IT314 PROJECT 2020

COUPONS UTILIZATION AND REMINDER SYSTEM

GROUP 7

DHIRUBHAI AMBANI INSTITUTE OF INFORMATION AND TECHNOLOGY

COUPONS UTILIZATION AND REMINDER SYSTEM

SOFTWARE REQUIREMENT SPECIFICATION

Group: 07

June 2020
v2.0

Team Members:

- *Patel Avi - 201701147*
- *Jarsaniya Tirth - 201701140*
- *Shah Meet – 201701143*
- *Dhandhalya Sagar – 201701139*
- *Thakkar Chintan - 201701141*
- *Hariyali Gajera - 201701119*
- *Ponnam Sai - 201701125*
- *Parmar Kaushal - 201701092*
- *Abhishek Jishu - 201701086*
- *Mohul Srivastva - 201701130*
- *Parikh Yash - 201701099*
- *Chauhan Vikas - 201701093*

CONTENTS

1. INTRODUCTION 4

1.1 PROBLEM SPECIFICATION AND PROPOSED IDEAS 4

1.2 PURPOSE 5

1.3 PRODUCT SCOPE 5

1.4 OVERVIEW 5

2. USERS AND STAKEHOLDERS 7

3. REQUIREMENT ELICITATION 8

4. REQUIREMENT PRIORITIZATION 9

5. GENERAL DESCRIPTION 11

5.1 PRODUCT PERSPECTIVE 11

5.2 PRODUCT FUNCTIONS (ENTERPRISE REQUIREMENTS) 12

5.3 CONSTRAINTS 13

6. SPECIFIC REQUIREMENTS 14

6.1 EXTERNAL INTERFACES 14

6.2 USER STORIES 14

6.3 SYSTEM FUNCTIONAL REQUIREMENTS: 16

6.4 NON-FUNCTIONAL REQUIREMENTS 17

7. PROCESS MODEL DESCRIPTION 18

8. FEATURES 19

9. DIAGRAMS AND USE CASES 21

9.1 CLASS DIAGRAMS 21

9.1.1 CLASS DIAGRAM FOR SPRINT 1 21

9.1.2 CLASS DIAGRAM FOR SPRINT 2 22

9.2 ACTIVITY DIAGRAMS 23

9.2.1 ACTIVITY DIAGRAMS FOR SPRINT 1 23

9.2.2 ACTIVITY DIAGRAM FOR SPRINT 2 24

9.3 USE CASES 24

9.3.1 USE CASES FOR SPRINT 1 24

9.3.2 USE CASES FOR SPRINT 2 27

10. TEST CASE DOCUMENTATION 30

11. MINUTES OF MEETING.....39

1. INTRODUCTION

1.1 PROBLEM SPECIFICATION AND PROPOSED IDEAS

In this world of information technology, almost everything which a human being may need in his life is available online like E-commerce for shopping, banking services, railway bookings, flight bookings, hotel bookings, E-Wallets, bill payments, cab bookings, online food deliveries, mobile and broadband recharges, entertainment services subscriptions, movie ticket bookings, holiday bookings etc.

All these services are provided through websites or applications of different companies and to attract customers they provide different types of deals, discounts, offers and coupons. It is very difficult for the users to keep track of coupons of various websites and applications and their expiry dates also it is difficult for the user to search and utilize a coupon of a particular website from a large number of coupons available to him at the correct time. So here comes the need for our application **Coupons utilization and reminder system** which keeps track of all the coupons available to a user from different websites and applications and reminds the user accurately at the time of need.

Coupons utilization and reminder system is meant to provide service which will help users to utilize available deals, offers, discounts and coupons which they have unlocked personally, or which are available in the market for all in a more appropriate, accurate, easy and comfortable way. This system or app will also provide various options for entering coupon details into the database of application like through manual entry of coupon details (company name to which coupon belongs, coupon code, amount of discount, expiry date etc.), by taking photographs of some posters, hoardings, advertisements etc. , by taking screenshots of digital advertisements, through automatic scanning of users photo gallery by the application at regular intervals and entering details to its database from the images containing some deals or discounts, also through automatic scanning of users mailbox whenever they receive new mail regarding some deal or discount and entering the details to applications database. This system is also designed to provide accurate reminders to the users at the time of checking out of some website or application whose valid coupon is available in the database, also at considerable time before the expiry date of the coupon, also at the time of checking into some offline store whose valid coupon is available in the database using GPS. User can also track his savings using a feature provided by this application. Thus, in a way this application will try to give maximum benefit to the user by keeping track of all the coupons and reminding at the correct time. It is also possible that some user wants to share his/her offer or coupon with another user, so the application is designed to provide

sharing options. It may be possible to give some chat options using Chatbot so that users can interact with the system for any issue or query.

1.2 PURPOSE

The purpose of making this document is stated as below:

1. To give a detailed description of the requirements for development of Coupon Assistant software.
2. To explain system constraints and interfaces.
3. To show analysis of requirements (how they have been understood and how various issues are resolved along with dependencies involved.)

Hence, the document provides an overall relation between requirements and how requirements have been developed from inputs.

1.3 PRODUCT SCOPE

The product is a software which is accessed from mobile with Android or iPhone OS and used to refer to general coupons which are available to all and to store personal coupons in various ways. This App can also be converted to cross platform apps which include desktop.

1.4 OVERVIEW

The following information is included in this document:

Section 2	Different Users and Stakeholders of this software
Section 3	Describes the process that was followed while requirement elicitation
Section 4	Describes the prioritization of the requirements which will be followed during making of the project
Section 5	Describes the general descriptions of the software
Section 6	Describes the specific requirements that will be implemented in the software
Section 7	Describes the analysis of the requirements
Section 8	Describes the model that will be followed while implementing the software
Section 9	Describes the features that will be present in the software
Section 10	Describes the Effort Estimation Report using different Effort Estimation Technique
Section 11	Describes the Gantt Chart of the project

Section 12	Describes the Meetings that were held during making the project
Section 13	Describes the roles of each member

2. USERS AND STAKEHOLDERS

Stakeholders of the software include the following:

1. **Project Mentors**: The tutors of the undertaking under whose direction this project will be created.
2. **Project Leader**: The leader of the team involved in making the project.

Project Development Team:

1. **UI Designers**: People associated with outlining the design of the front end of Coupon Utilization and Reminder System.
2. **Frontend Developers**: People involved in bringing the designs of UI designers on the screen; working on the frontend of the software.
3. **Backend Developers**: People involved in building up the backend of the framework which includes handling user requests and functionalities of the software.
4. **Database Managers**: People involved in handling the database of the project.
5. **Testers**: People involved in testing the framework made by Frontend and Backend Developers

Users:

1. **Frequent Online shoppers**: Individuals who are occasional online customers and have trouble in monitoring their coupons.
2. **Admin**: The people who are responsible for updating the general coupons on the site and maintenance of the App.

3. REQUIREMENT ELICITATION

Requirement Elicitation is the process of gathering requirements from the users, customers and stakeholders. It is done to identify requirements in the software. It is important to identify the correct set of requirements to ensure the success of the software. For gathering requirements of our project, the following are the requirement technique we have used:

Brainstorming: Since our idea is totally new, brainstorming is the only option to elicitate requirements that are needed to design the proposed idea. As many of us are active online shoppers, we noticed that many online payment applications give coupons/vouchers which can be used in the next transaction. So, we gathered the requirements that a system must have to store the coupons from different sources and give reminders to users on expiry of particular coupons. We referred some web applications which provide offers available in different mobile applications like Paytm, phonepe, Gpay, etc. After observing and analyzing these ideas, we brainstormed how we can fetch data of coupons of many users and how users can use it efficiently. The members brought many ideas, using which we can create an environment that includes an area for general coupons, manual entry, and many other features. We also discussed about automatic coupon entry in particular user's databases by reading the mail received for any coupon (by accessing the user's Gmail) and a chatbot to make the App user friendly. After gathering a lot of requirements, we made a list of all requirements and then we conducted a voting in which we eliminated requirements based on the number of votes – the requirement that got least votes was discarded.

4. REQUIREMENT PRIORITIZATION

Requirement Prioritization is the process of allotting priority to the requirements. The requirement will be incorporated into the software based on the priority of the requirements. It is important to prioritize the requirements because it might not be feasible to implement all the requirements in a fixed period of time. To prioritize the requirements, we have used MoSCoW technique. In this technique, we have prioritized the requirements based on their dependencies on each other and how important a requirement is for a user to completely add the coupon. The different categories in which we prioritized the requirements are:

1. **Must Have**:

   These requirements are mandatory to be present in the software

2. **Should Have**:

   These requirements are at high priority present in the software.

3. **Could Have:**

   These requirements are preferred but not necessary.

4. **Would Have:**

   Can be postponed and kept for future use.

The following is our list of priority:

1. **Must Have:**
    1. User Login
    2. Registration
    3. Enter the coupon manually
    4. Logout
    5. General Coupon
2. **Should Have:**
    1. Manual entry of personal coupons.
    2. Feedback option
    3. Add coupon by image
    4. Keeping records of all general coupons and offers in the database.
    5. Searching coupons and offers category wise or app wise:
3. **Could Have:**
    1. Review Us

2. Different options for filtering coupons and offer
3. Coupons' history

4. **Would Have:**
    1. Chatbot for interactive performance which will allow users to search and chat with the system in Q&A format.
    2. Option to read Gmail inbox to fetch data of coupons.

5. GENERAL DESCRIPTION

Coupons utilization and reminder system is meant to provide service which will help users to utilize available deals, offers, discounts and coupons which they have unlocked personally, or which are available in the market for all in a more appropriate, accurate, easy and comfortable way. This system or app will also provide various options for entering coupon details into the database of application like through manual entry of coupon details, by taking photographs of some posters, hoardings, advertisements etc. , by taking screenshots of digital advertisements, through automatic scanning of users photo gallery by the application at regular intervals and entering details to its database from the images containing some deals or discounts, also through automatic scanning of users mailbox whenever they receive new mail regarding some deal or discount and entering the details to applications database. This system is also designed to provide accurate reminders to the users at the time of checking out of some website or application whose valid coupon is available in the database, also at considerable time before the expiry date of the coupon, also at the time of checking into some offline store whose valid coupon is available in the database using GPS. User can also track his savings using a feature provided by this application. Thus, in a way this application will try to give maximum benefit to the user by keeping track of all the coupons and reminding at the correct time.

5.1 PRODUCT PERSPECTIVE

1. System Interfaces

The software designed is a self-contained system meaning that this system will not require much external software interfaces. But the system will require certain standard hardware interfaces. The system should be an App system, meaning that the system must support applications.

2. User Interfaces

User interfaces other than the installation occur through application.

3. Hardware Interfaces

There are no additional hardware interfaces required in this system. Only an Android or iPhone is required.

5.2 PRODUCT FUNCTIONS (ENTERPRISE REQUIREMENTS)

1. Add and Delete general coupons.

A registered user with admin privilege should be able to add a new general coupon. Same type of user should be able to delete the general coupon once the coupon expires.

2. Accessing general coupons

Registered/Non-registered both types of user should be able to access general coupons.

3. Add and delete personal coupon manually

Registered users with non-admin privilege should be able to add and personal coupon manually. Users can delete particular coupons if he/she does not want that coupon to be stored anymore.

4. Read coupon from inbox (Gmail)

If a registered user wants to read Gmail to check whether any new mail for coupons is received or not, then the app should read the mails those are received recently and make a new coupon entry for each mail of new coupons.

5. Entry of coupon using camera

Registered users should be able to take photos of coupons which contain coupon details.

6. Storing information of image as new coupon entry

System should be able to extract coupon information from image captured and store it as a new personal coupon entry in a particular user database.

7. Filtering based on text entered by the user.

Registered users should get an entry of general and personal coupons which match the text entered by the user in the search bar.

8. Set reminder for any coupon

Registered users should be able to set reminders for general or personal coupons. So that user can get a notification for that coupon on the day set by the user.

9. Automatic reminder on expiries.

10. Coupon History

Registered users should be able to see coupons that are expired and entered as personal coupons.

5.3 CONSTRAINTS

1. It is a requirement to be connected to the internet for performing various functions in the application. Hence, users should have a good connection to the internet available.
2. Passwords entered should be encrypted and hidden from developers as well as not visible in the database.
3. Applications should be able to handle a heavy flow of traffic of users simultaneously solving assignment questions.

6. SPECIFIC REQUIREMENTS

6.1 EXTERNAL INTERFACES

All the use interfaces are through an App UI. Following are the pages that will be seen when a person logs in:

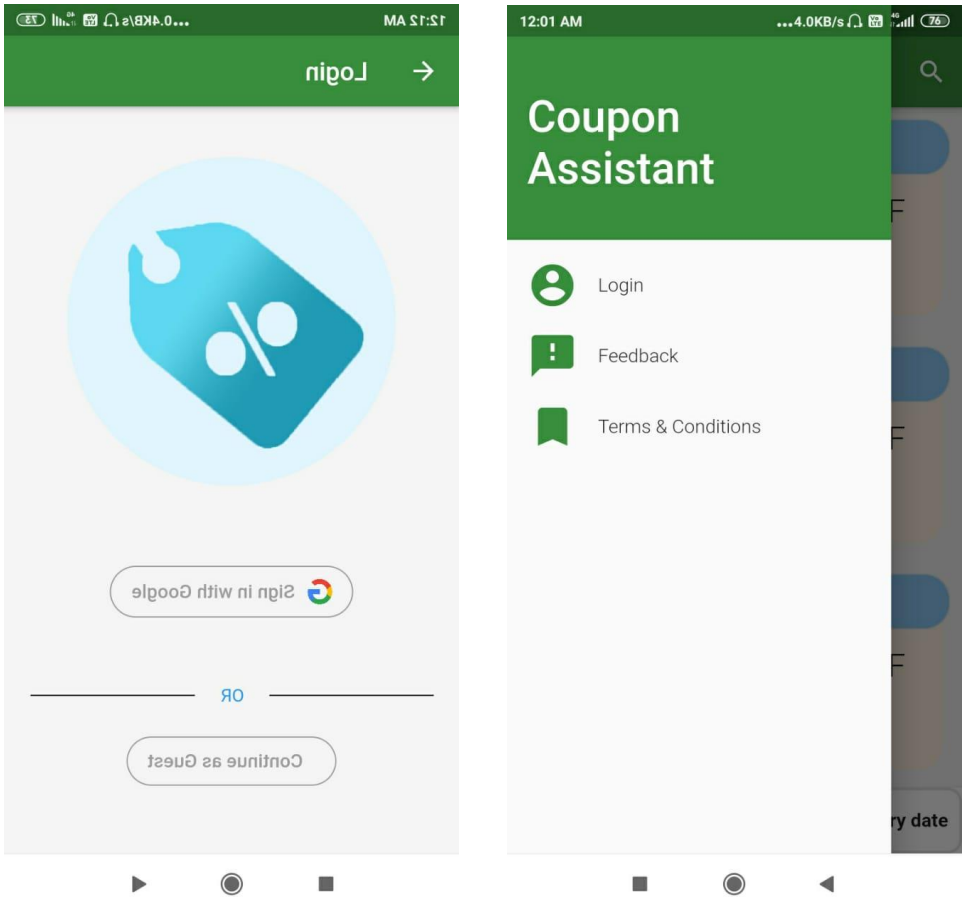


Figure1: User login Page

System functional requirements are specified by use stories and specific requirements. The use case helps understand system behavior, and the specific requirements extend the information from the use case.

6.2 USER STORIES

As per enterprise requirements, user stories formed from perspective of different users are as follows:

1. As a new user

User story id	I want to	So that	Acceptance criteria
1	Be able to register on the app	I can use the features of the app.	Valid Login (Valid Email, valid password)
2	Be provided with the terms and conditions	I can understand the policy and risks related to the use of the app.	

2. As a registered user

User story id	I want to	So that	Acceptance criteria
1	Be able to login into the app	I can access the features provided	Valid Login (Valid Email, valid password)
2	Be able to reset forgotten username and password	I can access the app again	Ask for registered email id and validate email id.
3	Be able to enter my coupons details manually	In the future I can access it.	Valid coupon detail
4	Scan and take images of coupons.	I can store it and use it in the future.	Valid image of a coupon
5	Be able to browse coupons and offer category wise.	I can efficiently conduct my search for a coupon	
6	Filter coupons and offers	I can get coupons and offers as per my need	
7	Be able to set reminders for the coupons	I can make use of it accordingly	Validate time & date of expiry and reminder

8	Take screenshot or scan coupon	The details are stored into the app instantly	1. Valid coupon 2. Clear image
9	Chat with the system	I can clear my doubts regarding the app features	1. Existing Question 2. Customer care should be available
10	Be able to share offers and coupons	My friend or other person can use it.	Validate user id/email id
11	Be able to browse my coupon history	I can keep track of the coupons used	
12	Be able to track of my savings through coupons and offers till date	I can get an idea about my savings.	
13	Be able give review and feedback	I can give suggestion or support the app	
14	Be able to contact the customer care	I can clarify my queries regarding the app	Customer care should be available
15	Keep my privacy maintained	Misuse of my personal information is avoided	

6.3 SYSTEM FUNCTIONAL REQUIREMENTS:

1. **Validate the User**: The system should be able to Validate the user and provide solutions in case of wrong/forgotten Username and Password.
2. **Access Mail Accounts Of registered users**: The system should be able to check for arrived mails of offers/coupons from Gmail and update their database
3. **Update the General Coupons and Offers**: The system should keep track of general coupons and offers of the online shopping sites.
4. **Reminder System**: The system should provide timely reminders to the users about the coupons which are expiring in the near future.

5. **Interaction Forum**: The system should be able to provide a solution to clarify the questions and problems of the users.
6. **Sharing Forum**: The system should be able to provide a dashboard for the users who wish to share their coupons and offers.
7. **Coupon History**: The system should be able to track the history of coupons that were used so as to keep a track of savings of all users.

6.4 NON-FUNCTIONAL REQUIREMENTS

1. Privacy: The system should be able to provide privacy to the users so that their data is not being misused.
2. Availability: The system should be available 24x7 hours for the users.
3. Scalability: The system should be able to cater to the needs of several users at a time.
4. Speed: The system should be able to keep up with the speed of the reminder system.
5. Recoverability: The system should be able to recover its data in case of a crash.
6. Usability: The software should be user friendly and no expertise should be required to use the software. New people using the application should be able to get used to the software functions easily.
7. Quality: If an error occurs, it should not lead to crashing of the app. Instead the user should be able to report the bug via a “Report This Bug” medium.

7. PROCESS MODEL DESCRIPTION

We are using Scrum implementation of Agile methodology. We have chosen agile methodology because it is an iterative methodology using which we can manage changes better and build products that will satisfy the users', clients' and all other stakeholders' needs. In this model, we keep all the requirements in the product backlog. Then we divide the product backlog in the scrums and then the requirements that are kept in a scrum are completed within predetermined time. Usually the duration of a scrum is 3-5 weeks.

8. FEATURES

FEATURES LIST:

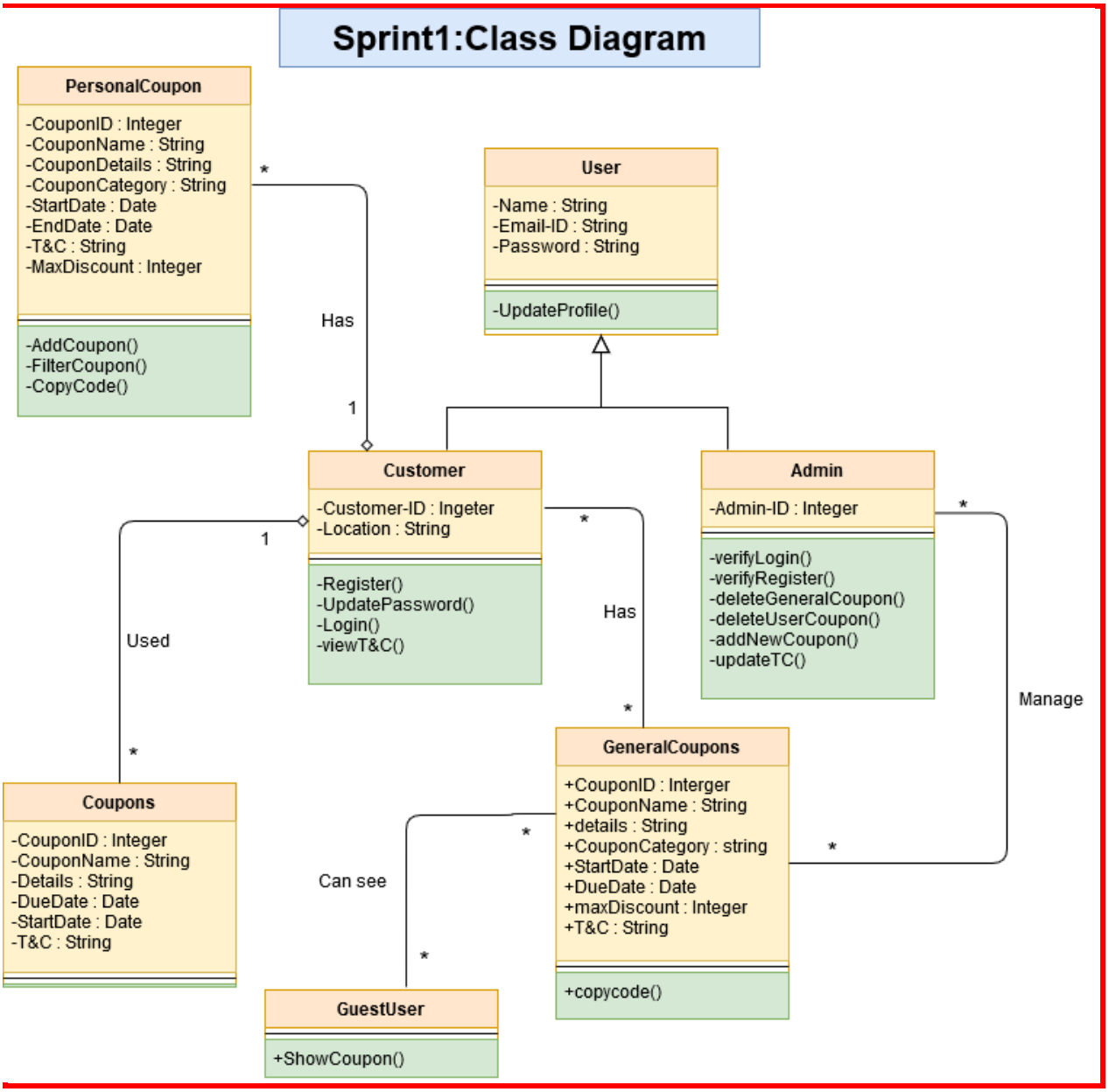
1. Login and Signup page, so as to be able to input user details and requirements.
2. T&C page for asking different permissions from users with the Agree and Decline button.
3. User interface to display options for selecting different ways of inputting coupons details:
4. Manually entering the coupon details.
    a. By reading the mailbox
    b. By scanning or taking images of coupons.
    c. All of the above.
    d. Searching coupons and offers category wise or app wise:
        i. Shopping
        ii. Travel
        iii. Hotel Booking
        iv. Food
        v. Entertainment
        vi. Subscriptions
        vii. Medicines
        viii. Recharge/Bills
        ix. Others
5. Keeping records of all general coupons and offers in the database.
6. Different options for filtering coupons and offer.
    a. Category wise
    b. Expiry date
    c. Maximum Discount
    d. T&C of different Coupons
    e. Redeem locations
7. Reminders at regular intervals about coupons and offers (Through notifications).
    a. While checking out of a particular app whose coupon is there in the database.
    b. At a particular time before the expiry date.
    c. While entering the store where the coupon is applicable from the database (using GPS).
8. Scan coupon barcode to input coupon details automatically.
9. Take a screenshot or scan coupon to input coupon details automatically into the app like the expiration date, total percentage of discount etc.

10. App will automatically enter coupon and offer details into the app database after reading the user's mailbox with their permission.
11. Chatbot for interactive performance which will allow users to search and chat with a system in Q&A format (optional).
12. Option for sharing coupons code and offers with others through different mediums.
13. Coupons history.
14. User account settings
    a. General settings.
    b. Notifications settings
    c. Permission settings
    d. Logout
15. About Us
16. FAQ
17. Feedback option
18. Review us
19. Contact us

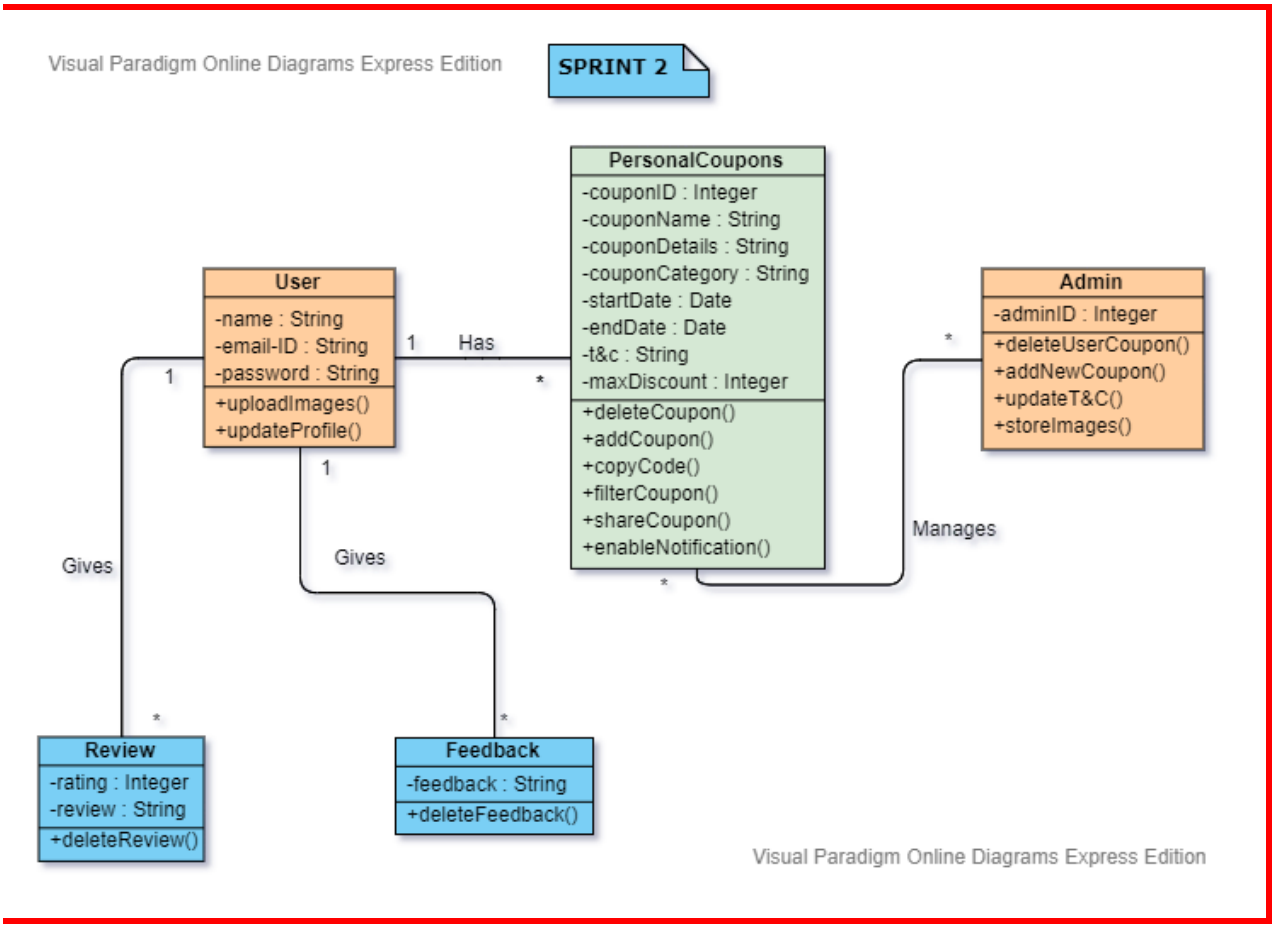
9. DIAGRAMS AND USE CASES

9.1 CLASS DIAGRAMS

9.1.1 CLASS DIAGRAM FOR SPRINT 1

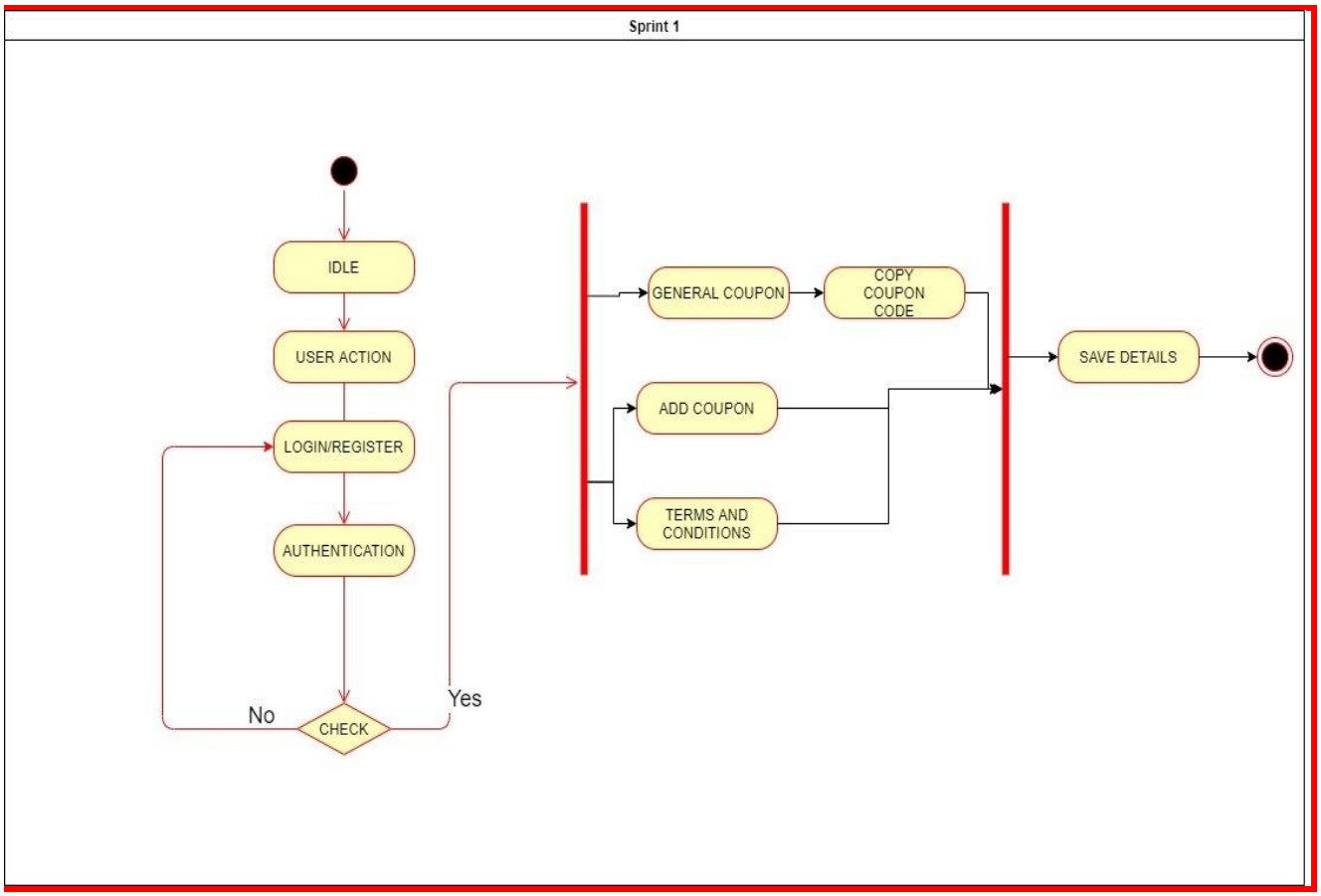


9.1.2 CLASS DIAGRAM FOR SPRINT 2

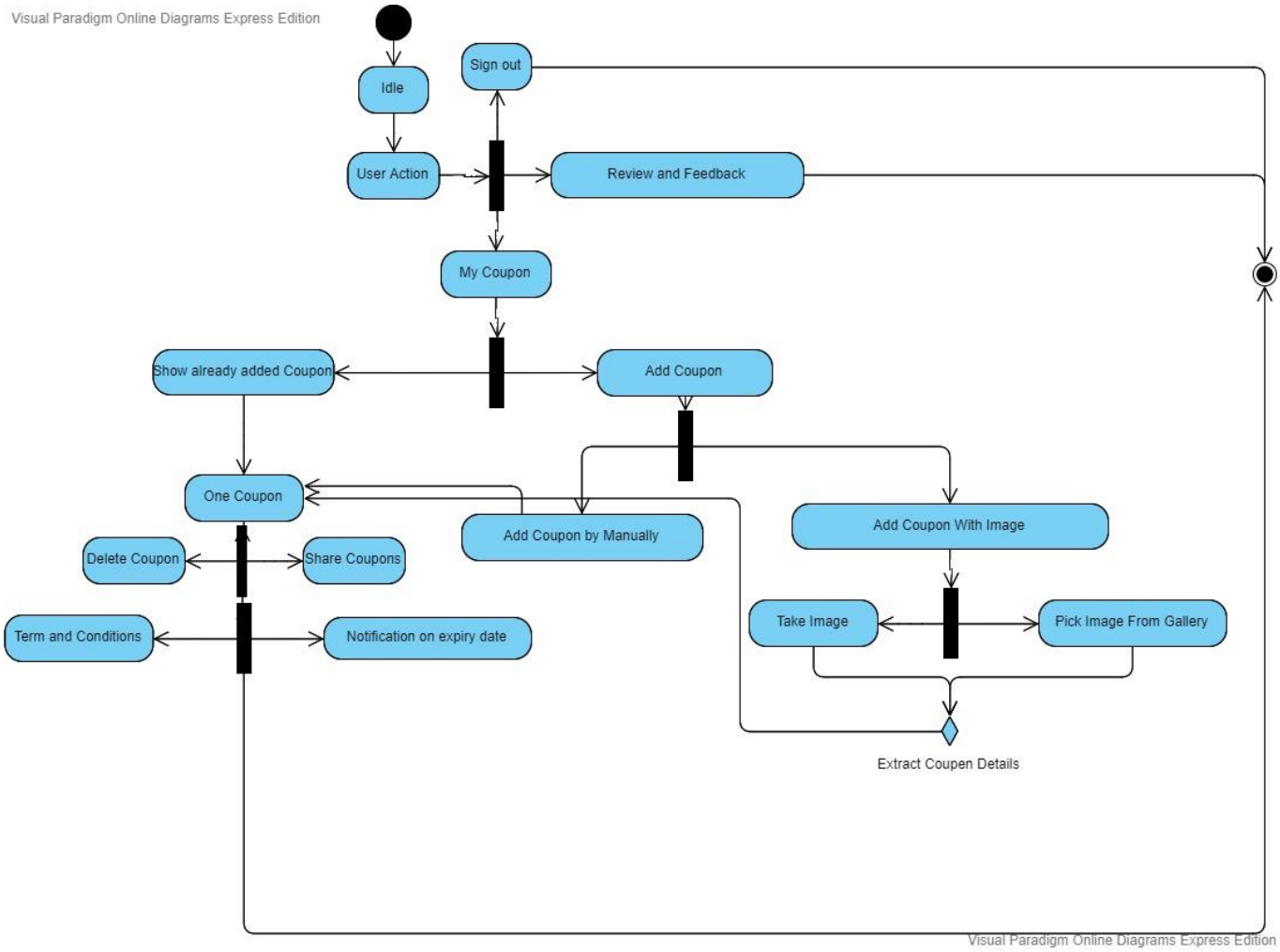


9.2 ACTIVITY DIAGRAMS

9.2.1 ACTIVITY DIAGRAMS FOR SPRINT 1



9.2.2 ACTIVITY DIAGRAM FOR SPRINT 2



9.3 USE CASES

9.3.1 USE CASES FOR SPRINT 1

Use Case Number	UC-1
Use Case Name	Log in

Participating Actor	User, System Admin
Description	This use case describes how a user can login to the App.
Entry Condition	None
Exit Condition	If the use case was successful, the actor is now logged into the system, if not system state is unchanged.
Event Flow	1) The system requests that the actor enter his/her Gmail id and password. 2) The actor enters his or her Gmail id and password. 3) The System validates the entered name and password and logs the actor to the system. The System redirects an actor to the home page.
Alternate Flow	1). Invalid Mail ID or Password: If in the Basic Flow the actor enters an invalid name and/or password, the system displays an error message. The actor can choose to either return to the beginning of the Basic Flow or cancel the login, at which the use case ends.

Use Case Number	UC-2
Use Case Name	Forgot Password
Participating Actor	User, System Admin
Description	This use case describes how a user can reset the password if he or she has forgotten his/her password.
Entry Condition	The Customer has selected the option called forgot the password.
Exit Condition	If the use case was successful, the actor is now redirected to the homepage and shows coupons, if not the system state is unchanged.

Event Flow	1) The System requests the actor to enter his/her Gmail address. 2) The Actor enters his/her Gmail id. 3) The System sends a link from which an actor can reset his/her password. 4) The Actor opens his/her Gmail and goes to that link. 5) The Actor enters a new password twice and selects the option called "reset password". 6) The System redirects the user to the home page and updates the password in the database. 7) The System asks the actor to save the password or not for future use. 8) The Actor selects an appropriate option and the system redirects the full page to the actor.
Alternate Flow	1) Invalid mail-id: Entered mail should be verified by the system and check whether the entered Gmail address is valid or not. If not, then displays an error message and asks the actor to enter a mail address for another type. 2) Check the match between both the password (B5): The system checks whether both the passwords are the same or not. If not, then displays an error message to write the same password in both the boxes.

Use Case Number	UC-3
Use Case Name	Manual Entry for Coupon
Participating actor	User, System Administrator
Description	This use case describes how a user can enter his/her coupon manually.
Entry Condition	1). User has logged into the system. 2). User has selected the option called "Enter coupon Manually".
Exit Condition	After successful insertion of coupon manually, system updates it's database and displays updated list to the user.

Event Flow	1). System displays option to choose the coupon manually. 2) User will select any one option out of three. 3) System shows features according to the selected option. 4) User will select coupon and click on the ok button 5) The System updates this coupon in the database of that user and displays it in the coupon menu.
Alternate Flow	1). In the reading option, if the coupon has expired then the system displays a message that coupon has already expired. 2). If the coupon already exists in the database, then the system displays a message that coupon already exists.

9.3.2 USE CASES FOR SPRINT 2

Use Case Number:	UC-1
Use case name:	Extract Coupon Details
Participating actor:	User, System Admin
Description:	Extract Coupon codes from uploaded images
Entry Condition:	User should be registered in the system
Exit Condition:	After extraction, the system will show the coupon in the user's database
Event flow:	1. The user uploads the picture of the coupon via gallery or camera. 2. The system scans the uploaded image and extracts the coupon details. 3. The details are then displayed in the user's coupon collection database.
Alternate flow:	1. If the user uploads an invalid image, the system should display an error and ask for a reupload.

Use Case Number:	UC-2
Use case name:	Notification on Expiry Date
Participating actor :	User, System Admin
Description:	Notification will be sent to the user prior to the expiry date
Entry Condition:	User should have at least one coupon in his database
Exit Condition:	User is reminded before the coupon expires.
Event flow:	1. The system constantly checks the user's database for coupons that are about to expire. 2. A notification is sent to the user with the expiry date and description of the coupon.
Alternate flow:	

Use Case Number:	UC-3
Use case name:	Share coupons and offers
Participating actor:	User
Description:	Share the details of the coupons with other users
Entry Condition:	User should have valid coupons in his/her database
Exit Condition:	After sharing, the coupons should be displayed on the dashboard
Event flow:	1. The user selects the coupon he/she wants to share. 2. The user shares the details of the coupon on the general dashboard.
Alternate flow:	

Use Case Number:	UC-4
Use case name:	Feedback and Review
Participating actor:	User
Description:	Provide Feedback and Review
Entry Condition:	User should be registered in the system
Exit Condition:	After the entry of feedback/review, the system should register it in it's database.
Event flow:	1. The user enters the feedback/review for the system. 2. After entering the feedback/review, it is displayed in the review forum.
Alternate flow:	1. If the user enters offensive language, the system should display an error.

10. TEST CASE DOCUMENTATION

LOGIN TEST CASE

TEST CASE ID	TEST SCENARIO	TEST STEPS	TEST DATA	EXPECTED RESULT	ACTUAL RESULT	PASS/FAIL
TU01	Check user Login with valid Data	1. Go to app 2. Click on login 3. Click login with Gmail. 4. Select Gmail ID	Mail id=temp@gmail.com	User should be logged in to the application	As expected	Pass
TU02	Check user login with invalid data	1. Go to app 2. Click on login 3. Click login with Gmail 4. Select Gmail ID	Mail id= temp@gmil.com	User should not be logged in to the application	As expected	Pass

MANUAL COUPON ENTRY

TEST CASE ID	TEST SCENARIO	TEST STEPS	TEST DATA	EXPECTED RESULT	ACTUAL RESULT	PASS/FAIL
TU01	Valid and successful manual	1. Login into app	- Swiggy - GPAYNEWNQN8IBOL	Coupon entry should be	As expected	pass

	entry of coupons	2. click 'Your coupons' 3. click on '+' sign 4. enter coupons details	- 22nd april,2020 - 50% OFF - On first order on swiggy Apply promo code at checkout	successfully reflected in users personal coupons section		
TU02	Valid and unsuccessful Manual entry of coupon	1. Login into app 2. click 'Your coupons' 3. click on '+' sign 4. enter coupons details	- Swiggy - GPAYNEWNQN8IBOL - 22nd april,2020 - 50% OFF - On first order on swiggy Apply promo code at checkout	Coupon entry should not be reflected in users personal coupons section	As expected	pass
TU03	Invalid manual entry of coupon	1. Login into app 2. click 'Your coupons' 3. click on '+' sign 4. enter coupons details	- Swiggy - GPAYNEWNQNL - 22nd april,2020 - - On first order on swiggy Apply promo code at checkout	Coupon entry should not be reflected in users personal coupons section	As expected	pass

COPY COUPON CODE

TEST CASE ID	TEST SCENARIO	TEST STEPS	TEST DATA	EXPECTED RESULT	ACTUAL RESULT	PASS/FAIL

TU01	Successful copying of coupon code	1. login to app 2. go to personal coupons 3. select coupon 4. click on copy icon	Coupon code	Coupon code must be copied to clipboard	As expected	Pass
TU02	Unsuccessful copying of coupon code	1. login to app 2. go to personal coupons 3. select coupon 4. click on copy icon	Coupon code	Coupon code will not be copied to clipboard	As expected	Pass

SHOW GENERAL COUPONS

TEST CASE ID	TEST SCENARIO	TEST STEPS	TEST DATA	EXPECTED RESULT	ACTUAL RESULT	PASS/FAIL
TU01	Successful display of all the general coupons from the database	Open the application	None	All general coupons should be fetched from database and should be visible on general coupons section	As Expected	Pass
TU01	Unsuccessful display of all the general coupons	Open the application	None	Not All general coupons should be fetched from	As Expected	Pass

	from the database			database and visible on general coupons section		

EXTRACT INFORMATION FROM UPLOADED IMAGE

TEST CASE ID	TEST SCENARIO	TEST STEPS	TEST DATA	EXPECTED RESULT	ACTUAL RESULT	PASS/FAIL
TU01	Successful capturing of a clear image of a coupon through the camera of the mobile	1. Login to App 2. go to 'Your coupons' section 3. click on camera icon 4. click on 'click an image'	Clear and vivid poster or advertisement of the offer, coupon or deal.	Clear image of the offer, coupon or deal must be captured	As expected	Pass
TU02	Unsuccessful capturing of a clear image of a coupon through the camera of the mobile	1. Login to App 2. go to 'Your coupons' section	Clear and vivid poster or advertisement of the offer, coupon or deal.	Clear image of the offer, coupon or deal will not be captured	As expected	Pass

		3. click on camera icon 4. click on 'click an image'				
TU03	Successful upload of an image from the photo gallery of the mobile	1. Login to App 2. go to 'Your coupons' section 3. click on camera icon 4. click on 'pick an image'	Clear and vivid image of the offer, coupon or deal.	Clear image of the offer, coupon or deal must be uploaded from the photo gallery of the mobile	As expected	Pass
TU04	Unsuccessful upload of an image from the photo gallery of the mobile	1. Login to App 2. go to 'Your coupons' section 3. click on camera icon	Clear and vivid image of the offer, coupon or deal.	Clear image of the offer, coupon or deal will not be uploaded from the photo gallery of the mobile	As Expected	Pass

		4. click on 'pick an image'				
TU05	Successful extraction of coupon details from the uploaded or captured image	1. Login to App 2. go to 'Your coupons' section 3. click on camera icon 4. click on 'pick an image' or 'click an image' 5. Click on 'Read Text'	Clear and vivid image of the offer, coupon or deal.	All the required coupon details are successfully extracted from the captured or uploaded image and entered into the database	As Expected	Pass
TU06	Unsuccessful extraction of coupon details from the uploaded or captured image	1. Login to App 2. go to 'Your coupons' section 3. click on	Clear and vivid image of the offer, coupon or deal.	All the required coupon details are not extracted from the captured or uploaded image	As Expected	Pass

		camera icon 4. click on 'pick an image' or 'click an image' 5. Click on 'Read Text'				

SHOW COUPONS IN PERSONAL COUPONS SECTION

TEST CASE ID	TEST SCENARIO	TEST STEPS	TEST DATA	EXPECTED RESULT	ACTUAL RESULT	PASS/FAIL
TU01	Successful display of all the coupons entered by capturing or uploading image in the personal coupon section		Coupon details extracted from the captured or uploaded image and entered into the database	All the entered personal coupons should be fetched from database and should be visible in personal coupons section	As expected	Pass
TU02	Unsuccessful display of all the coupons entered by		Coupon details extracted from the	All the entered personal coupons will	As expected	Pass

	capturing or uploading image in the personal coupon section		captured or uploaded image and entered into the database	not be fetched from database and will not be visible in personal coupons section		

NOTIFICATION BEFORE AN EXPIRY DATE

TEST CASE ID	TEST SCENARIO	TEST STEPS	TEST DATA	EXPECTED RESULT	ACTUAL RESULT	PASS/FAIL
TU01	Unsuccessful notification before an expiry date of the coupon	None	Coupons already available in the database of the applications	User is successfully notified before the expiry date of the coupon	As expected	Pass
TU02	Successful notification before an expiry date of the coupon	None	Coupons already available in the database of the applications	User is not successfully notified before the expiry date of the coupon	As expected	Pass

REVIEW AND FEEDBACK

TEST CASE ID	TEST SCENARIO	TEST STEPS	TEST DATA	EXPECTED RESULT	ACTUAL RESULT	PASS/FAIL
TU01	Successful submission of feedback and review by the user	1. Open the app 2. Go to 'Review & Feedback' 3. Select the option 4. Submit the feedback	Feedback and review rating	Feedback and review successfully received by the stakeholders of the application	As expected	Pass
TU02	Unsuccessful submission of feedback and review by the user	1. Open the app 2. Go to 'Review & Feedback' 3. Select the option 4. Submit the feedback	Feedback and review rating	Feedback and review not received by the stakeholders of the application	As expected	Pass

11. MINUTES OF MEETING

Following are the meetings except the lab meetings.

1. Time: 2nd February

   Duration: 1 hour

   Location**:** LT1 Foyer

   Objective: To make activity diagram and sprint

   Every member of the group was assigned to pick out at least 3 unique ideas for a software from the pdf and on their own. Each member was asked to present their ideas and the other members had to list down the advantages and disadvantages of the software along with the usefulness of the software. A topic was narrowed down and the detailed features were listed.

   Outcome: “Coupon Utilization and Reminder System” was decided.

   Members Present: All members of the group were present.

2. Time: 3rd February

   Duration: 2 hours

   Location**:** Cafeteria

   Objective: Requirement Elicitation.

   In this meeting, we discussed various requirements of the users that should be included in our project. Many ideas were brought by the members. A group discussion was held. We collected all the ideas on a list and prioritized the requirements.

   Outcome: We prepared a list of requirements that were essential.

   Members Present: All members of the group were present.

3. Time: 12th February

   Duration: 2 hours

   Location**:** Cafeteria

   Objective: To Make concept posters.

This meeting focused on the making of the concept poster. Every member was responsible for listing down the important points to be included in the concept poster.

Outcome: Logo, name and other salient features were decided and a Concept poster for the topic was created.

Members Present: All members of the group were present.

4. Time: 19th February

   Duration: 2 hours

   Location**:** Cafeteria

   Objective: To create activity diagram and class diagram

   The meeting was held to create the activity diagram and class diagram as per the sprint and discuss the sprint in detail.

   Outcome: Activity and class diagram was made.

   Members Present: All members of the group were present.