Travel Itinerary Management

Team 1

Requirements Specification

1. Introduction

The management of itinerary is one of driving force for this Travel itinerary management software. The proper management of itinerary is essential part of a trip for every traveler since everyone wants to cover all feasible places in a fixed period of time and since most of times traveler will not have any information about the country he is travelling to.

This software helps him to get all information about place in his fingertip and also pre-departure stuffs. This software makes his travel experience smoother and easier.

1.1 Project Overview and Statement of Proposal

Overview

The travel itinerary management creates a platform for a traveler to plan the complete trip. Traveler can book the hotels, plane, and taxies for travelling. This software also provides a wide variety of options like travel management that includes planning his travel according his past travelling history, weather prediction and suggestions for the places based on it. The one click feature provides all information all his fingertips and also travelers' valuable feedback can guide future travelers.

Statement of Proposal

We proposed the travel management software that includes accommodation details, travel itinerary and management, weather prediction, feedback and one click feature in one platform.

1.2 Scope and Objectives

Objectives

1. Increase ease of use and efficiency by streamlining the travel booking and expense management process

2. Improve cost savings through travel management supplier consolidation and by establishing airline, hotel, and car rental contracts.

3. Provide better expenditure reporting for planning purposes, integrate travel booking, accommodation, weather forecast and travel itinerary for efficient and streamlined processing.

Scope

The travel management system provides application that can assist the traveler to plan his trip on fingertips and also it allows him to feasibly manage his trip in the optimal amount of time. The worldwide travelling destinations are the scope of this project.

2. Non-Functional Requirements

We have divided the Non-functional requirements of the project with respect to different modules incorporated in our software.

Following are the different non-functional requirements:

1. User Registration & Login Module:

   1.1 The software should provide security constraints on user's personal details. This comes under security non-functional requirements.

   1.2 The software should filter the date as per the user's specifications. This is product requirement.

   1.3 The authorised user is identified by his email -id. This is again one of the security requirements

   1.4 The software should follow the same template in all of its consecutive webpages. This is organizational requirements.

2. Booking Module:

   2.1 Only authorised user have access to book/cancel their travel itinerary which includes flights,hotels and taxis. This is a part of security requirements.

   2.2 Only authorised user can add,customize or remove their itinerary from the cart. This comes under product requirements.

   2.3 The software should able to fulfill the request entered by the authorised user. This is an organizational requirement.

3. Itinerary Management:

   3.1 The administrator can authenticate the authorised user's transactions. This is security requirement.

   3.2 The software should follow proper and legal process while payment is in progress. This is a part of external requirements.

   3.3. The authorised user's bank details should be kept secure. This is one of the most critical security requirement.

   3.4 The software should provide efficient information about the weather forecast to where the passenger is travelling to. This is a part of product requirement.

Some of the non-functional requirements of the whole software

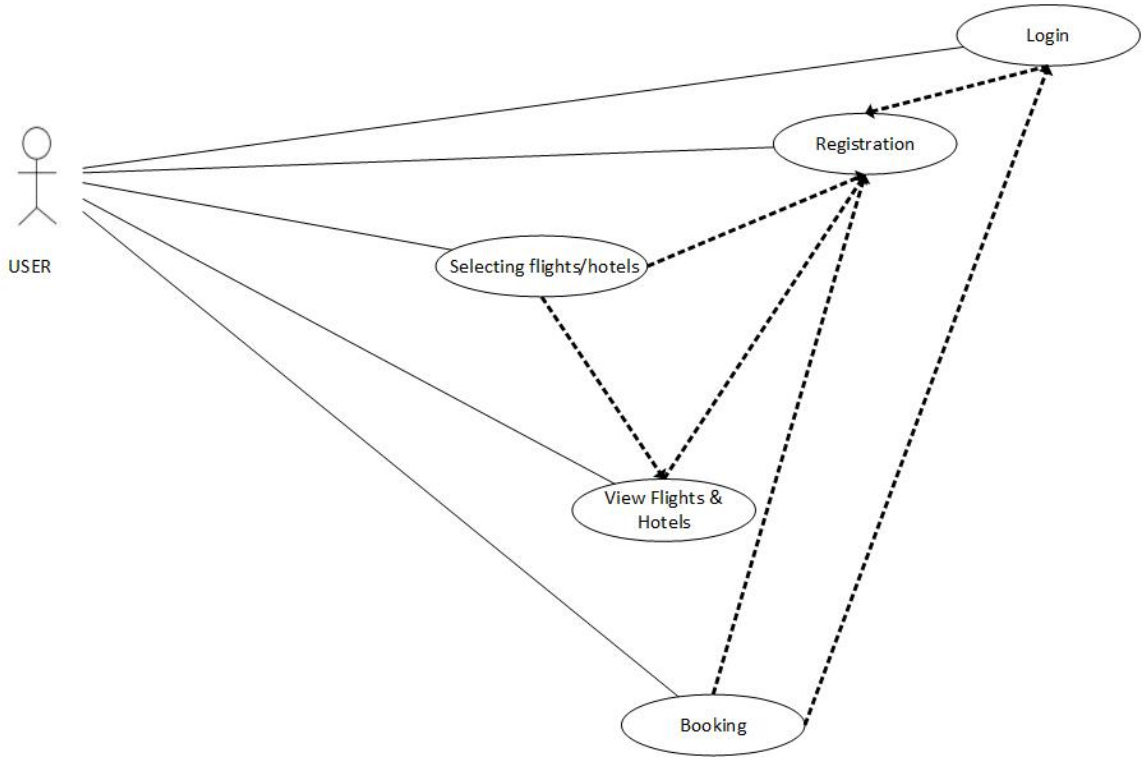
1. Security requirement : All communication between the user and the server must be secured.

2. Product requirement: Software should be a web application accessible from all operating systems and most of the web browsers
3. Organization requirement: The software should be easy to handle.

3. Functional Requirements

The functional requirements of the project are defined module wise. The different use case represents the different modules and the process in each module and their Activity diagram picturizes the flow of control over the different process of each module.

Usecase Diagram 1



Use Case Description

Use case name: User registration and login.

Participating actors: User and Admin.

Description: The goal of the use case is providing user to access our software and providing him the functionality to register himself and check for flights and hotels. Even the user can login directly from this page to book flights or hotels.

Pre-condition:

User should provide email id and his travel plans to get access to check all options of flights and hotels available.

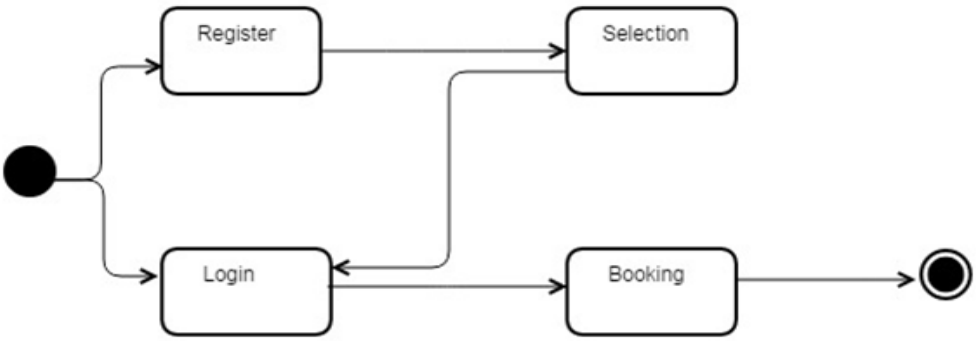
Post-condition:

1. User has registered himself to check for options available for booking.
2. User has logged in to book for particular travel plan.

Primary and alternate flow of events:

· Registration using mail id includes Display of flights and hotels
· Selection is depended upon by Displaying of hotels/flights
· Login is depended upon by selection
· Booking is depended upon by login
· The user can register using mail id and can check on the availability of flights depending upon his travel.
· The user after logging in, can select any convenient flights / hotels depending upon his type of travel from numerous displays of flights/hotels
· The authorized user can then proceed to booking through his valid credentials.
· The admin will provide details of flights/hotels when the user registers.

Activity Diagram



Usecase Diagram 2

Use Case Description

Use case name: Booking Management.

Participating actors: Authorized user

Description: The goal of the use case is to provide the Authorized signed in user to manage his trip. The authorized user can manage his itinerary by adding and removing the services to his cart.

Pre-condition:

1) The user must be a authorized user and he should sign in to the booking page through his login credentials.

2) The user should also need to have complete picture of his trip to manage booking.

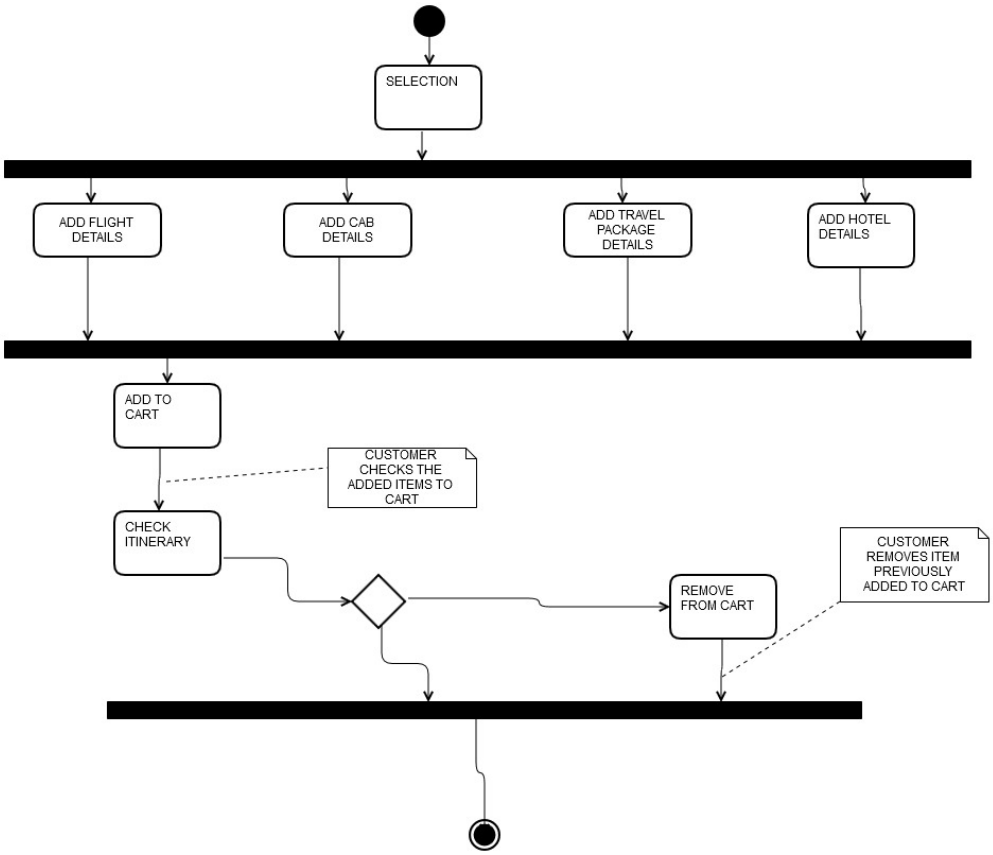
Postcondition:

1) The user has selected his flight, taxies, hotel and travel package and other travel related services and also checks his itinerary for verification.
2) The user can also remove the services which he feels irrelevant, from the cart.

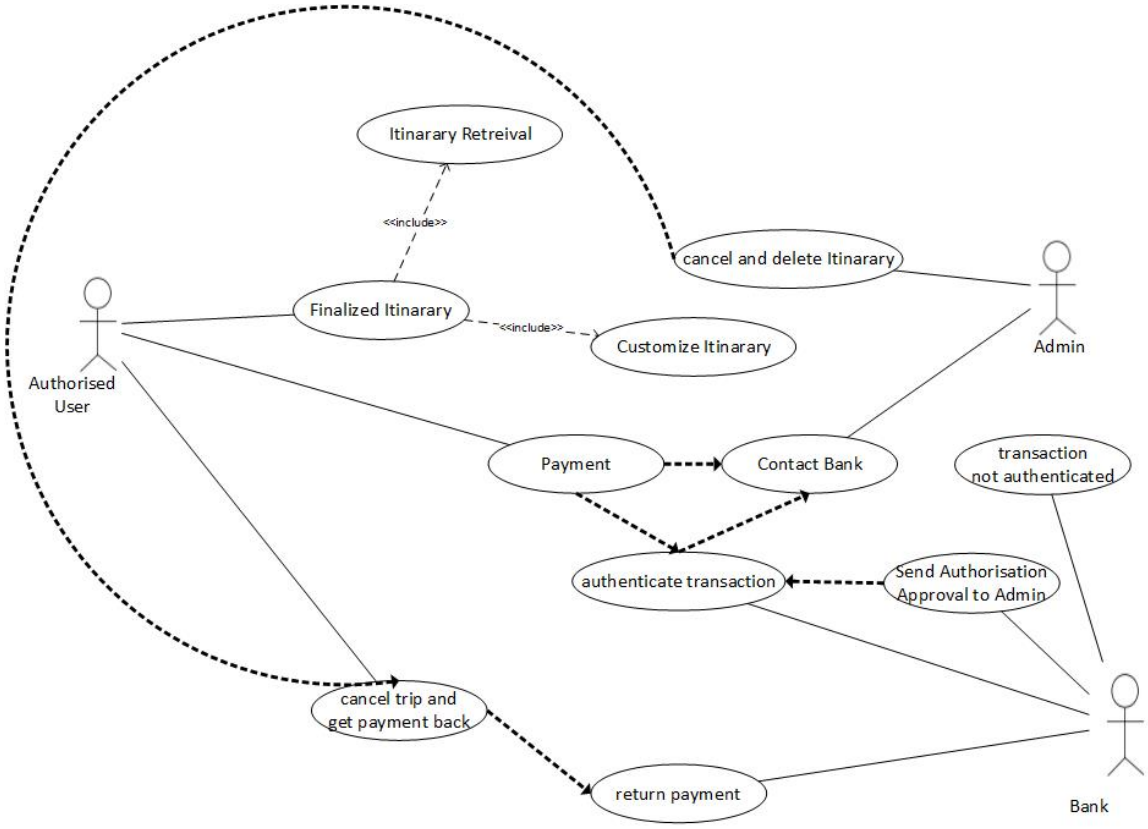
Primary and alternative flow of events:

- "Add to cart" depends upon "Book flight", "Book Hotel", "Book cab service", "Check for itinerary" and "Select the travel package". " Book flight" depended upon by "Add to cart"
- " Book hotel" depended upon by "Add to cart"
- " Book cab service" depended upon by "Add to cart"
- "Check for itinerary" depended upon by "Add to cart"
- " Select the travel package" depended upon by "Add to cart"
- "Add to cart" includes "Remove from the cart"
- The user can select the flights for his onward journey or for the round trip.
- The user can select the hotels or any other temporary accommodations such as apartments for his period of stay.
- The user can book the cab services available for airport pick up, for city rounds or else for his trip around the city.
- The user can select his travel package either by selecting the readily available travel packages or else he can customize his travel package based on the suggestions provided by the application on considering the weather forecasting.
- The user can check his overall all itinerary plan and the services selected by him.
- The user can see all the packages selected by him in the travel cart and he can also add to the cart list.
- The user can also remove the unwanted services previously added by him to the cart.

Activity diagram



Usecase Diagram 3



Use Case Description:

Use Case Name: Itinerary Management

Participating Actors: Authorised User(logged in), Admin and Bank are the three actors participating in this use case.

Description of the goals of this Use case: The Itinerary management use case gives the capability to the logged in user to View a Finalized Itinerary , to cancel his/her itinerary and get the payment back, also to retrieve and customize the itinerary. to achieve. Admin will be able to cancel the and delete the itinerary, contact bank for authentication. Bank user, will authenticate the transaction, send a approval, and also will be able to return the payment when a customer cancels a booking.

Pre-condition: The use case depends on what the customer selects and what are his booking requirements. For this use case to be triggered, the user needs to select a booking option, such

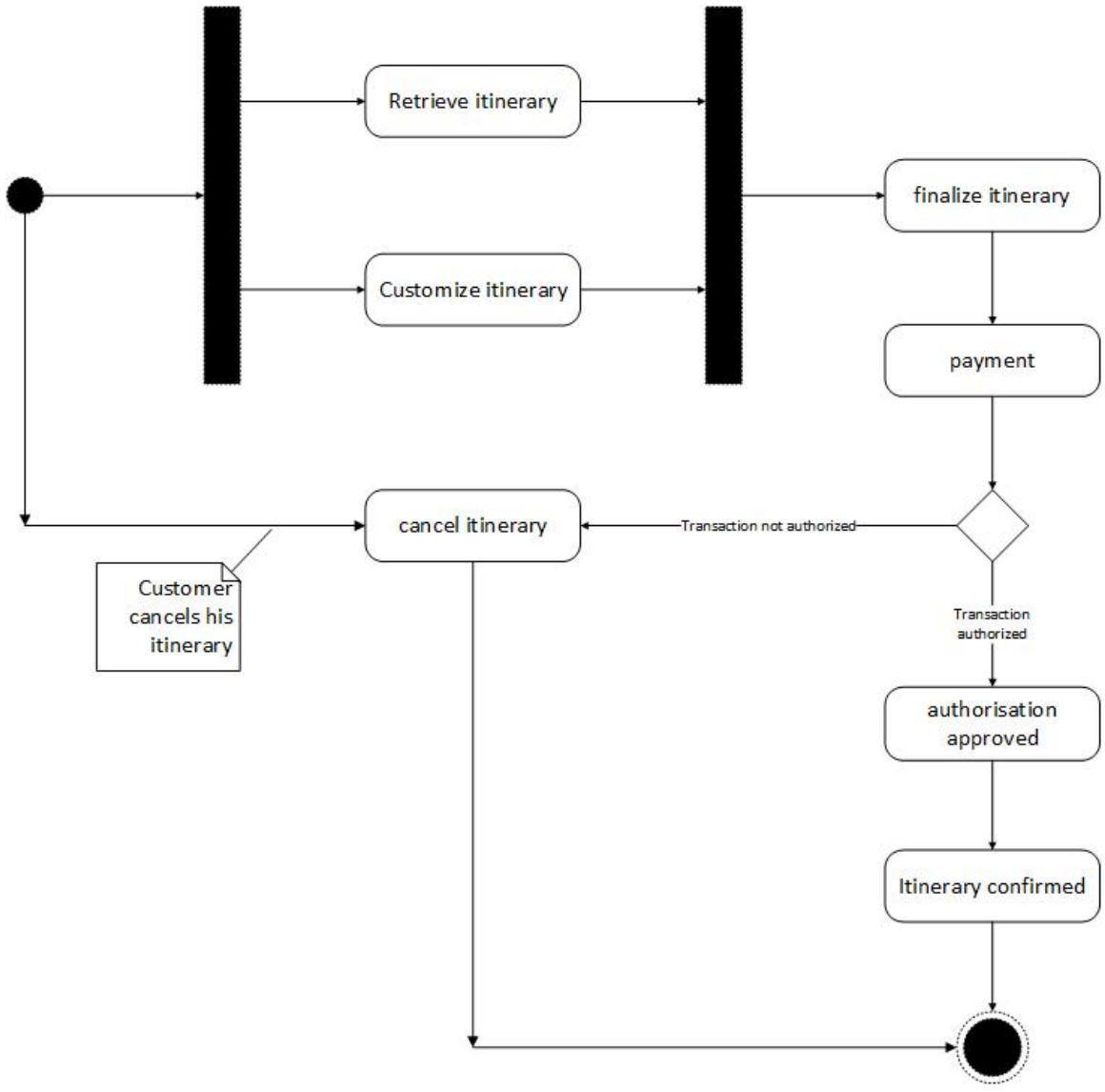
as a flight or hotel and confirm. This use case will be executed only when the user reviews his/her itinerary and completes the payment.

Postcondition: The bank should approve the transaction for the outcome to be confirmed and finalized. If the bank fails the transaction then customers itinerary will not be generated.

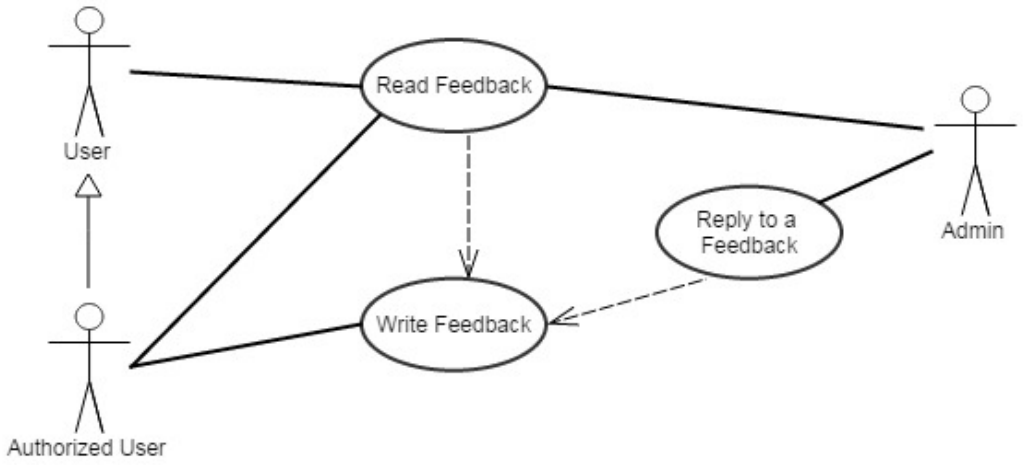
Flow of Events:

- The authorised user, can "retrieve the itinerary". The "finalized itinerary" <includes> both "customize" and "retrieve itinerary"
- The "payment" depends on banks "authentication approval" and Admins "contact bank".
- The "authenticate transaction" depends on "contact bank".
- The "send authorization approval to admin" depends on "authenticate transaction". Without authorising the transaction , bank will not send the approval to admin.
- "Cancel trip and get payment back" will depend on "return payment".
- The "cancel and delete the itinerary" will depend on "cancel trip and get payment back".
- The user will be asked to pay for the booking selections in his/her cart.
- The bank will be contacted by the Admin, If an authorisation approval is given then the itinerary will be finalized.
- The bank will send "transaction not authenticated if the "payment" is declined
- Admin will "cancel the itinerary" if the "transaction is not authenticated".
- Admin can also "cancel and delete the itinerary" when customer selects "cancel trip and get payment back"
- User after "finalizing the itinerary" and also can "cancel itinerary and get the payment back".
- The "return payment" will happen, if customer select "cancel itinerary and get the payment back".

Activity Diagram:



Usecase Diagram 4



Use Case Description:

Use Case Name: Feedback System

Participating Actors: Authorised User(logged in), Admin and User are the three actors participating in this use case.

Description of the goals of this Use case: The Feedback System provides the User to check for the other customers review, Authorised User can read as well as can provide their feedbacks and the Admin can also read for customers feedbacks and also reply to customers feedbacks.

Pre-condition: The use case depends on particular actors. There is no precondition for general Users but for Authorised users to provide their feedback the Authorised User must have a booking history.

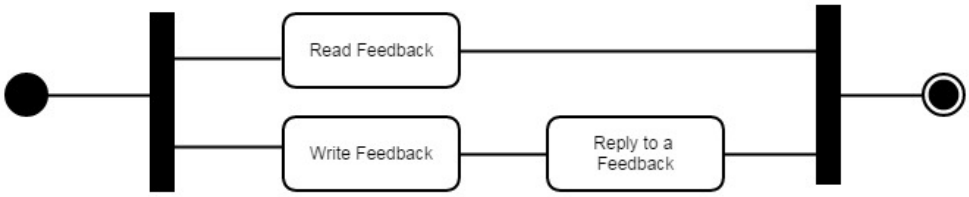
Postcondition: The Admin should provide positive replies to the feedbacks provided by the Authorised Users

Flow of Events:

- ❏ The general User can read the feedbacks provided by Authorised Users.
- ❏ The Authorised User can provide a feedback and these feedbacks can be read by any users.

- ❑ The "reply to feedback" depends on "write feedback" and the admin can reply to the customers feedbacks.

Activity Diagram:



4. Appendices

4.1 Project Status

The complete summary of the current status of the project is reported below. The project is currently now in project requirement specification stage and the project proposal and plan is already finished.

Completed:

- Project proposal and plan is already reported.
- Project scope and objective are clearly defined and also the the statement of purpose of the project.
- The different risks that can affect the project development process are reported according to their type, probability of occurrence and the severity of the risk.
- The Risk mitigation , monitoring and management plans are discussed and reported.
- The project requirement specification stage reports the non-functional requirements and discuss their importance.
- The functional requirements are reported according to module wise and through use case diagram, use case description and the activity or flow diagram of the module or process is also reported.

To-Do tasks:

- The project requirement gathering stage that includes reporting of the project related data and the design specifications.
- The designing of the project application according to the project requirement specification and the data gathered in the requirement gathering stage.
- The project application testing and resolving the testing issues.
- The implementation and deployment of the application.