

**Advance e-Commerce**

A Software Project Submitted

By

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**Disclaimer**

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**Approval**

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# **Chapter 1: Statement of Work**

## Purpose/Objectives

Mainly in Dhaka city where people are doing their job and can’t find enough time to go to the grocery store every week to buy their groceries. Who goes shopping most of the time goes without a proper shopping list and spends more than they need. So our main purpose is to provide them the service where they can get their necessary groceries from their homes. Our service also restricts them from over spending. They will only spend the amount of money for their groceries that they can afford.

Customers can always edit the suggestion based on their needs. Then customers can order those products online. We will deliver products weekly. The best part is customers can make payments monthly and they can choose a specific time limit on a specific day of the week when s/he wants the delivery (e.g. 7 pm-9 pm, Monday).

## 1.2 Scope

The scope of this project is to study and design a web application that will provide services to busy families. Deliver products within fixed days of weeks and in a time range. Deliver fresh vegetables and groceries regularly. The scope of the project is much specified as it outlines the modern e-commerce to be incorporated in individual business models. This project is carried out to build a web based e-commerce application from scratch. Our intelligent system will provide all the suggestions of grocery lists based on customer budget.

## 1.3 Proposed System

This web-application is built to provide service to the customers to get their needful day to day groceries. The system will provide a suggestion of a grocery list based on their budget that will be for a month. They will be able to order their needs and they can also customize their orders. They don't need to go outside to purchase their groceries, they can just order from the website. Customers will provide their preferred order receive date and time and the system will automatically place orders for the customers. If the customer wants they can also change their preferences time and date and they will also have the authority to cancel their order at any time.

Benefits /Improvements of Proposed System

* No hassle for buying groceries.
* Customers will set their monthly budget and the system will provide a suggestion list of groceries.
* Customers don't have to go outside to get their groceries.
* Customers don't need to spend time thinking about grocery shopping.
* It prevents customers from overspending on groceries.
* Customer satisfaction.
* Save time and travelling cost.
* Very safe and secure payment system.
* Multiple option for doing payment.
* Every transaction history is recorded.

## 1.4 System Features

Admin:

* Login
* Add new admin and managers
* View Retailer and delivery man information
* View customer information

HR Manager:

* Login
* Retailer verification
* Delivery man verification

Accounting and Finance:

* Login
* Manage Income and expenditure

Customer:

* Login
* View product
  + By shop
  + By category
  + Search
  + Sort
  + Suggestion List
* Grocery suggestion list
* Add to cart
* Checkout
  + Make payment (Mobile banking, Card) once in a month
  + View balance (adjustment with previous balance)
  + Service cancelation (Entirely)
* Order Cancelation (Weekly/Monthly)
* Feedback on product and delivery service (optional)
* Discounts/Voucher/Referrals
* View stats (Monthly, Category)

Unregistered User:

* See/search contents (groceries)
* Check availability of products
* See available offers.

Retailer:

* Self-Registration
* Retailer info
  + Shop name
  + Shop Address
  + Bank account information
  + Verification
* Add/Update/Disable Product
* Discount/Voucher
* View Review and ratings
* Update delivery information

Delivery Man:

* Self-Registration
* Verification
* Login
* View nearest order
* Accept order
* Update delivery process
* View Stats
* View Review and ratings

Payment:

* Keeping log of all transaction history.
* Individual client wise payment module.
* Security and authentication verification of payment cards.

## 1.5 Environment

## 1.5.1 Organizations Involved

Project Client: ABHIJIT BHOWMIK.

Developer: AB-15 Team

User: Online Users or Customers

## 1.5.2 Processing

* This application will be worked as a website which will be supported by any web browser.
* It will be also platform independent. For example, it will work on windows, Linux and mac-OS or any other platform.
* If it gather proper recognition it will also be available as mobile applications on mobile platforms like android or IOS.
* This website will have four working modules. Admins, Users, Retailers and Deliverymen will have their individual workings.
* All the information of the users, retailers and deliverymen will be stored in the website. Admins as well as users, retailers and deliverymen also can see their information’s in the website.
* Login system will be authenticated for everyone.
* The data transmission inside the website will be secured by maintaining data security policies.
* All the transactional data of the users and retailers will be kept secured and private

## 1.5.3 Security

System’s security requirements

* User authentication will be required to login to the website. If the user is new they can sign up by giving valid information.
* Without signing up and being verified, retailers or deliverymen can’t use the features of the website but can view products.
* Customers can view website but cannot make purchase without registration.
* Without a secured login, there will be no transaction happen
* Authority can have the right of removing any deliverymen account from the website if they want.
* Users and retailers data will be kept protected

## 1.6 Assumptions

Some third party software may be used to build this project. These are free components, most of which are open source. We have used Google Chrome, Microsoft New Edge, etc. as web browsers to access the user interface as client applications. Then our project will not be affected because we have not used anything used illegally.

## 1.7 Constraints

Usage without maintaining regulation: Data will be passed from client to server through TCP/IP & we are not using any public key encryption service like SSL certificate right now. But we have plan to add this when the site will reach a large number of users. So we can have risks or errors in case of passing user data. It may cause – Confidentiality, Integrity and security problems. Only registered users, retailers and deliverymen are valid & can use the software through Client Application with help of Internet Browser on server side. For any missing password found by anonymous user, responsibility goes to valid user. They have to follow the rules and regulations for a secure usage of the website.

* **Bandwidth limitations**: The internet speed is different and depends on area to area. So user satisfaction of using the website will also fluctuate for slow speed of internet. Then it may also lose server connection for technical error (depends on hardware/internet connection). We need to run query again. But we will work to ensure the best user experience in a limited bandwidth.
* **Databases**: We will use MySQL database for the backend of the website. When user queries will be more than server limitations, we need to check the databases and refresh the data tables by running query again.
* **Parallel operations**: Parallel use of other Internet applications like having several tabs open in the browser where other applications are using the users bandwidth may hamper the proper loading of the website features or may take longer time for a response of a query as the internet becomes slower.
* **Language requirements**: Language will be used in this software is C#. Because we will use Asp.net to create this website which is a framework of C#. We may also use JavaScript if it became necessary to build the frontend.
* **Communications protocols**: Communication protocols we are using- TCP/IP to interact with the server. Other protocol is not considerable if user wants.
* **Security considerations**: If user doesn’t want to buy SSL security then client applications will not using any public key encryption service like SSL certificate (i.e.128 bit RSA encryption). So we have constraints in case of passing user data. It may cause (In case of internet security

**Authentication problem**: Server may not recognize/confirm actual valid user.

**Confidentiality problem**: User, intended server fails “understanding” message contents.

**Integrity problem**: sender, server may fail to ensure message not altered without detection

**Eavesdrop**: There may be Intercept messaging, actively insert messages into connection

**Impersonation**: can fake (spoof) source address in packet (or any field in packet)

**Hijacking**: “take over” ongoing connection by removing sender or server, inserting himself in place

**Denial of service**: prevent service from being used by others (e.g., by overloading resources)

## 1.8 Proposed System

## 1.8.1 Description/Improvements of Proposed System

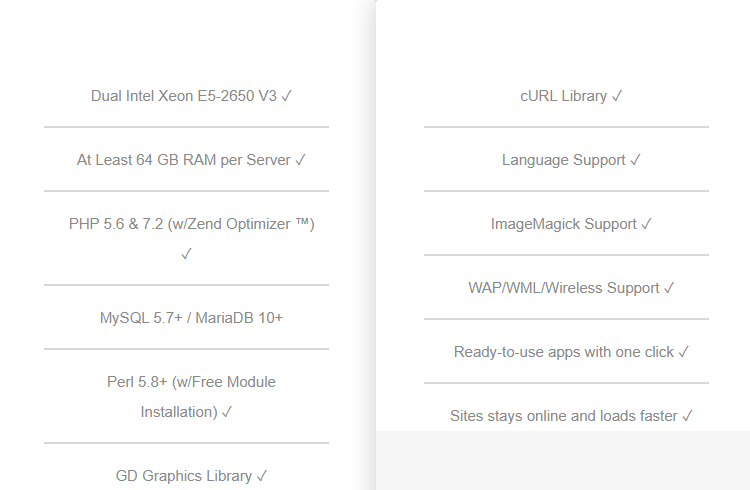
* Gather information of client experience about the software
* Provide map facility so that user can track the delivery man
* All the features offer almost bug free functionality
* Fast transaction
* Reduce loading time of the website and it’s features specially the heavy ones
* Reduce the making cost of the software
* More security features (data encryption, verification)
* Make the vulnerable feature strong by providing proper logic and utility tools
* Monitor system performance for taking further decisions about features that need more efficiency.
* A proper system design to make the software as much as error and bug free
* Make site responsive so that mobile or tab users can also get a better view and have great experience with the website

## 1.8.2 Resources

All the resource needed is provided below.

## 1.8.3 Hardware

* Minimum requirements for server:



* Minimum requirements for client:

A System than can run any Web browser.

## 1.8.4 Software

* Microsoft visual studio
* Entity-framework
* Adobe XD
* Microsoft SQL server
* Draw.io

## 1.8.5 Operating Environment

The system will be created under windows operating system environment. It will work as a middleware between the software and the operating system.

The hosting server has a 99.9% uptime. This website is platform independent.

So this will work in every platform like windows, Linux and MacOS. This

Website will be available in a variety of browsers including Chrome, Mozilla Firefox, Microsoft Edge, Opera, and others. This is a web application in which

client program includes browser-based user interfaces while the major component of the website is hosted on a Linux server

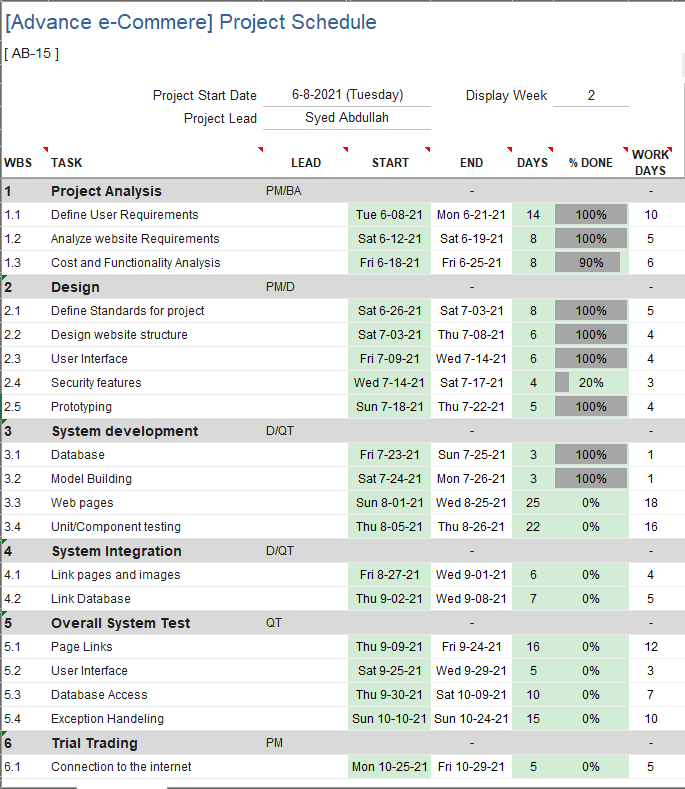
## 1.9 Project Time & Cost

## 1.9.1 Project Period

* Expected time of completion of project is 4 months.

## 1.9.2 Project Schedule

|  |  |
| --- | --- |
| **Term** | **Description** |
| **BA** | **Business Analyst** |
| **PM** | **Project Manager** |
| **D** | **Developer** |
| **QT** | **Quality Tester** |

****

## 1.9.3 Domain & Hosting Package

**Domain**

* **.com** 1099 taka/year

**Hosting Package:**

* Bandwidth: unlimited
* Storage : unlimited
* Domain pointer : unlimited
* SQL DB : unlimited
* INode :75000
* Up time: 99%

**Estimated service cost**

|  |  |
| --- | --- |
| **Description** | **Cost Assumption** |
| Resource buying | 20,000BDT |
| Site launch (hosting) | 45,000 BDT |
| Maintenance (1 year) | 30,000 BDT |
| Developers | 3,20,000 BDT |
| **Grand total** | **4,15,000 BDT** |

# Chapter 2: Software Requirement Specification

## 2.1 Objectives and Scope

Mainly in Dhaka city where people are doing their job and can’t find enough time to go to the grocery store every week to buy their groceries. Who goes shopping most of the time goes without a proper shopping list and spends more than their need. That’s why we are offering a smart web service that can suggest them make a proper shopping list based on 3 parameters. (i) Number of a family member, (ii) Monthly budget, (iii) Based on previous shopping stats. Customers can always edit the suggestion based on their needs. Then customers can order those products online. We will deliver products weekly. The best part is customers can make payments monthly and they can choose a specific time limit on a specific day of the week when s/he wants the delivery (e.g. 7 pm-9 pm, Monday). This way customers can save time and save themselves from overspending.

**Project Scope**: The scope of this project is to study and design a web application that will provide services to the busy families. Deliver products within fixed days of weeks and in a time range. Deliver fresh vegetables and groceries regularly.

## 2.2 Document Convention:

Currently there are very few system like TripAdvisor, Ticketshala, MakeMyTrip implemented in Bangladesh that are based only on finding and book hotels and transpotation and spots.

Inspirock has the facility to customize the travelling plan and book the ticket but it has a much lacking in best and effective route details for Bangladesh and its has less transporation details also except flights.

## 2.3 Data Flow Diagram of the Present System

Not required.

## 2.4 Weakness of the Present System

* Most of the routes are not effective
* Less information and availabilty all kind of trasnportations
* No Itinerary Planner

## 2.5 Overview of the Proposed System

Proposed system will have the customize plans based on clients budget and preferences and an effective routes , schedule & transporation details which will all kind of travellers. Booking facilities will make this system complete package.

## 2.6 Benefits of Proposed System

**Benefits /Improvements of Proposed System**

* No hassle for organize trip schedule
* Client will refine their plan and system will find the best routes and schedules
* Best places & time to visit
* Transportation options
* Minimizes travel time
* Recommends how much time to spend
* Well planned budget for all type travelling
* Give preference every client according to their limitation of expense
* A complete day-by-day itinerary based on clients preferences and budgets
* Choises from the best hotels and activities
* Fast & safe booking
* Instant transaction history
* Client satisfaction
* Compliance with time

## 2.7 System Features

**Admin**

* Update/modify/create client.
* Update/modify/create system user.
* Update/modify/create role.
* Update/modify/create content details
* Update/modify/create of offers and speciality

**Unregisterd User**

* See/search contents (hotel, trips,transportation, reviews)
* Check availability of transpotation seat and hotel room and also their costs

**Registerd User**

* See/search contents
* Check availability of transpotation seat and hotel room and also their costs
* Make/customize day to day Schelude
* Book transporation seat, hotel room and also resturant table(depends on available)
* Save plans
* Set Trip Reminders
* Add a hotel, place,resturant to favorite list
* Give reviews

**Itinerary Planner**

* Adding Multiple Destination
* Adding Start and End Date
* Adding number of traveller with catagory
* Adding personal activities
* Adding transporation preference
* Adding budget limitation

**Day to Day Plan**

* Keeping log of all transaction history.
* Individual client wise payment module.
* Security and authentication verification.

**Individual Hotel Module**

* Hotel address, rating , cost, facalitites and other information
* Add to favourite option
* Add review
* Different type of offers (optional)

**Individual Resturant Module**

* Resturant address, ratings , food cost, special facalitites and other information
* Add to favourite option
* Add review
* Different type of offers (optional)

**Individual Client Module**

* Registered client’s account information and transaction history.
* Edit/Modify existing client information.
* Customization according to client choice.

**Booking**

* Viewing available seats(transportation) and rooms(accomodation)
* Assigning particular available seats and rooms
* Book ticket by date and member number
* Different type of offers (optional)

**Payment**

* Keeping log of all transaction history.
* Individual client wise payment module.
* Security and authentication verification.

**Transaction Security**

* Login/Registration/Authentication and Validation process

## 2.8 Hardware and Software Requirements

## 2.8.2 Hardware

➢ Minimum requirements for server:

* Processor: Xeon based microprocessor.
* RAM: 16 GB.
* System Type: Linux (64 bit).
* Storage: 256 GB SSD.
* For Storage Service: Network File System (NFS)

➢ Minimum requirements for client:

* Processor: Dual-core.
* RAM: 2 GB.
* System: Windows, MAC OS X, Linux.
* Web Browser: Firefox, Google Chrome, Opera

## 2.8.3 Software

* Notepad++ / Sublime Text.
* PHP, MySQL.
* Apache

## 2.9 Human Resource Requirements

The total human resource needed for implementing and operating the system is mentioned below.

* **Hardware Specialist**: A part time hardware specialist is needed to manage all the computers of the centre. So in case of any hardware failure he/she may come and solve the problem.
* **Computer operator/Data entry operator**: A computer operator is needed to upload the online question to the system in case specific user lacks the systems know how.

## 2.10 Constraints and Limitations

**Assumptions and Dependencies**

* The users have sufficient knowledge of computers.
* The user’s computer should have Internet connection and Internet server capabilities.
* The users know the English language, as the user interface will be provided in English.

**Constraints**

* Bandwidth limitations: It may lose server connection for technical error (Depends on Hardware/Internet connection). We need to run query again.
* Databases: Databases we are using Oracle Database. User queries more than server’s limitations we need to check databases and refresh table data.
* Parallel operations: Parallel use of other Internet application with this software may hamper in bandwidth, may occur taking time for a query for slow connections.
* Language requirements: If any user wants to use any language other that what we used for Oracle Database, we need to use bind variable technique.
* Communications protocols: Communication protocols we are using- TCP/IP to interact with the server. Other protocol is not considerable, if user wants.

## 2.11 Budget

|  |  |
| --- | --- |
| Description | Cost Assumption |
| Resource buying | 20,000BDT |
| Site launch (hosting) | 40,000 BDT |
| Maintenance (1 year) | 30,000 BDT |
| Developers | 6,40,000 BDT |
| Grand total | 7,30,000 BDT |

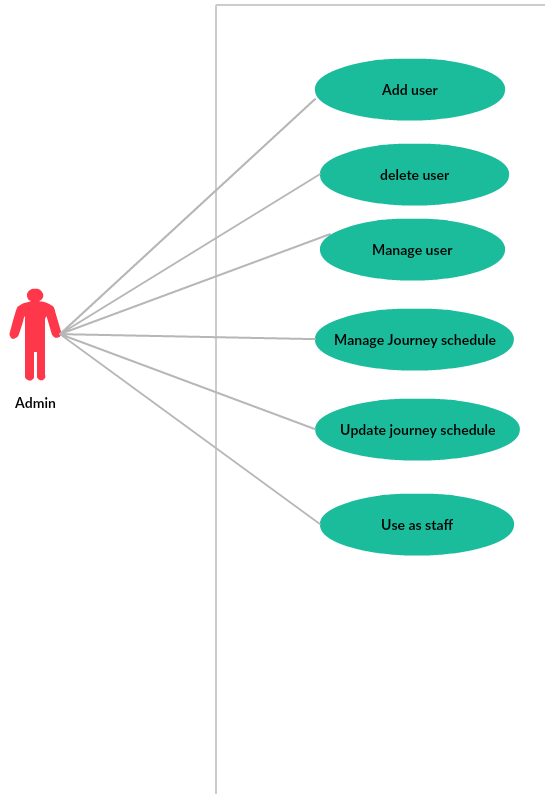
## 2.12 Conclusion

This Requirement Specification Document has been developed based upon by the studying common scenario and previous experience of the project manager. Thus any unusual circumstances rise on the process of development may derail the values and time frame mention in this document

# Chapter-3: Diagram

## 3.1 Use Case Diagram

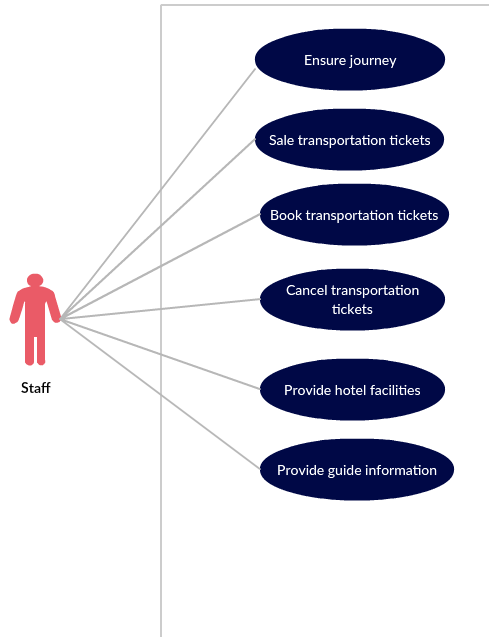
## 3.1.1. Admin Functionality:



The functionality of an admin is as follows:

* Adding a new user
* Delete an existing user
* Can manage users
* Manage journey schedule
* Update journey schedule
* Behave as a staff.

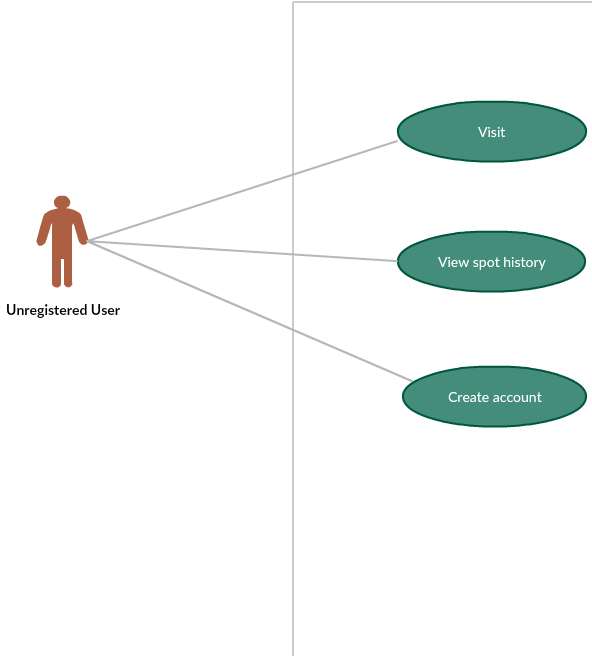
## 3.1.2. Staff Functionality:



The functionality of a staff is as follows:

* Ensure users itinenary journey plan
* Can sale transportation tickets for user
* Can book transportation tickets for user
* Cancel transportation tickets
* Provide hotel facilities
* Provide guide facilities

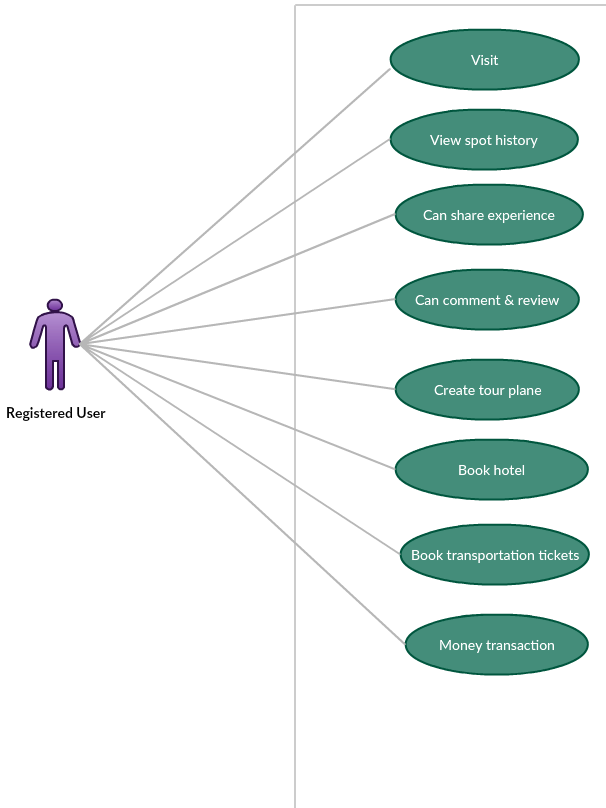
## 3.1.3 Unregistered User:



The function of Unregistered user:

* Create an account
* Can visit the website
* View spot history and information

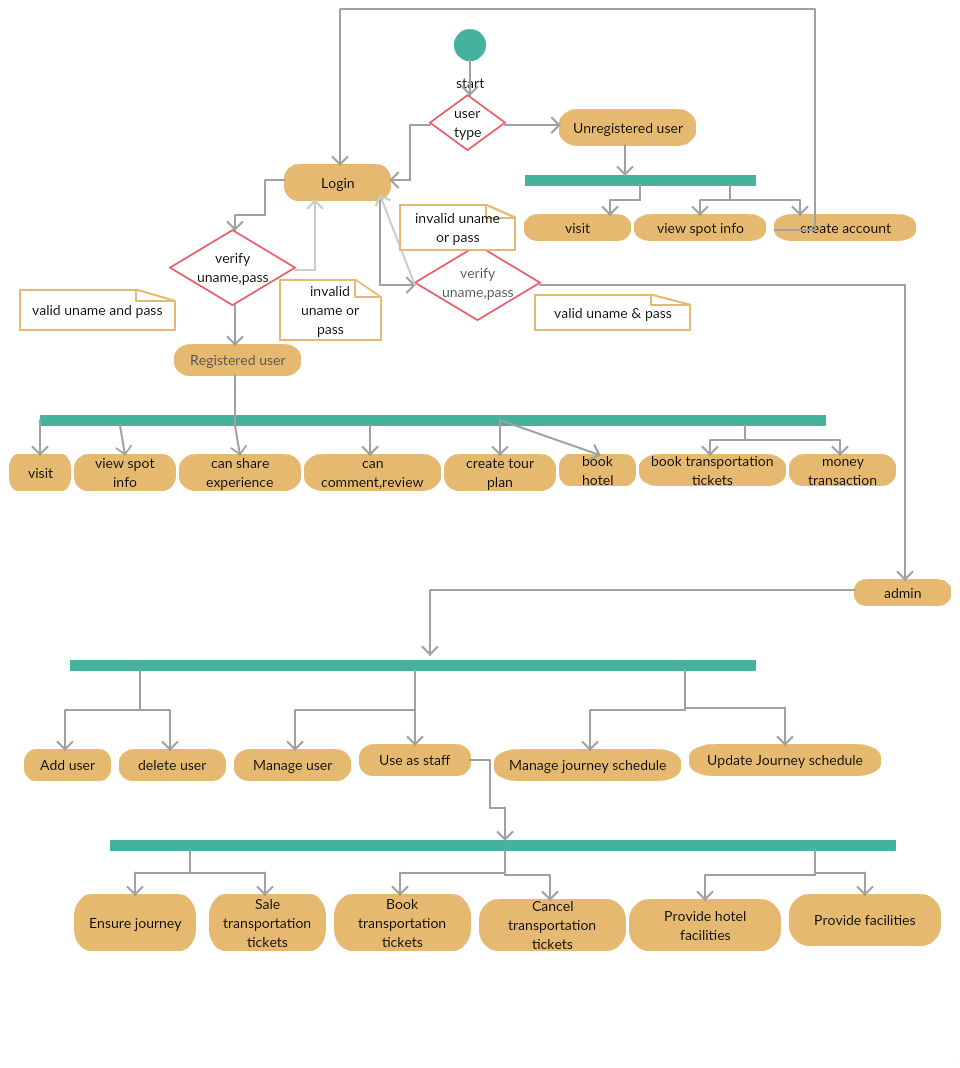
## 3.1.4 Registered User:

**:**

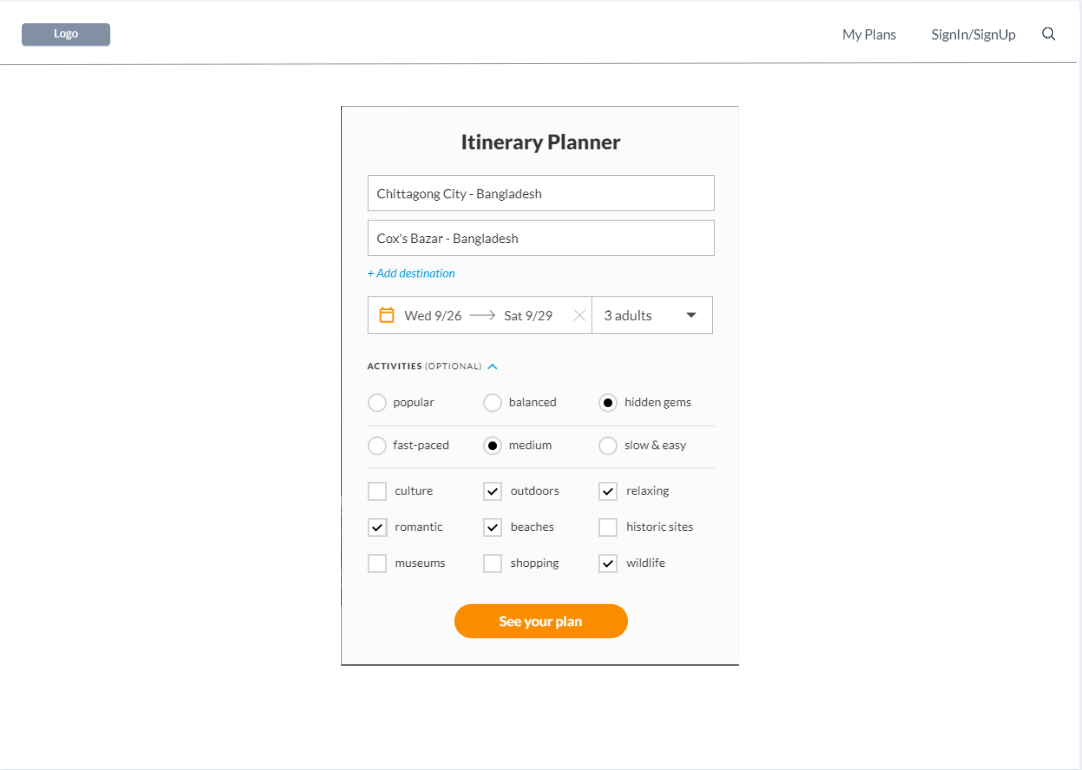
The function of Registered user:

* Can visit website
* View spot information and history
* Can share their tour’s experience by post
* Can comment and review of hotel, transportation and spot
* Create tour plan by special feature (ITINERARY PLANNER)
* Can book hotel
* Can book transportation tickets
* Money transaction

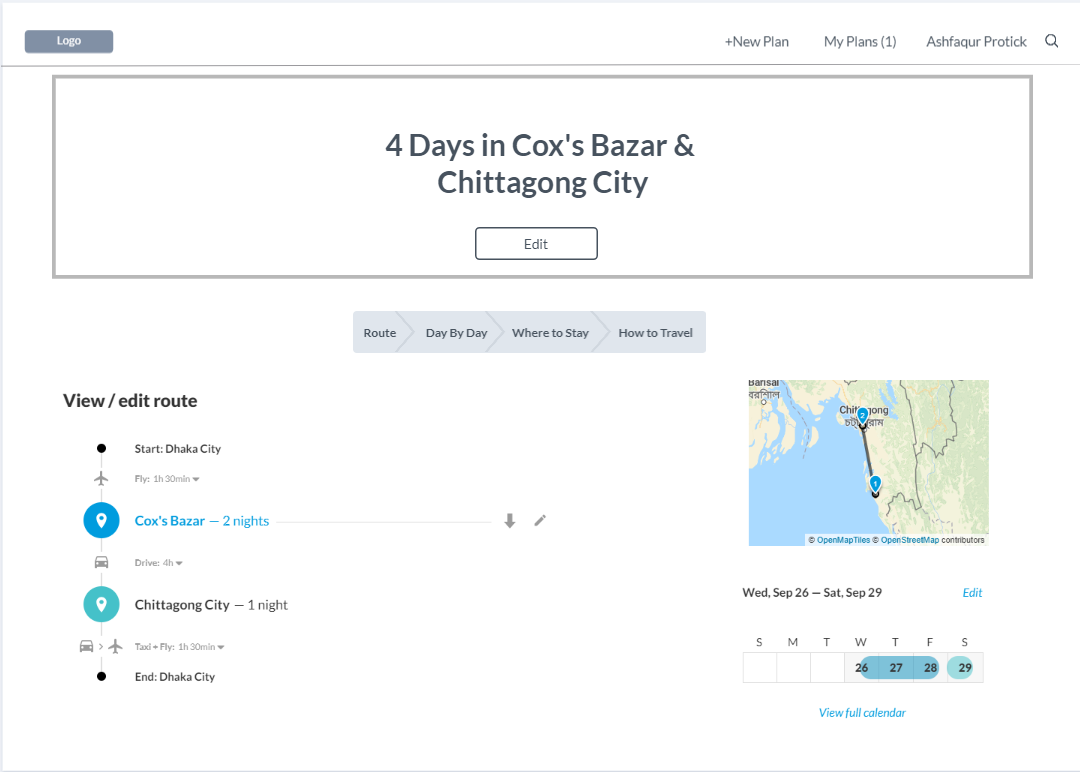
## 3.2 Activity Diagram



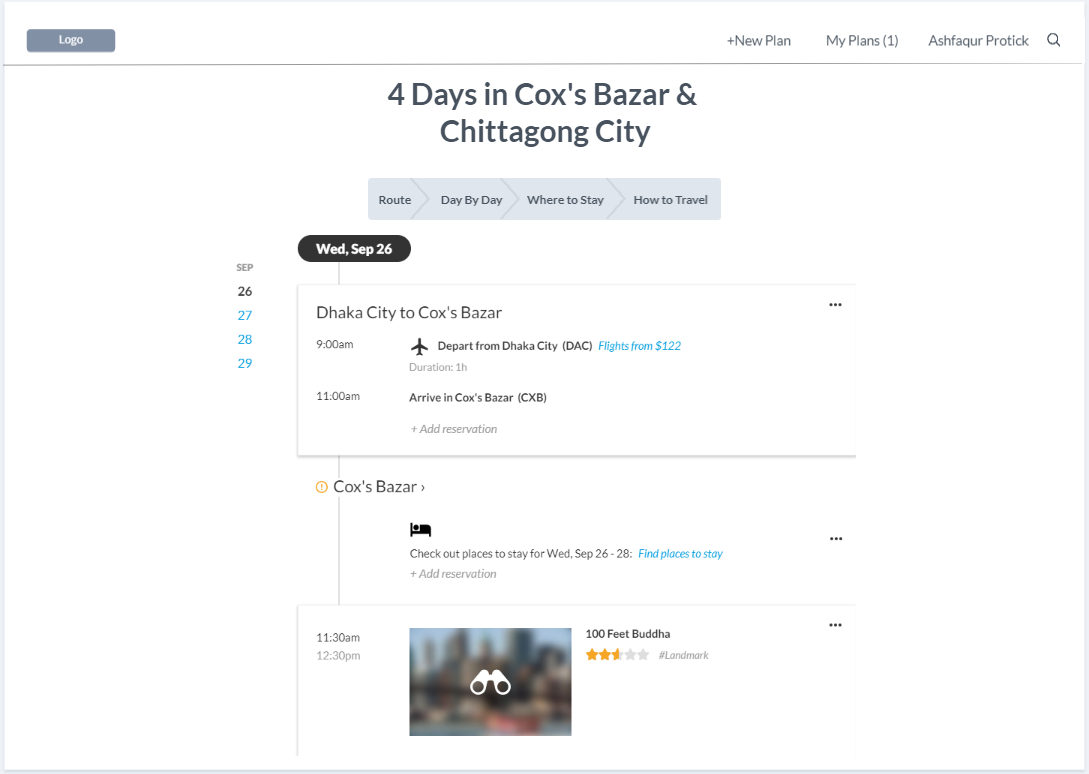
## 3.3 Prototype

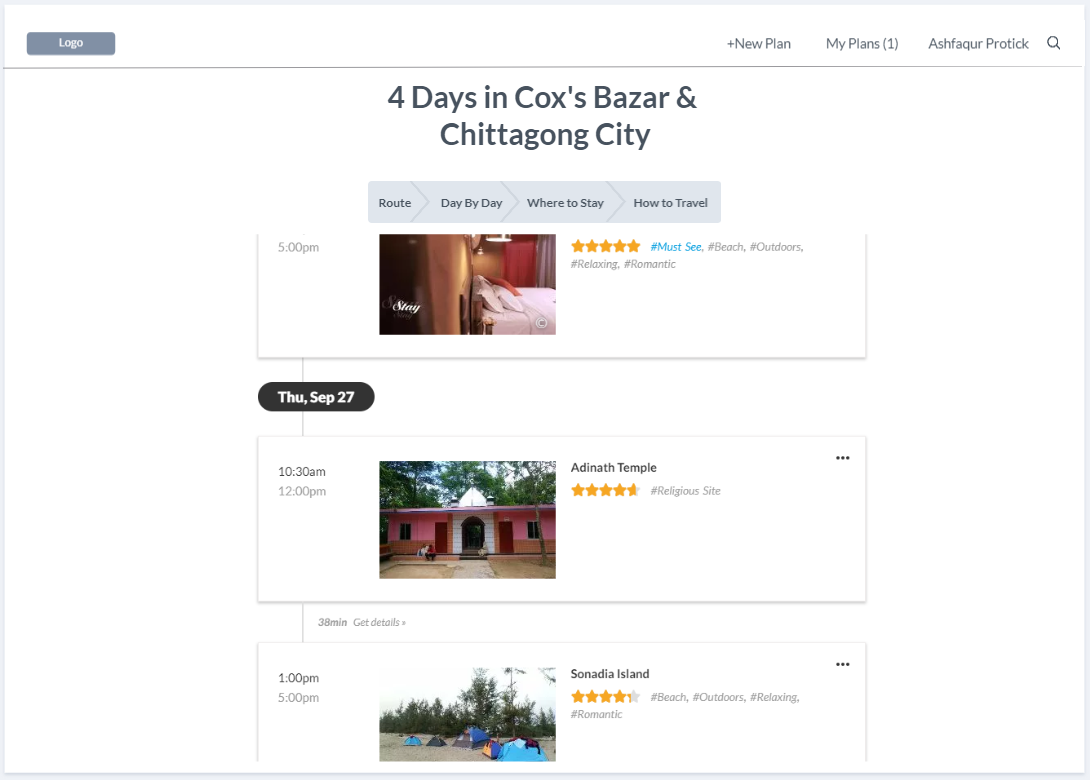


Itinerary Planner

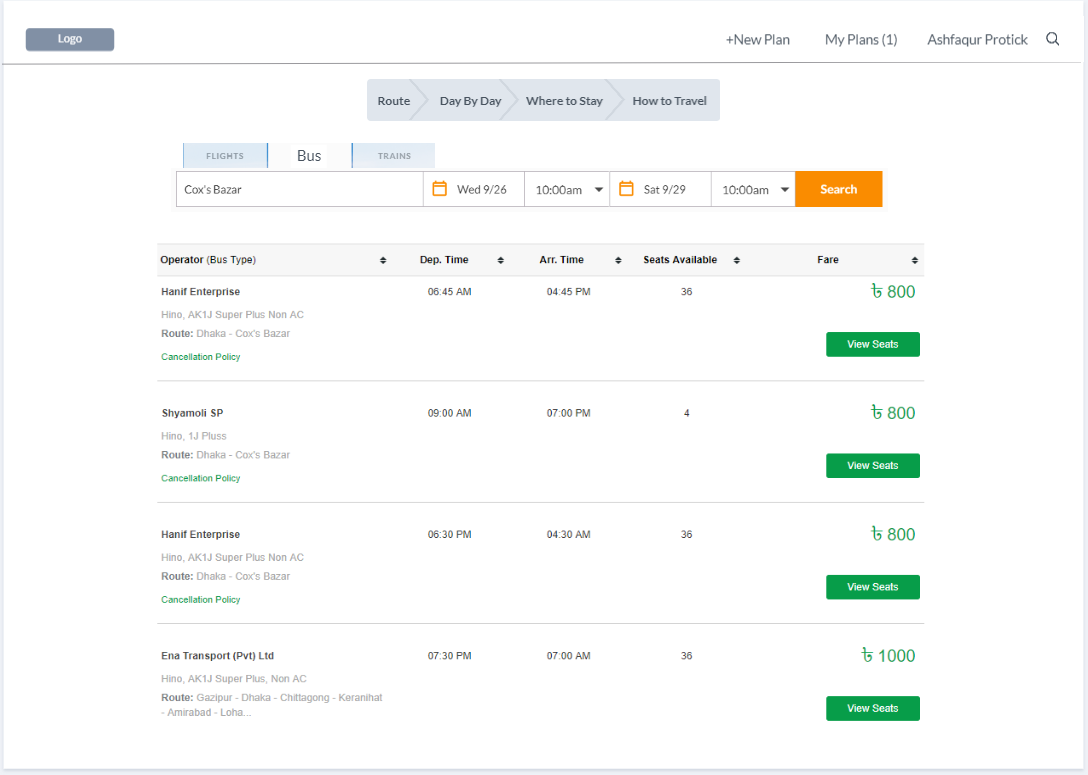


Route

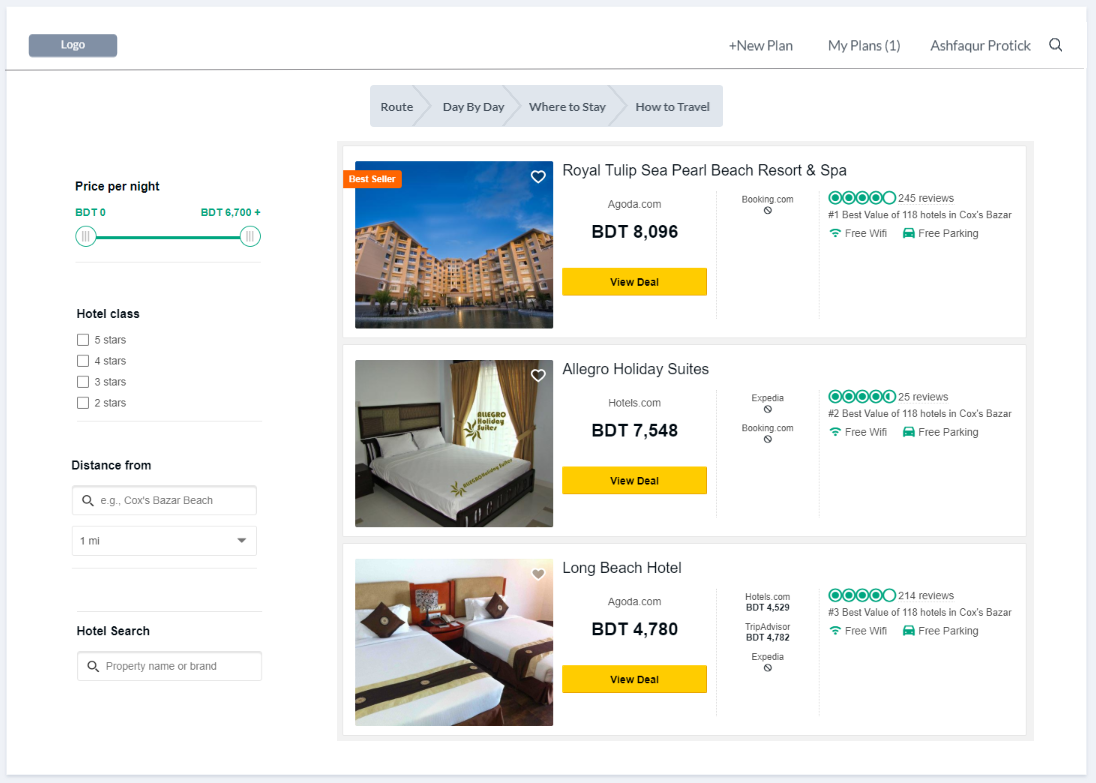




Day by Day Plan with Spots



Transportation (How to Travel)



Hotels (Where to Travel)

# Chapter-4: Software Project Management Plan

## 4.1 Document History and Distribution

Mainly in Dhaka city where people are doing their job and can’t find enough time to go to the grocery store every week to buy their groceries. Who goes shopping most of the time goes without a proper shopping list and spends more than their need. That’s why we are offering a smart web service that can suggest them make a proper shopping list and also listens to the customers what they want.

## 4.1.1 Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Revision #** | **Revision Date** | **Description of Change** | **Author** |
| 01 | July 25th , 2021 | Primary Phage | Syed Abdullah |
| 02 | July 28th, 2021 | Yes | Mahbub Hossain Faisal |

These versions will show up there and also on its service work good.

## 4.1.2 Distribution

|  |  |  |
| --- | --- | --- |
| **Recipient Name** | **Recipient Organization** | **Distribution Method** |
| Abhijit Bhowmik | AIUB | Hard Copy, Soft Copy |
| Abhijit Bhowmik | AIUB | Hard Copy, Soft Copy |

Soft copy and Hard copy Distributed copy mention on the table.

## 4.2 Overview

## 4.2.1 Purpose, Objectives and Project Scope

The objective of this document is to demonstrate the requirements of the e-commerce project. The document gives a detailed description of both functional and non-functional requirements for this project. The document is created after a number of examining the requirement specifications paper of the given Project. The final product of the group will be meeting the requirements of this document.

## 4.2.2 Project Scope

The scope of this project is to study and design a web application that will provide services to the busy families. Deliver products within fixed days of weeks and in a time range. Deliver fresh vegetables and groceries regularly

## 4.2.3 Assumptions and Constraints

The assumptions during the projects are-

* Due to pandemic situation the developer team can’t work together physically. Everybody is in their hometown so proper communication will not be possible.
* Project might get delayed. Electricity and internet connection is very much dependable on the weather.
* The development team has not quite enough experience as a whole to complete the project.
* Additional resources (people or money) are not available for the project.

## 4.3 Project Deliverables

## 4.3.1 The list of project deliverables is:

1. Statement of Work (SOW)
2. Software Requirements Specification (SRS)
3. Software Project Management plan (SPMP)
4. Software Design Plan (SDP)

## 4.3.2 Schedule and Budget Summary

|  |  |
| --- | --- |
| **Schedule** | |
| **Milestone or Major Project Deliverable** | **Planned Completion Date(Day)** |
| SOW | May 2th , 2021 |
| SRS | May 20th , 2021 |
| SPMP | June 1th , 2021 |
| SDP | June 17th , 2021 |
| Soft testing plan | June 24th , 2021 |
| Presentation & project progress | July 4th , 2021 |
| Technical documentation | With completed product |
| Software evaluation report | Along with final submission |

## 4.4 Evolution of the Software Project Management Plan

The preliminary drafts of the SPMP will be submitted to the project manager and after approval. Copies of the same will be distributed to the members of the group on the date as referred to in section 1.1.4.

## 4.4.1 Definitions

|  |  |
| --- | --- |
| **Terms** | **Description** |
| 1. SOW | Statement of Work |
| 1. SRS | Software Requirement Specification |
| 1. SPMP | Software Project Management Plan |
| 1. SDP | Software Design Plan |
| 1. SQATP | Software Quality Assurance and Testing Plan |
| 1. Impact | 1-catastrophic  2-critical  3-marginal  4-negligible |

## 4.5 Project Organization

The most important decision of a project management team is to form a standard organization structure that will be required and essential for the project. To maintain good interaction between team member and client we use three major organization structure.

## 4.5.1 External Interfaces

Our project interfaces with wider or External Environment.

* Government
* Economic Climate
* Finance
* Community Group
* Media
* Regulatory agencies
* Competitors
* Suppliers
* Owners

## 4.5.2 Internal Structure

There are some few items that are relevant to interfacing with the organization.

* Management team
* Social Contact
* Trainer
* Financial system
* Technical Support team
* Computer Programmers

## 4.5.3 Roles and Responsibilities

Roles refer to one’s position on a team. Responsibilities refer to the tasks and duties of their particular role. Our all team member are responsible for completing all task and can achieve their goal.

## 4.6 Managerial Process Plans

## 4.6.1 Project Start-up Plan

This segment describes the materials and resources required to begin the project. Since most of this data was pre-defined for the group, this segment will not describe the method of reasoning for numerous of these choices.

## 4.6.2 Estimation Plan

As previously stated in that, the total development time is estimated to be 6 days and the total internal cost to be BDT. These figures were obtained by expert judgment by analogy. This project cost will be compare to other similar project.

## 4.6.3 Staffing Plan

To develop this project our team member will be available 7-8 hours per days. They will complete daily task by doing meetings, document preparation and inspection, and tool development.

## 4.6.4 Resource Acquisition Plan

At the beginning of the development process all the resource must be clear and available. In development if its needs to change plan then technical writer will change. After reviews we will add those changes in development phase. According to project need the team member role can be change.

## 4.6.5 Project Staff Training Plan

All team member must help each other if they find any trouble. We will share resource to meet the project objective. For this no additional staff training is needed.

## 4.7 Work Plan

Work Activities and Schedule will allocate each team member.

## 4.7.1 Budget Allocation ( To-Do )

|  |  |  |
| --- | --- | --- |
| Budget Allocation | | |
|  | **Hours** | **Costs** |
| **Agency Labor** |  |  |
| **Contract Labor** | N/A | 0 BDT |
| **Non-Labor Costs** | N/A | 0 BDT |
| **Total Hours / Implementation Cost** |  |  |

## 4.8 Control Plan

## 4.8.1 Requirements Control Plan

When changes are to be made in the requirements after the Software Requirement Specification has been released, the changes shall be brought to the attention of the developers and discussed. Any changes that are to be made will be with the prior approval of the management and only if feasible and permissible within the constraints of the project and resources in terms of knowledge and skill of the developers required. Once the changes have been made to the Software Requirement Specification document, an updated version of the Software Requirement Specification will be released.

## 4.8.2 Schedule Control Plan

In project life cycle if its need to extend time then the management will be estimate the time again and add this into schedule section. The developers will be available to spend extra time to meet the project objective.

## 4.8.3 Budget Control Plan

Totaling all earnings for the year and dividing by 12 will get the average monthly income. By keeping note of all expenditures, we will be able to calculate our average monthly spending. The savings will be the difference between "Budget" and "Current Spending." If spending exceeds income, efforts to reduce spending may be taken, based on the individual savings objectives. The project manager keeps track of expenses, which are published and accessed via the Weekly Status Report.

## 4.8.4 Quality Control Plan

Any significant modifications that affect the points of reference or the budget must be authorized by everyone and reported. Management will have the ability to ensure that the project is finished on time and on budget. This will be accomplished through daily meetings between the members of the group and management. Designers from the group will present the day's progress and challenges at each assembly. Each team member will assess if they are developing as planned and adhering to the specification report and project management plan. Any big challenges that the group faces will be immediately communicated to the rest of the group.

## 4.8.5 Reporting Plan

The updated Software Project Management Plan will be distributed, as mentioned in section 1.1.4. All preliminary versions of all papers, updates, and progress reports will be sent to the advisor for evaluation and discussion, with the approved document being distributed to the rest of the team once authorized. A report on the project's progress will be given to the team members.

## 4.8.6 Metrics Collection Plan

The measurements data must be reported to the persons who must act on it in order to impact change. They must also be able to comprehend the data, including its current state, previous trends, the measure's purpose, and if a rise or decrease in this measurement indicates an improvement.

## 4.9 Risk Management Plan

|  |  |  |  |
| --- | --- | --- | --- |
| **Risks** | **Probability** | **Impact** | **Rating** |
| Project Manager Availability | 50% | 3 | Medium |
| Schedule slips | 70% | 4 | Low |
| Changes in Requirements | 30% | 1 | High |
| Computer Crash | 20% | 2 | Low |
| Lack of Development Experience | 30% | 4 | Medium |
| Programmers doesn’t have good experience | 20% | 1 | Medium |
| Poor Comments in Code | 40% | 2 | Low |
| Late delivery | 30% | 4 | Medium |
| Customer Participation in Beta Testing | 60% | 3 | Medium |

**Impact Values:**

**1 – Catastrophic**

**2 – Critical**

**3 – Marginal**

**4 – Negligible**

## Assessing overall project risk

**1. Have software engineer team formally committed to support the project?**

**Answer:** Yes. All the members are formally committed to support the project. They also ensure that they will give all types of available facilities.

**2. Are requirements fully understood by the software engineering team and their customers?**

**Answer:** Yes. As the software engineering team or the developers has the sound knowledge about the requirements so it is easily understandable by the team. The requirements details are well organized also informative, so it is under stable by the customers.

**3. Are end-users enthusiastically committed to the project and the system/product to be built?**

**Answer:** Yes. Because the end-users are expecting that, they will be able to find all kind of information about Chain Store Management System.

**4. Have user been involved fully in the definition of requirements?**

**Answer:** Yes. The user has been fully involved in the definition of requirements. They are aware of the application requirements.

**5. Is project scope stable?**

**Answer:** Yes. Project scope is stable because the minimum and mandatory scope is almost covered by the software engineering team. If any further scope will arise then just adding it with the old ones.

**6. Does the software engineering team have the right mix of skills?**

**Answer:** Yes. The software engineering team has the right mix of skills. The team members have the capability of doing their work in a team, ability to work in pressure and also have sound knowledge according to the software implementation.

**7. Are project requirements stable?**

**Answer:** Yes. Currently all possible requirements are being listed, and seem that if anything would be added later to the list will not make the project unstable. All requirements for this project are easily available that will enthusiast the end-user to use it.

**8. Does the project team have experience with the technology to be implemented?**

**Answer:** Yes. The project team has experience with the technology to be implemented because they have the sound knowledge about the technologies and the technologies are also implemented by them before.

**9. Does the project team and client are aware about the possible risks?**

**Answer:** Yes. Project team prepare the possible risk assessment and aware of handling the risk. Client is also being notified

## 4.10 Closeout Plan

At the end of the project, the following actions will occur:

* The developers team will make a hard copy file of all documents generated by the team.
* Project code will save into GitHub in daily basis. At the end full project will save into Pen drive/Hard disk.

## 4.11 Technical process plans

The Software Project Management Plan will specify the development process model, technical models, tools and techniques that will be used to develop the work products, project infrastructure and product acceptance plan.

## 4.12 Process Model (To-Do)

The XP (extreme Programming) agile process model will be follow during the project implementation.

## 4.13 Methods, Tools and Techniques (To-Do)

The project, E-Commerce, adapts the system on Personal Computer using HTML, PHP, Visual Studio 2019 and MySQL for database management system. Additional tools that will be used are: Adobe Dreamweaver, Adobe Photoshop etc.

## 4.14 Infrastructure Plan (To-Do)

The hardware resources are three Intel Core2Duo Personal Computers running Windows XP/Vista or UBUNTU operating system. The project using software resources are like Notepad ++, Adobe Dreamweaver, Adobe Photoshop, Adobe Flash, XAMPP, Wamp etc.

## 4.15 Product Acceptance Plan

The project manager will formally accept each project milestone by signing proper acceptance documentation. The project manager will conduct an acceptance test at the end of each phase. This could lead to more demands for changes and enhancements. The project manager will conduct acceptance testing on final product.

## 4.16 Supporting Process Plans

The Software Project Management Plan will include the plans for the supporting processes that are part of the software project. These plans include:

* Maintain the accepted project management methods, standards, and processes throughout the project's lifecycle.
* Assist the Project Manager and Team Managers in creating and updating project plans.
* Produce project summary reports and coordinate the preparation of all reports.
* Assist and advise members of the project team on how to apply project procedures, disciplines, and recording and reporting requirements.

## 4.17 Configuration Management Plan

Every project deliverable should be viewed as a configuration item. The configuration item and associated file will be designated after the document, such as SOW or SRS, and will include the version number. All preliminary versions submitted to the project manager for approval, for example, would be given the acronym followed by 0.1, 0.2. This baseline document will be version 1.0 and issued to project members after the project manager accepts the basic SPMP. The project manager's informal updates will be numbered 1.1, 1.2, etc., and the next full delivery to the committee will be version 2.0, etc.

## 4.18 Verification And Validation Plan

## This project's Software Project Management Plan must include the software project's verification and validation plan, as well as tools, techniques, and responsibilities for the verification and validation work activities. The verification and validation plan will be contained in its own document and will be updated as needed.

## 4.19 Documentation Plan

For all documentation needs, IEEE standards would be followed. Before the baseline versions of the papers are released and distributed, they will be discussed and reviewed with the project manager.

## 4.20 Quality Assurance Plan

The quality of our project will be maintained and checked by the project manager and quality assurance team. They will assure that this project is maintaining the quality.

## 4.21 Reviews and Audits Plan

The Software Quality Assurance and Verification & Validation Plan, which would be designed according to suggested departmental standards, would include review and audits.

## 4.22 Problem Resolution Plan

## All issues would be settled informally by the project manager and the developer. However, if the necessity for such a plan appears, the Software Project Management Plan will be revised accordingly.

## 4.23 Subcontractor Management Plans

The project does not have any plan for managing subcontractors that may contribute work products to the software project. In future if we need to outsource we will discuss with project manager and team member. If the reasons is valid then we will manage plan.

## 4.24 Process Improvement Plan

The project manager will review the project on a regular basis once it has been completed, and if any improvements are required, he will advise the developers.

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