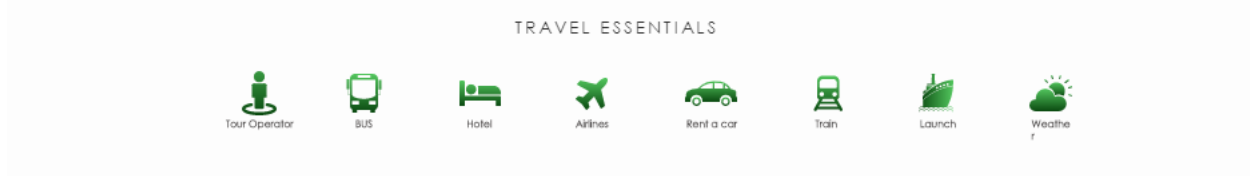
Plan Trip



Search



Travel Essential (2nd phase)



Stakeholder registration

The screenshot shows a web form titled "Stack Holder Registration" with a yellow header. The form is divided into two columns. The left column contains dropdown menus for "Stack Holder Type", "Country", "District", and "Type", each with a "Select" label and a downward arrow. The right column contains text input fields for "Operator/Company Name", "Division", "Thana", "Email", and "Social Link", each with a label and a "Select" label. Below these fields is a "Government Registration ID/Code" field with a red error message: "(If this id/code doesn't match with government database then registration cannot be completed)". At the bottom is a "Security code" field. A large orange "Create" button is at the bottom center.

Stack Holder Type	Operator/Company Name
Select Type ▼	
Country	Division
Select Country ▼	Select Division ▼
District	Thana
Select District ▼	
Type	Email
Select Type ▼	
Website Address	Social Link
	Select & ▼
Government Registration ID/Code (If this id/code doesn't match with government database then registration cannot be completed)	
Security code	
Create	

Footer and Chatbot

