

Food Mania Application

Higher National Diploma in Software Engineering

Final Project Documentation

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National Institute of Business Management

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Project Title

Title of the project : “Food Mania” Android Application

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“This project is submitted in partial fulfillment of the requirement of the Higher National Diploma in Software Engineering of National Institute of Business Management, Colombo.”

10.06.2021

Declaration

We certify that this project does not incorporate without acknowledgment, any material previously submitted for a higher national diploma in any institution, and to the best of our knowledge and belief, it does not contain any material previously published or written by another person or ourselves except where due reference made in the text.

We also hereby give consent for our project report, if accepted, to be made available for photocopying and interlibrary loans, and for the title and summary to be made available to outside organizations.

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Preamble

Abstract

Nowadays “Food” has become fashionable in society and as a result, individuals are more eager to try new recipes.

Users can create user-profiles plus, connect with friends, share the latest news, and discover what other people are up to with the "Food Mania" app. It populates your newsfeed with posts based on your interests and following.

Food Mania allows you to create user profiles and collaborate with other Food Mania users to share your food craze. Frequent photo-taking can signal underlying eating disorders or unhealthy habits. Some argue that it can make us gain more weight, as we start to obsess about food and regard meals as magnets for likes.

Finding the finest recipes, seeing fantastic food related posts, and cooking wonderful meals is much easier with the Food Mania app.

Food Mania is a great platform for those with special culinary skills such as chefs and cake bakers. Users can hire these skill sellers by using the location.

Food Mania serves you to hold video conferences with friends you care about. It is a key feature of Food Mania application. Users can share their knowledge by conducting meeting sessions. When you create a meeting, others can join through either a shareable link or have the facility to meet specific users within the app.

There is a chat feature with video conferencing, and it is a way of conversing with the participants of a meeting via text messages and file sharing. It allows chatting only with those who are connected to each other through a conference call.

If you are interested in trying different kinds of foods, you can find restaurants around you easily through food mania.

So that, “Food Mania” would be very useful if we had easy to find recipes to prepare the food we need whenever we feel hungry.

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Chapter 1: Introduction

1.1 Introduction of the Application

Food is the basic human need to stay alive. Moreover, it is the need of every living organism. Nowadays food has become trending among the society, because of that people are willing to try a different kind of dishes.

Food, the cure to all problems in this world, turns out to be more than just something that satisfies our hunger and aids our bodies with survival. The act of food-sharing and feeding is a big indicator of the level of intimacy within relationships.

Social media can be a divisive place but if there's one thing that unites us all, it's food. Therefore, it is better to have a social platform that allows to sell, buy, and share their food ideas. Especially the young generation likes to try out various tastes. Whether the people are reviewing restaurants, posting food pics or hashtagging their favorite snacks, foodies are out in force on social media. Food photos are huge on social media because they're both easy to produce and relevant to everyone.

The past year has been a roller-coaster for food consumption and eating trends. Restaurants scrambled to offer home delivery services following lockdown orders.

Not only that, but we can also keep our focus on restaurants to expand their marketplace, content-creators who create food recipes, people who are willing to sell their cooking skills and all other food lovers.

It will help to be inspired by thousands of free tasty and healthy recipes, instructional videos, and articles about cooking and baking for real foodies. Plus, publish your own food recipes to share with our global community of hungry home cooks. It's easy to use and offers a variety of irresistibly tasty and healthy recipes that appeal to beginners and experts alike.

1.2 Problem Definition

Many people are accustomed to using social media to share food related content, but a food only platform has not yet emerged.

A huge segment of people seems to do just that: according to Business2Community, 23% of all social media users photograph their food for a photoblog or as a food diary.

Not only that but there is also a lack of a social platform that provides all buying, selling, hiring, sharing food related things in one place. Only a unique task can be done through existing social media or mobile apps. It is hard to use two, three apps together to fulfill our requirements. Therefore, there is a need to have everything in one application to facilitate our needs.

There is no proper digital application to hire a chef as soon as you needed.

We can elaborate on the sub-problems we have identified as social media platforms do not have a proper video conferencing feature. If someone wants to hold a video conference, they must use Zoom, MS Teams, Google Meet or any other server that supports video conferencing.

1.3 Project Objectives

- Show off the skills by uploading our own cooking and baking recipes to share with our international community.
- Be inspired daily by thousands of free food recipes, tips, and articles and have a taste of home.
- Learn how to cook – become a kitchen pro with instructional video conferences and skill tutorials.
- Hire skill sellers as soon as we needed.
- Browse our favorite restaurants.
- Setup the personal profile and upload photos of the dishes we've cooked and exchange cooking experiences with others.

1.4 Proposed Solution

We are hoping to develop an android application called “**Food Mania**” which allows you to create accounts and share recipes, businesses, photos, stories, videos, and cooking skills with the friends and followers you care about.

Taking a photo of your food is a form of ritualistic behavior, too. In a way, it's similar to praying before meals. A series of experiments published in Psychological Science showed that people who perform brief rituals before eating reported that they enjoyed the food more compared to those who simply sat down and consumed it right away. A longer delay between the ritual and the meal works even better, as it increases pleasure anticipation.

Plus taking a photo during a positive experience (bus tour around a city, a meal) can make us feel happier - so long as it doesn't interfere with the experience itself.

Users can share their knowledge by holding video conference meeting sessions. It not only creates a culture of a more collaborative meeting between food-loving communities but is also the basis for activating the current digital workforce.

Therefore, “Food Mania” will be a great hit among the society in near future.

Functional Requirements

- Login and Registration –

People can login as a normal user or a business user (restaurants and shops) or a skill seller by creating a user account.

If the user ever forgets his/ her password, he/she can recover the password by using the "Forgot Password" option.

It will send an auto-generated verification code to user's email.

- Manage user account –

User can customize the account according to his/her dietary preference and they can manage their personal profile information along with the user image. After creating their user accounts, they can edit and modify according to their needs.

- Place orders –
Users can contact a range of restaurants and suppliers to order the cuisine and food items they crave according to their dietary preference any time of the day by dropping a direct message.
- Manage news feed –
By using the “Food Mania” app you can connect with friends, share what you are up to, or see what is new from others. It will suggest posts to your news feed as you preferred and according to your followers.
Food mania app makes it even easier to find the best recipes, watch incredible food videos and cook delicious meals.
- Skill selling and buying –
Users can hire a skill seller such as a chef, cake baker and many more, by using the location.
- Browse restaurants –
Users can browse Restaurants and Suppliers within their vicinity by using the location to search for food according to item name and type of dish.
- Video conference –
Users can use video conference feature for live stream, conduct classes for food lovers and any other entertaining stuff. It has a chat feature and is a way of communicating with the participants of a meeting by texting and exchanging files. It only allows you to chat and file sharing among people who are connected by their video conference.

Non-Functional Requirements

- Performance –
This is a simple and lightweight android application.
- Portability –
This application can be download easily from Google play store.

- Security -

We maintain separate user-profiles normal users, business users, and skill sellers by creating accounts.

Unauthorized users should not be able to access the application.

Irrelevant posts and profiles will be automatically banned.

- Maintenance –

We would be able to do all the new updates according to the technology change.

By considering customer reviews, we would be able to update the app to be able to continue well maintenance.

- Reliability –

The application will run with fewer failures.

The definition of a failure will be clearly identified by using validations and exception handling. We will specify the consequences of application failure, how to protect from failure, a strategy for error detection, and a strategy for correction.

1.5 Chapter Summary

This chapter describes the application with the identified problem and the proposed solution.

There is a lack of social media platform which provides all buying, selling, hiring, sharing food-related things in one place. we had identified sub problems regarding that such as there is no proper video streaming facility to conduct meeting within the social media app.

“Food Mania” allows you to create accounts and share recipes, businesses, photos, stories, videos, and cooking skills with friends. By conducting video conferencing will allow users to share their knowledge with other food lovers, and it will make a huge platform for a collaborative community.

Chapter 2: Methodology

2.1 Introduction

This planning section describes what is used to obtain the solution.

Software development methodology refers to structured processes involve when working on a project. It is a mixture of design, philosophical and practical realism that stretches back to the early days of computing. The aim is to provide a systematic approach to software development.

2.2 Data Collection Methods

Interviews

We use interviews as our data collection method. We are unable to meet the person due to this pandemic situation we go for a telephonic interview.

We ask questions through telephones such as their idea about food-related social media platforms and the favoritism of sharing food-related things to be able to exchange their knowledge with others. It doesn't typically require extensive training on the part of the data collector, and he or she is generally not dependent on other participants.

Especially in this epidemic situation, we can't meet people at all. We used this observation technology to collect data over the phone.

Documents and Records

We have done extensive research on your competitors and similar application. It is efficient and inexpensive because we're predominantly using research that has already been completed. We collect and use data contained in web articles (scientific study) to gain a proper understanding of the current social media impact of food.

2.3 Software Process Model

We have used **Agile Methodology** as our Software Process Model.

The agile process model encourages continuous iterations of development and testing. Each incremental part is developed over an iteration, and each iteration is designed to be small and manageable so it can be completed within a few weeks.

It helps us to focus on fully implementing each small feature set. Plus, it considers that the system evolves through a series of short iterations if the requirements will change.

Scrum is our basic methodology. Scrum consists of iterations called sprints. Each sprint is between 2 to 4 weeks long and is preceded by planning. We assign a specific task in each sprint among our team members.

Requirements, design, development, testing, and deployment are the main steps we have taken. It improves team performance based on real-time, visual data that our team can use.

2.4 Software Development Tools

Front End – Android Studio - version 4.2 with android retrofit (2)

Backend – Laravel/PHP - version 7.4

Database – My SQL - version 5.0

Web Host – 000webhost

Admin UI – Html 5, CSS, Java Scripts

2.5 Testing Strategies

The main purpose of software testing is to design tests that systematically detect various types of errors without much time and effort, requiring less time for software development.

Before we start the test, it is necessary to quantify and specify the product requirements. We can customize the application to suit the needs of end users.

Then, we specify the objectives of testing in a clear and detailed manner. Our objectives of the tests are a success, which means that the software will be able to achieve the goal, the failure to meet the requirements and the performance of any failure, and the cost of shortcomings or errors.

As the third step, we identify the category of user and set up a profile so that each user can describe the interaction and communication between different classes of users to achieve the goal.

We used effective formal reviews as a filter. Formal technical review is the technology of fault detection that has not yet been discovered.

We use **Unit testing** to know whether the individual unit of the code is working properly or not and **Integration testing** to focus on the construction and design of the software.

As the developers, we do **White-Box testing** (the design and structure of the code are known to the tester) on our code with control flow testing and data flow testing techniques.

We provide input and observe the output generated by the system under test by using **Black-Box testing**. It makes it possible to identify how the system responds to expected and unexpected user actions, its response time, usability issues, and reliability issues.

Efficient technical reviews helped us prior to testing reduce the overall trial time of the software and significantly reduce the amount of testing effort and time required to test the software.

2.6 Implementation Plan

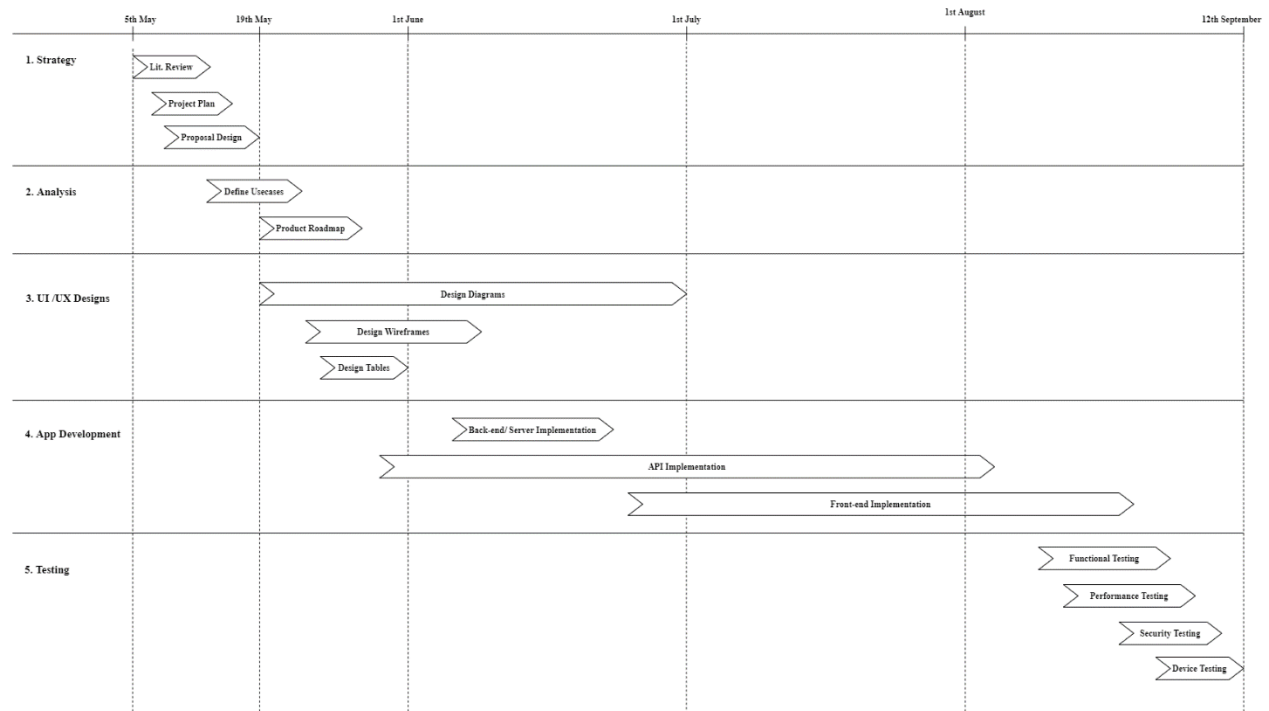


Figure 1 - Implementation Plan

2.7 Chapter Summary

This chapter includes Data Collection Methods, Software Process Models, Software Development Tools, Testing Strategies with our Implementation Plan.

Software development methodology provides a platform for developers to work together more efficiently as a team. Especially in this epidemic situation, we used this observation and questionnaire technologies to collect data through mobile phones. We had used Agile Methodology as our Software Process Model.

Chapter 3: Analysis

3.1 Introduction

This chapter describes the way of analyzing the problem. Plus, identify system requirements and identify limitations to system operation, growth, or evolution.

This chapter ensures that the software meets all the expectations of the users. Ensures that quality software is delivered to the user at the end of the production process. Upon completion of the software specification, a requirements document will be produced and validated by all parties.

We analyze, refine, and test the added requirements to meet fixed and ambiguous requirements.

This functionality reviews all requirements and can provide a graphical overview of the entire system.

It is hoped that the understanding of the project will be significantly improved once the analysis is completed.

3.2 Use Case Diagram of Proposed System

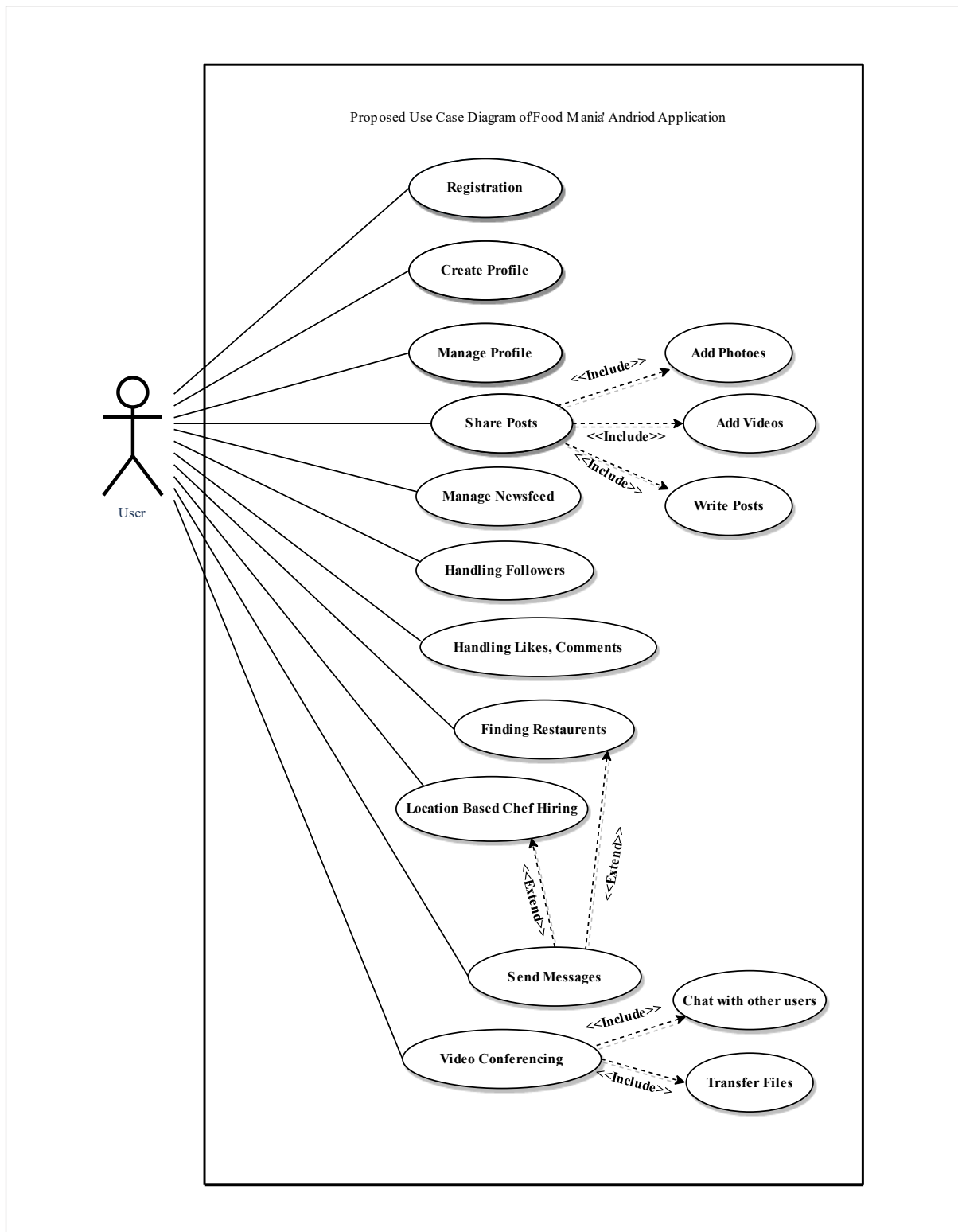


Figure 2- Usecase Diagram

3.3 Class Diagram of Proposed System

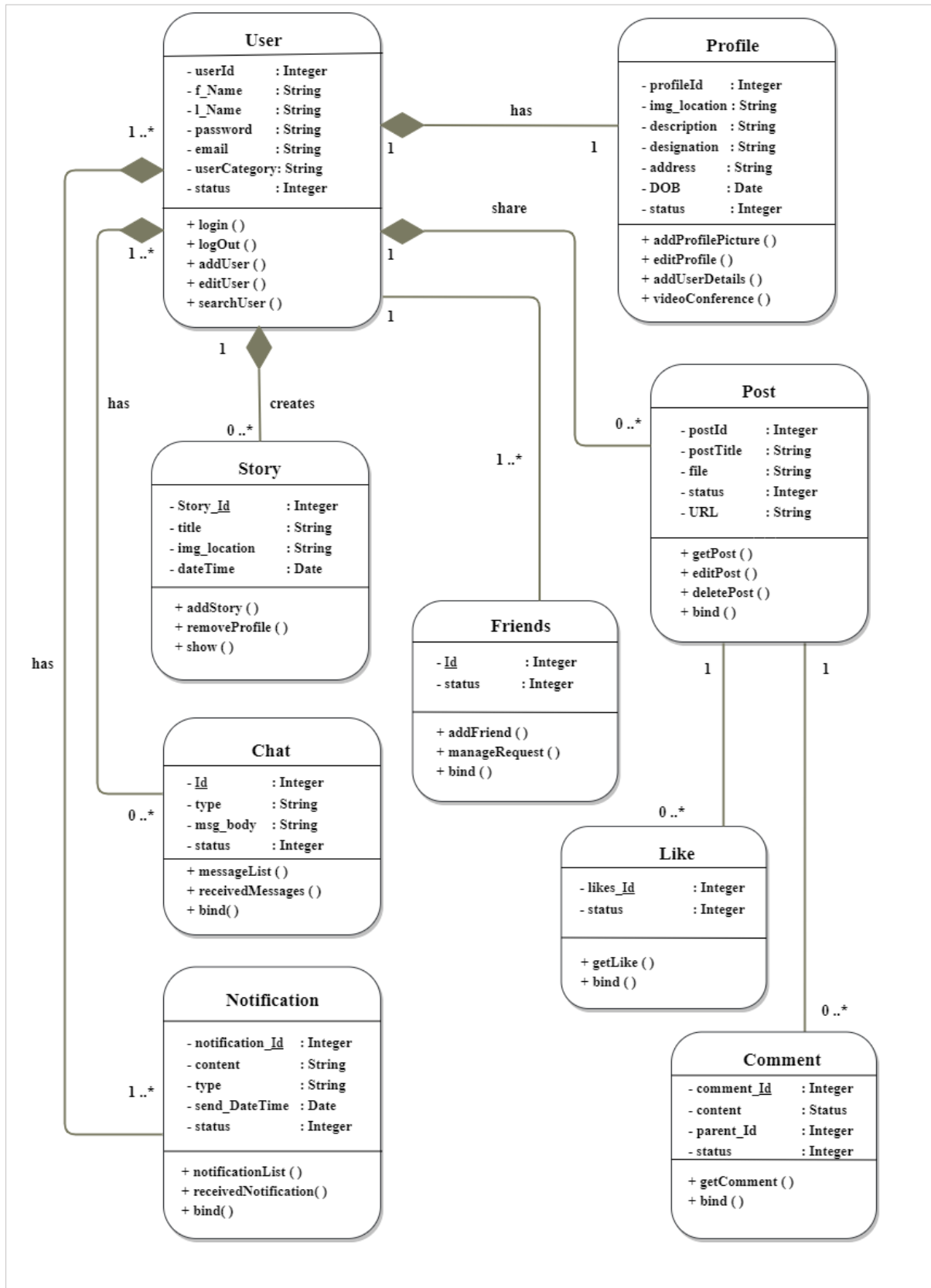


Figure 3 - Class Diagram

3.4 Sequence Diagram

3.4.1 Sequence Diagram of User Login

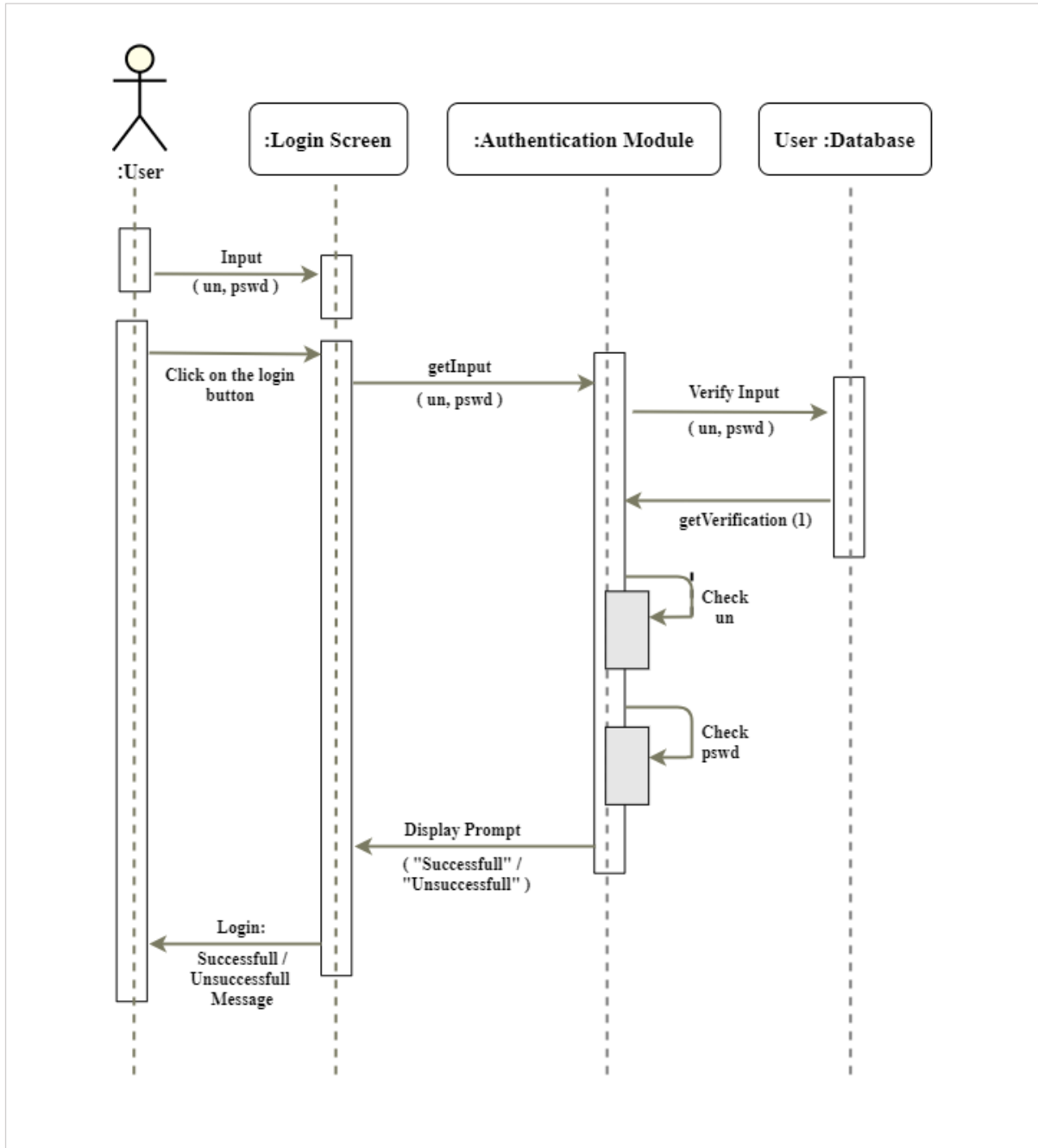


Figure 4 - Sequence Diagram of User Login

3.4.2 Sequence Diagram of User Registration

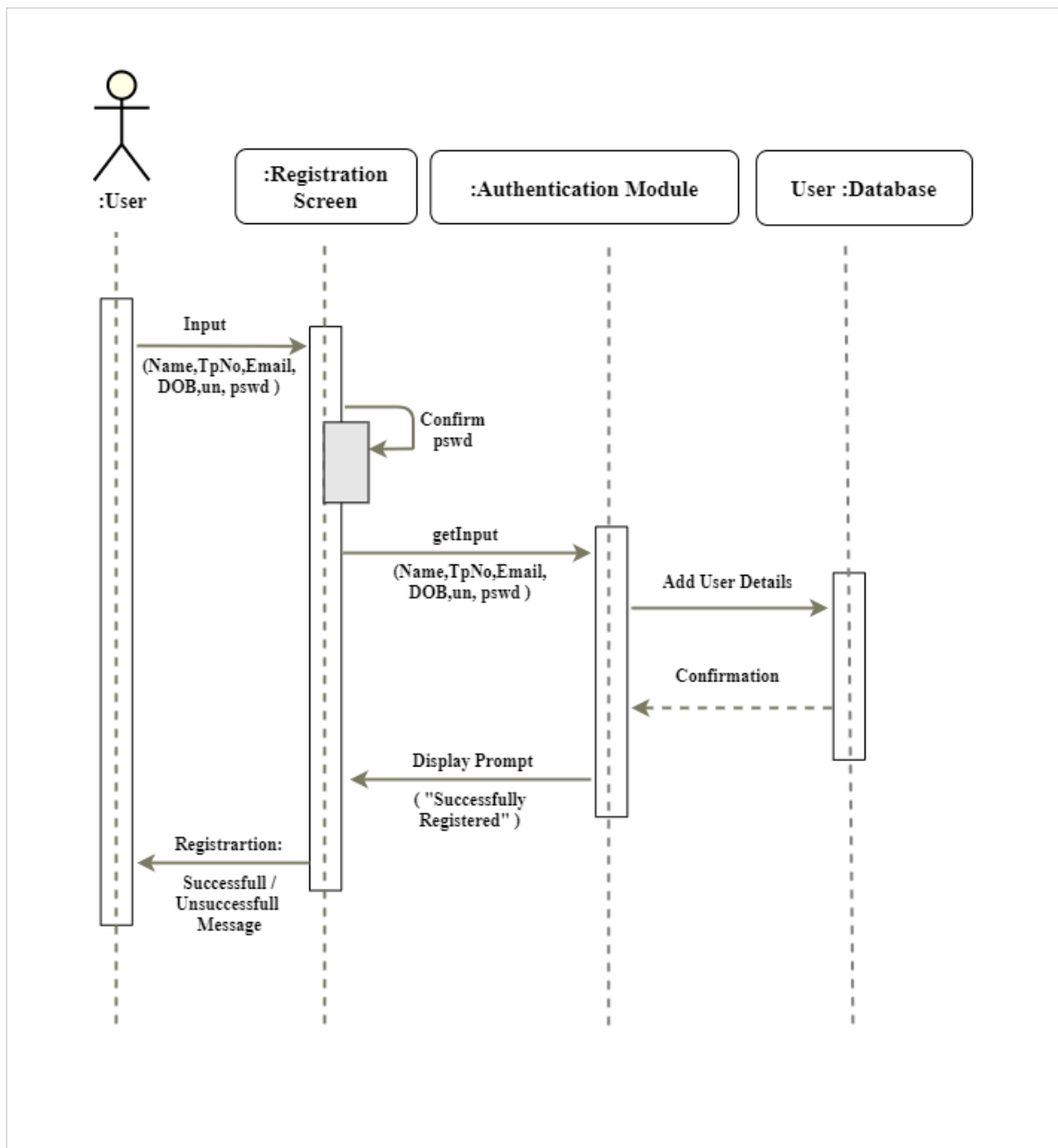


Figure 5 - Sequence Diagram of User Registration

3.4.3 Sequence Diagram of News Feed

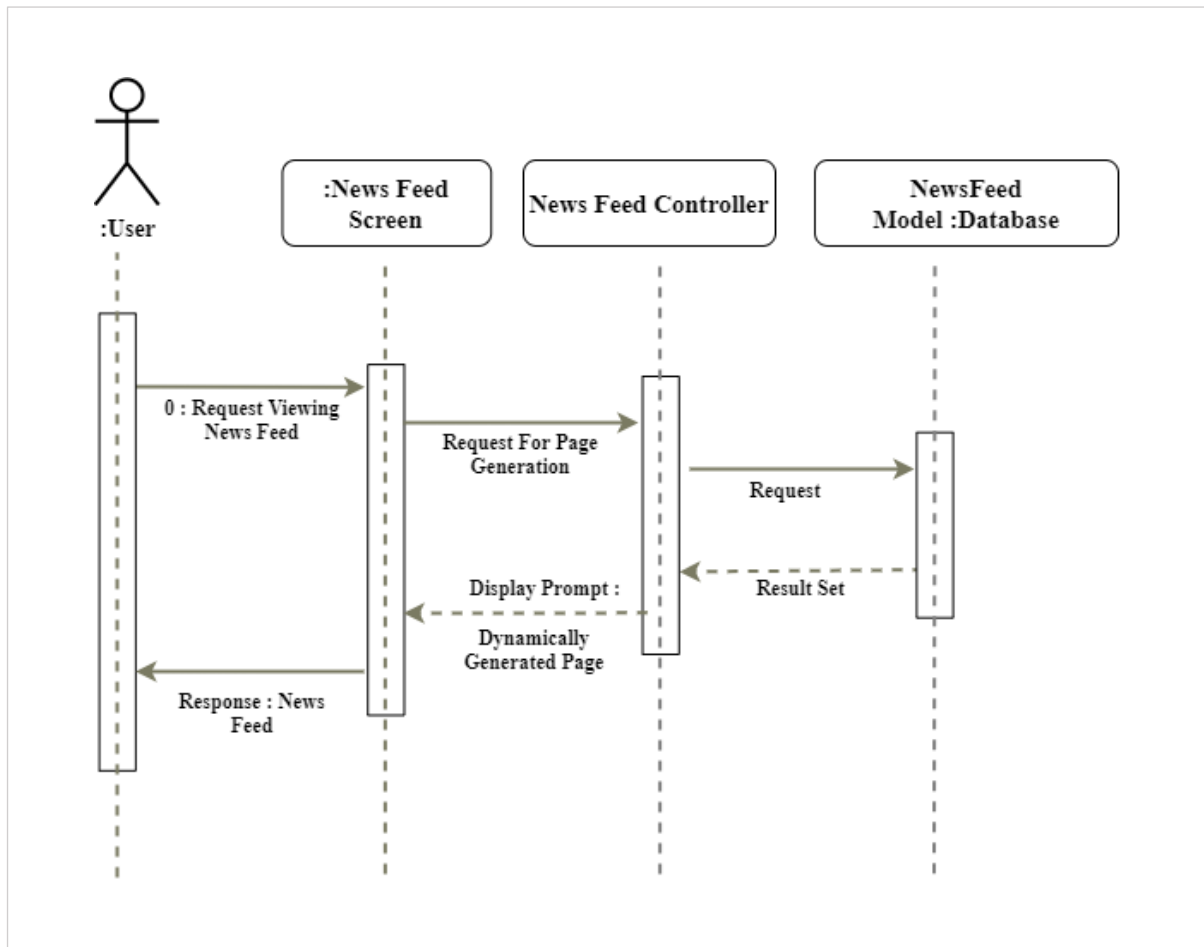


Figure 6 - Sequence Diagram of News Feed

3.4.4 Sequence Diagram of Friend/Unfriend Request

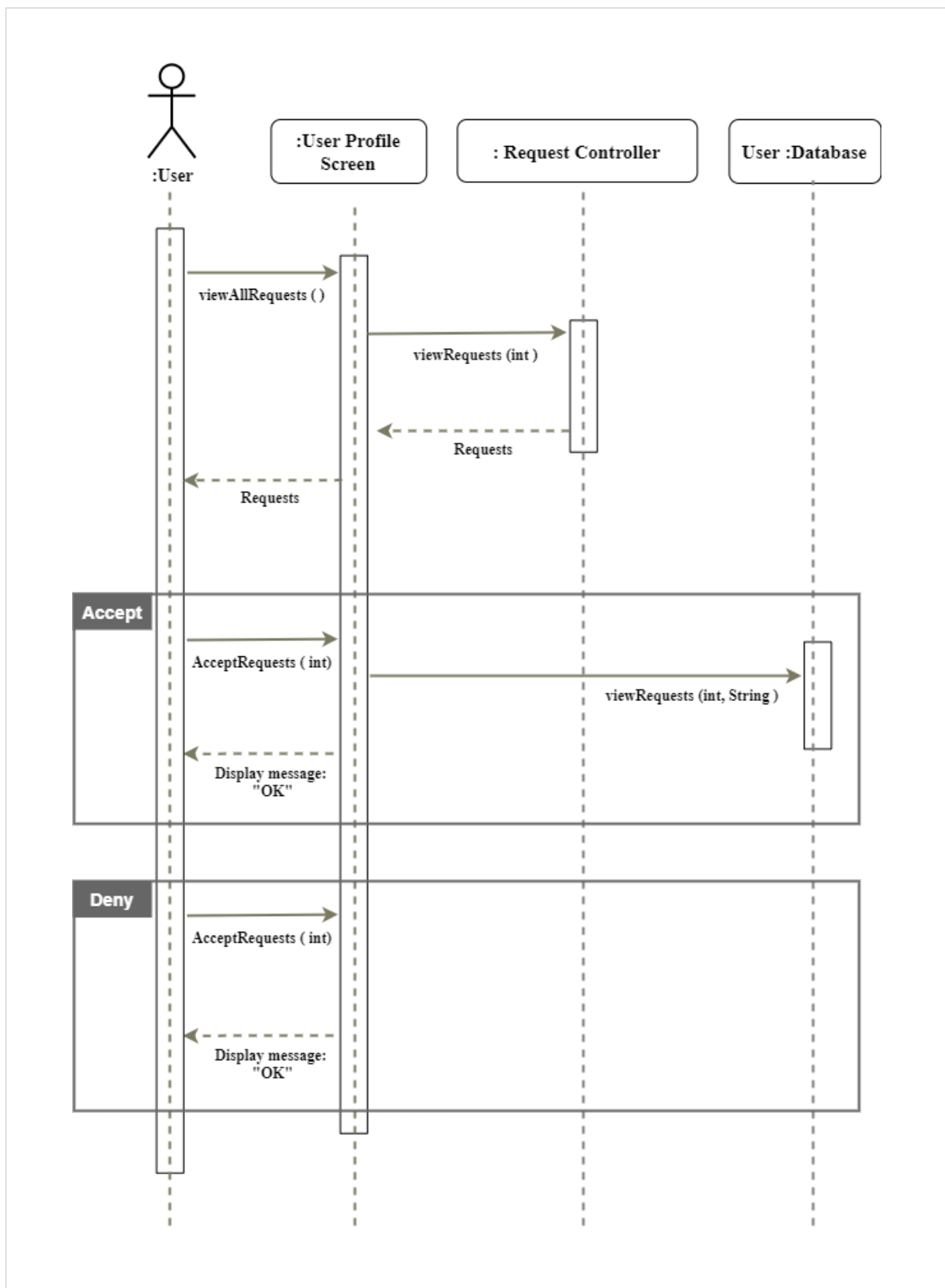


Figure 7 - Sequence Diagram of Friend/Unfriend Request

3.4.5 Sequence Diagram of Chat

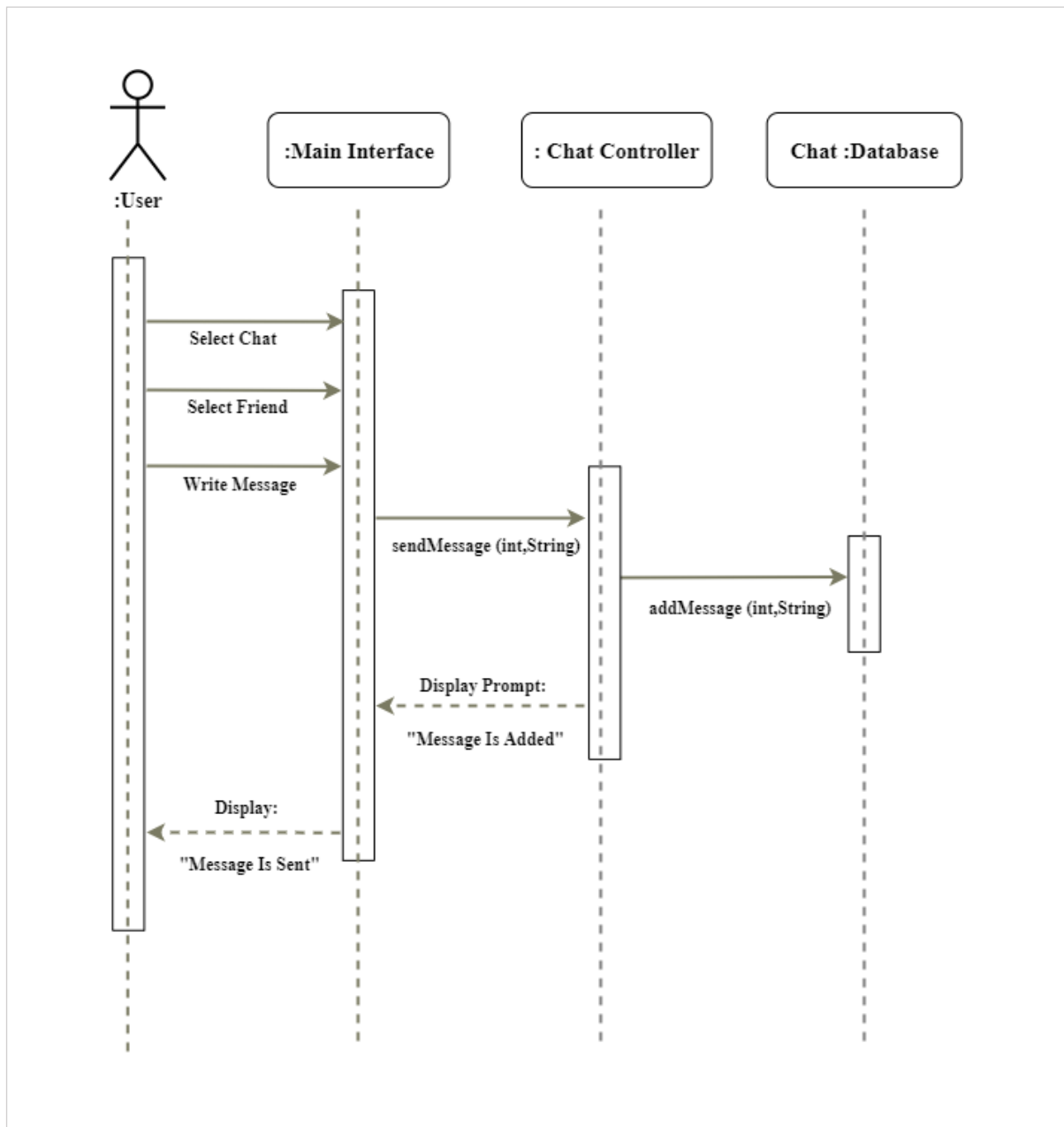


Figure 8 - Sequence Diagram of Chat

3.5 Software Architecture

We use MVC (Model, View, Controller) architecture as our android architecture pattern.

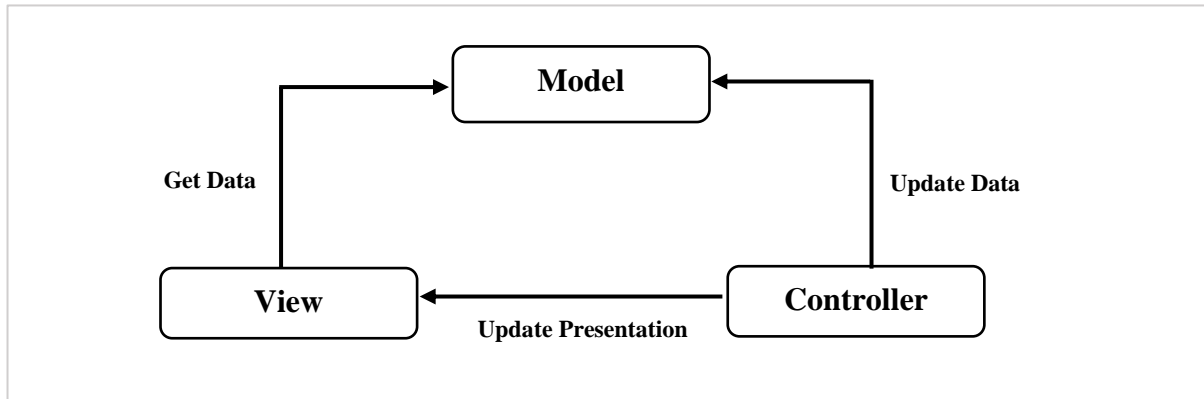


Figure 9 - Software Architecture

Here View and Controller both depend upon the Model and the Model could be tested independently of the UI as it is separated.

- **Model** - The data layer, responsible for managing the business logic and handling network or database API.
- **View** - The UI layer (visualization of the data from the Model).
- **Controller** — The logic layer, gets notified of the user's behavior and updates the Model as needed.

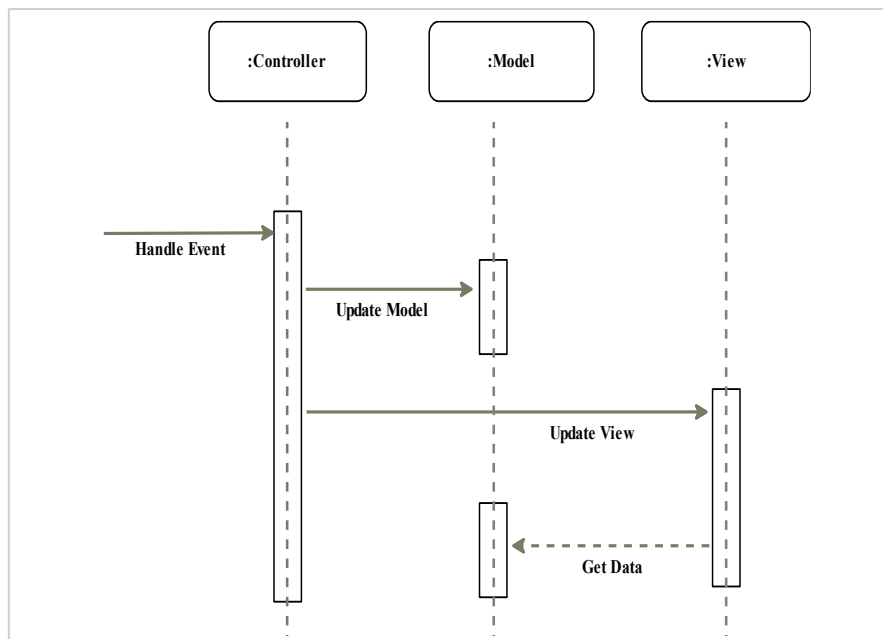


Figure 10 - MVC Behavior

3.6 Entity Relationship Diagram

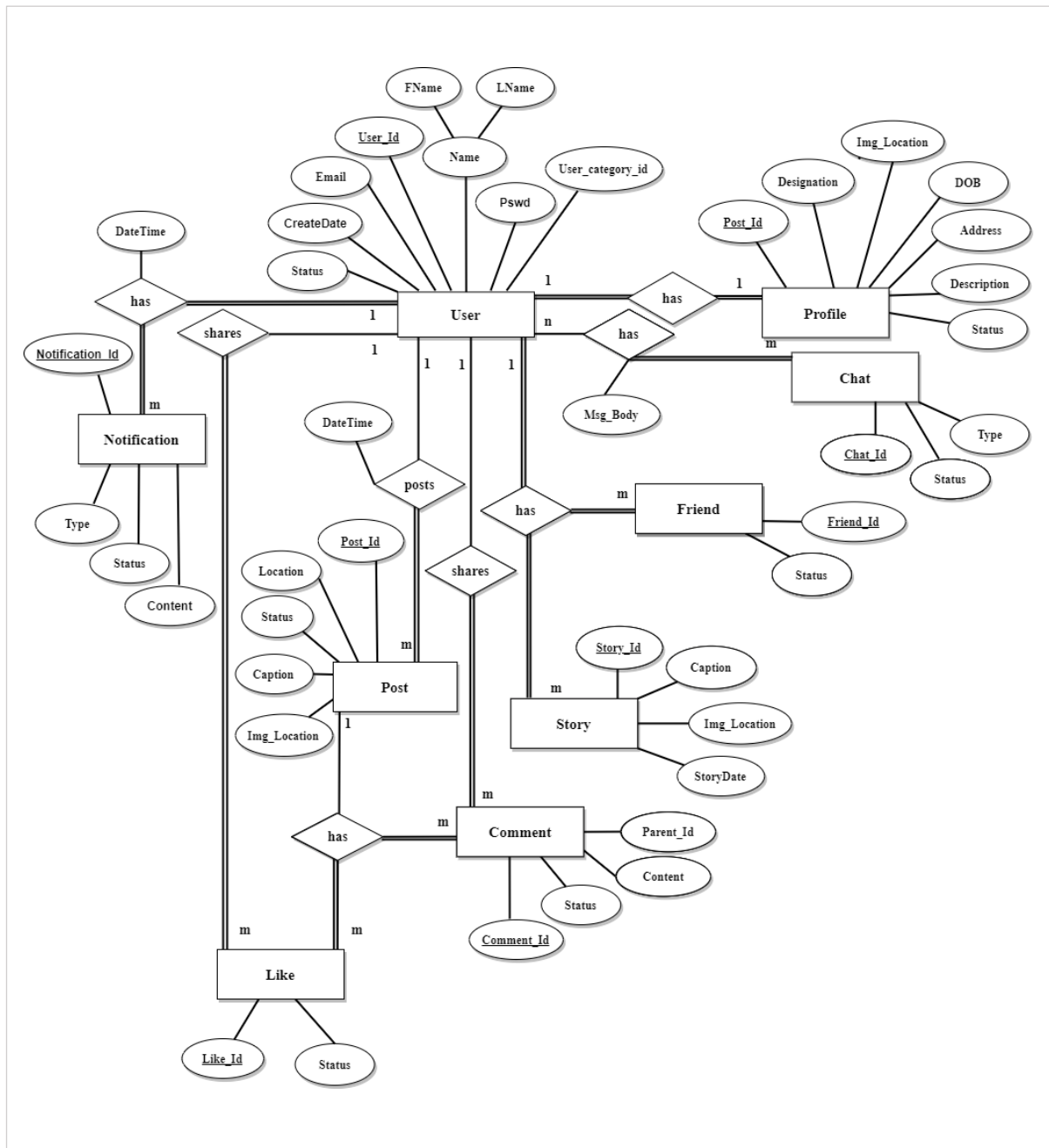


Figure 11 - ER Diagram

3.7 Schema Mapping

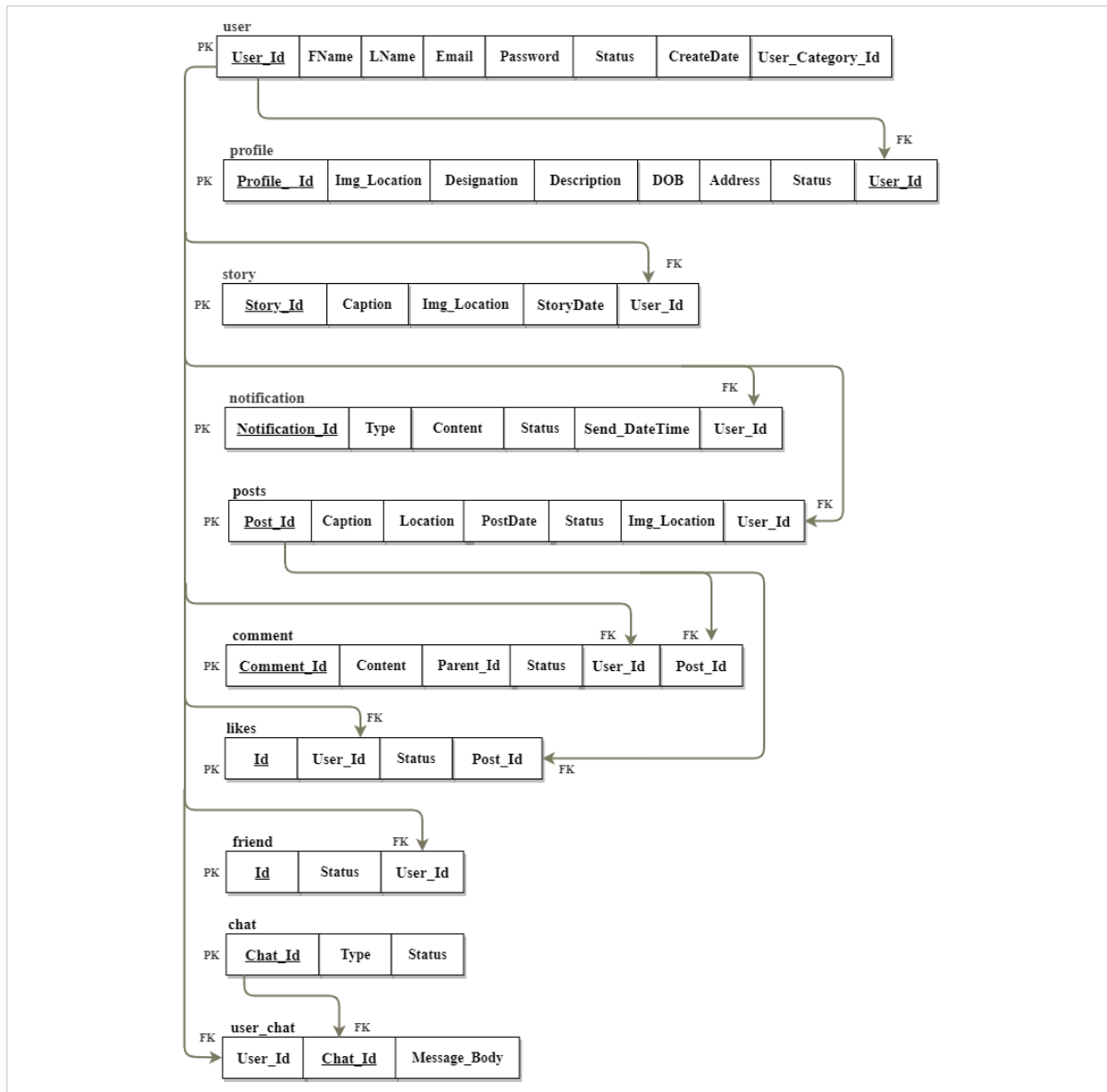


Figure 12 - Schema Mapping

3.8 Chapter Summary

These UML diagrams act as a link between system description and design model.

In this Analysis Modelling, information, behavior, and functions of the system are defined and translated into the architecture, component, and interface level design in the design modeling.

ER, and schema mapping is very important to identify the structure of our database.

Chapter 4: Solution Design

4.1 Introduction

This chapter represents the design of our proposed solution. It helps us to achieve operational excellence in software development.

It is the first step towards the eventual physical deployment of any solution including Interface design, Database design and Report layout design.

4.2 Table Design

Table No : 01
Table Name : user
Primary Key : user_id
Foreign Key : -

Field Name	Field Type	Field Size (Bytes)	Description
user_id (PK)	Number	20	Unique username for every user. (User, Restaurant, Skill seller)
f_name	Character	20	First name of the user
l_name	Character	20	Last name of the user
email	Character	50	Email of the user
password	Character	20	A specific password for system login
status	Number	1	Status used to identify whether it is active or inactive
Create_date	Date	-	Account created date
user_catargory_id	Number	20	Category shows the user's account type (User, Restaurant, Skill seller)

Table 1 - User

Table No : 02
Table Name : profile
Primary Key : profile_id
Foreign Key : user_id

Field Name	Field Type	Field Size (Bytes)	Description
profile_id (PK)	Number	20	Unique id for every created profile.
designation	Character	50	Users can set their designation
DOB	Date	-	Date of birth of the user
address	Character	100	Address of the user
description	Character	100	Users can a description about their profiles
img_location	Character	100	Profile picture saved path
status	Number	1	Status used to identify whether the profile is active or inactive
user_id (FK)	Number	20	User table primary key

Table 2 - Profile

Table No : 03
Table Name : post
Primary Key : post_id
Foreign Key : user_id

Field Name	Field Type	Field Size (Bytes)	Description
post_id (PK)	Number	20	Unique id for every post.
caption	Character	50	Users can set a caption to their post
location	Character	50	Users can set a location to their post
post_date	Date	-	Posted date will be automatically added to the system.
img_location	Character	100	Post saved path
status	Number	1	Status used to identify whether the profile is active or inactive
user_id (FK)	Number	20	User table primary key

Table 3 - Post

Table No : 04
Table Name : likes
Primary Key : like_id
Foreign Key : post_id, user_id

Field Name	Field Type	Field Size (Bytes)	Description
like_id (PK)	Number	20	Unique id for likes.
status	Number	1	Status used to identify whether the like is active or deleted
post_id (FK)	Number	20	Post table primary key to identify the liked post
user_id (FK)	Number	20	User table primary key to identify the user who likes the post

Table 4 - Likes

Table No : 05
Table Name : comment
Primary Key : comment_id
Foreign Key : post_id, user_id

Field Name	Field Type	Field Size (Bytes)	Description
comment_id (PK)	Number	20	Unique id for comments.
content	Character	150	Content of the comment
parent_id	Number	20	Parent ID can be used to identify whether it is a reply or a direct comment
status	Number	1	Status used to identify whether the comment/reply is active or deleted
post_id (FK)	Number	20	Post table primary key to identify the commented post
user_id (FK)	Number	20	User table primary key to identify the user who puts the comment

Table 5 - Comment

Table No : 06

Table Name : chat

Primary Key : chat_id

Foreign Key : -

Field Name	Field Type	Field Size (Bytes)	Description
chat_id (PK)	Number	20	Unique id for chats.
type	Character	30	Content of the messages
status	Number	1	Status used to identify whether the chat is active or inactive

Table 6 - Chat

Table No : 07

Table Name : user_chat

Composite Keys: user_id, chat_id

Field Name	Field Type	Field Size (Bytes)	Description
index (PK)	Number	20	Indexing column of the table
chat_id (FK)	Number	20	Chat table primary key
User_id (FK)	Number	20	User table primary key
message_body	Character	255	Content of the messages

Table 7 - User_Chat

Table No : 08
Table Name : notifications
Primary Key : notification_id
Foreign Key : user_id

Field Name	Field Type	Field Size (Bytes)	Description
notification_id (PK)	Number	20	Unique id for notifications.
content	Character	255	Content of the messages
type	Character	20	Type of the notification
status	Number	1	Status used to identify whether the notification is valid or not
end_date_time	Date	-	Send date and time of the notification
user_id (FK)	Number	20	User table primary key to identify the who sends the notification to whom

Table 8 - Notification

Table No : 09
Table Name : story
Primary Key : story_id
Foreign Key : user_id

Field Name	Field Type	Field Size (Bytes)	Description
story_id (PK)	Number	20	Unique ids for stories.
title	Character	30	Title of the story
img_location	Character	100	Location (path) of the story
date_time	Date	-	Posted date of the story
user_id (FK)	Number	20	User table primary key to identify the user who share the story

Table 9 - Story

4.3 User Interface Designs

Interface Number	:	01
Interface Name	:	Loading Screen
Description	:	This is the opening window of the “Food Mania” android application.

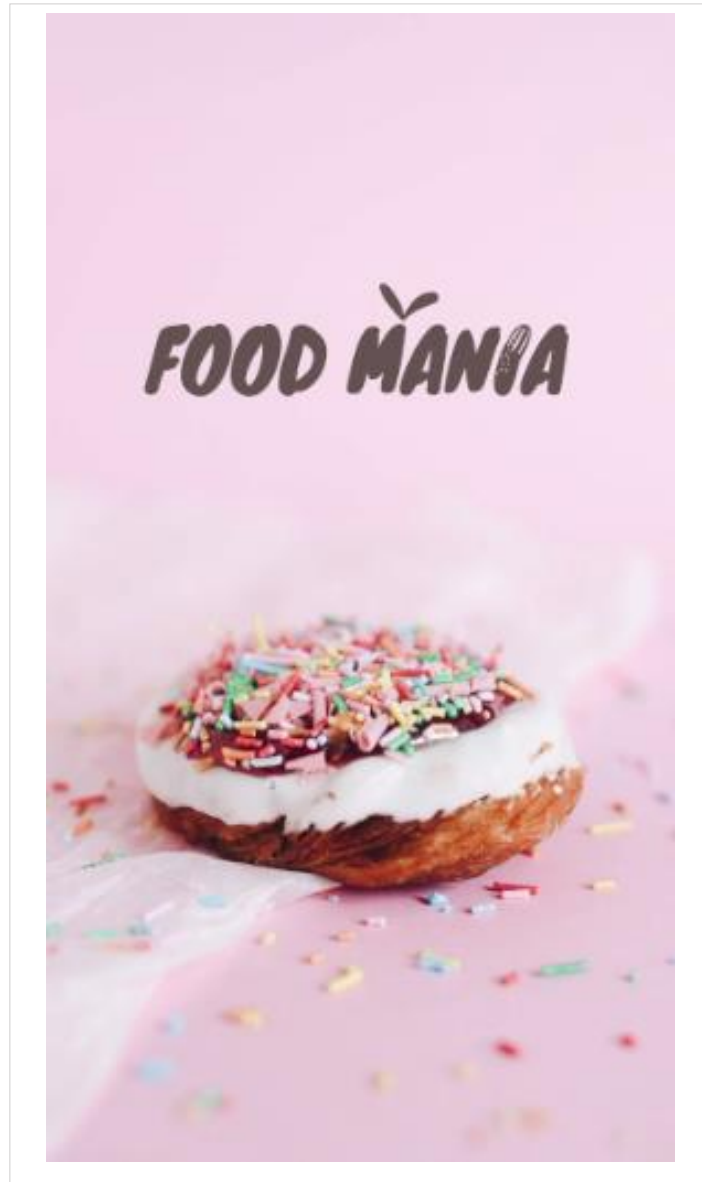


Figure 13 - Loading Screen

Interface Number : **02**

Interface Name : **Login Screen**

Description : This UI is designed as the login page for the “Food Mania” android application.

Users can enter their email and password to log in to the system.

And there is an option called ‘Show password’ when clicking on it, they can see their entered password.

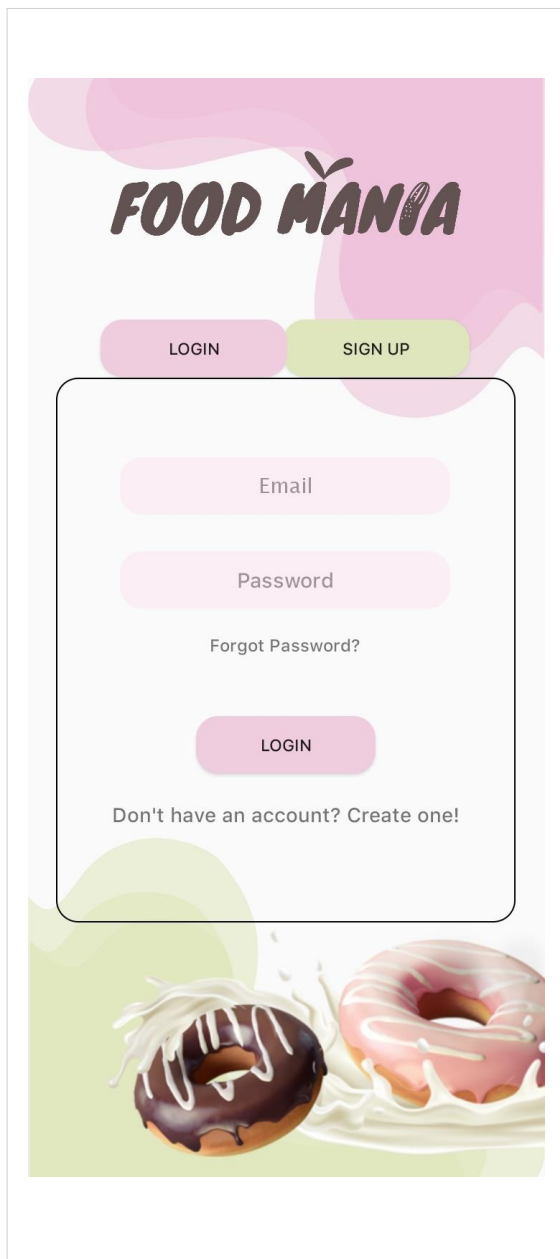


Figure 14 - Login Screen

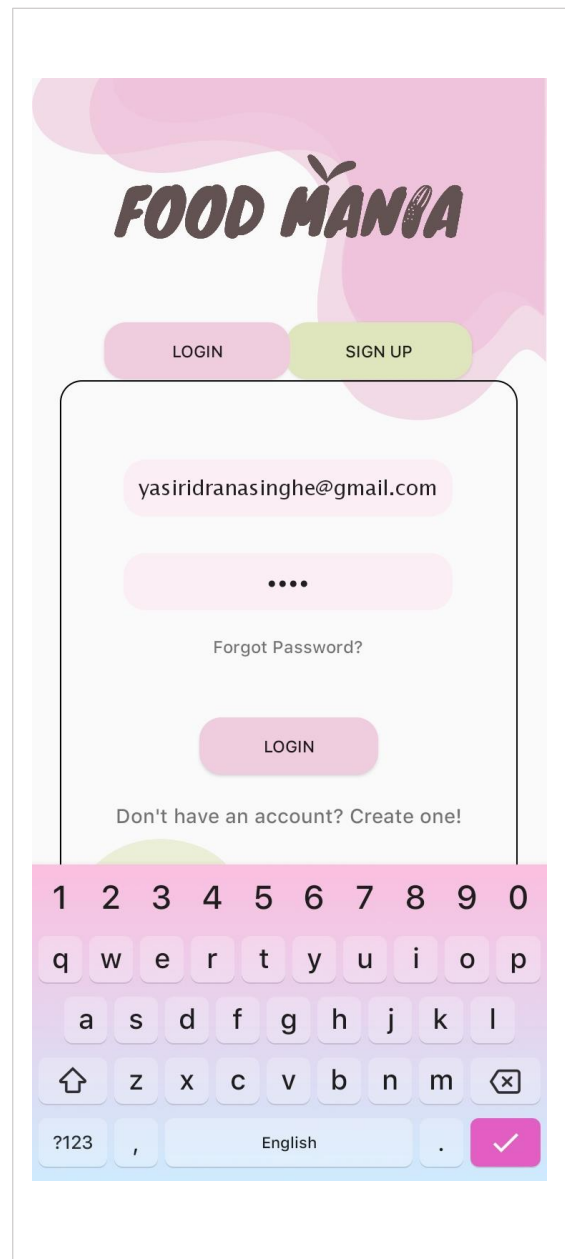


Figure 15 - Login Screen with data

Interface Number : **03**

Interface Name : **Forget Password Screen**

Description : If the user ever forgets his/ her password, he/she can use this “Forget Password” option to recover the password.
There you can enter your email address and it will send an auto generated verification code to your email.

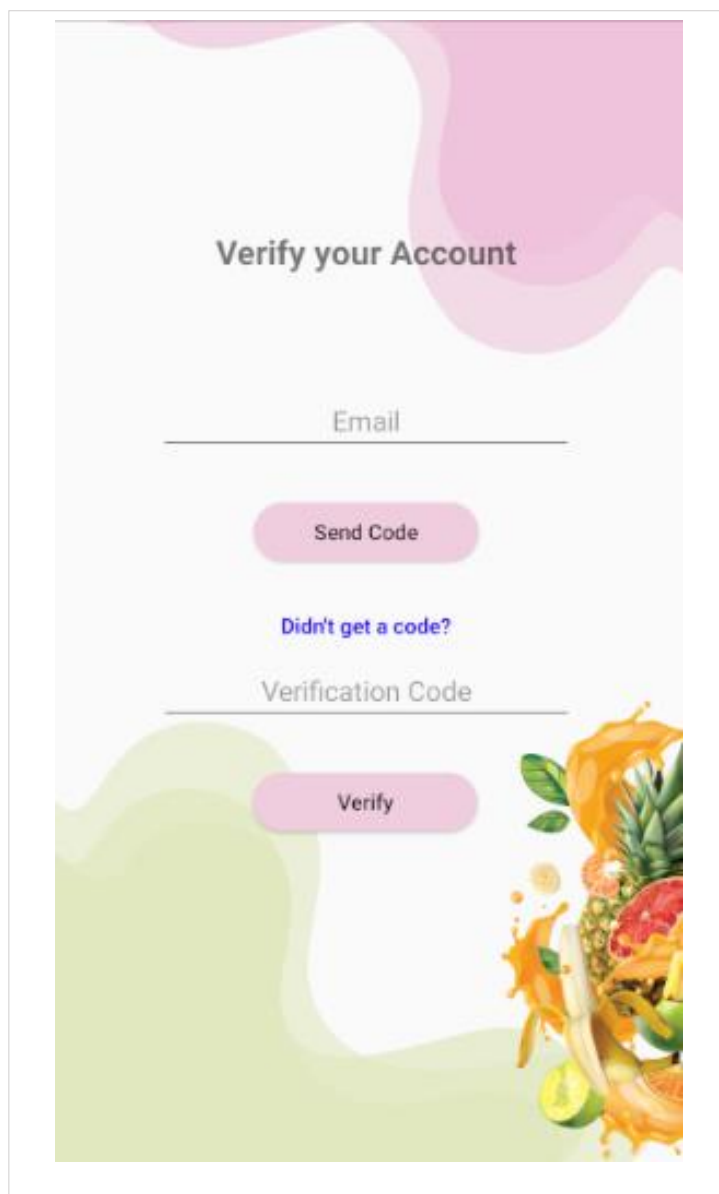


Figure 16 - Forget Password Screen

Verification code is received to the e mail. Entering that code will enable you to recover your password.

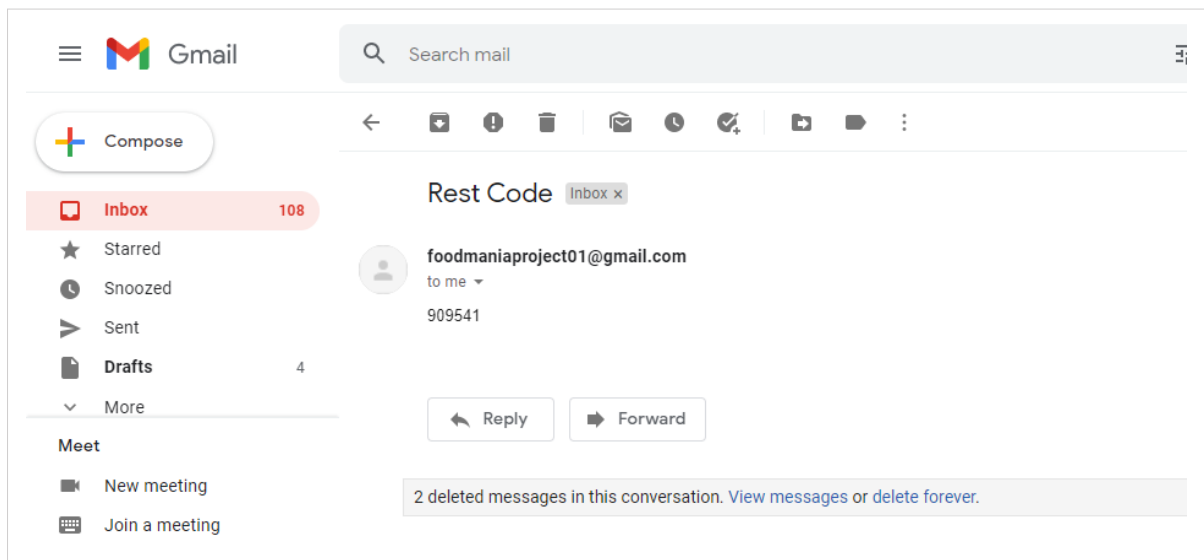


Figure 17 - Email with verification code

If you did not get the verification code, you can click “Didn’t get a code?” option to resend the code.

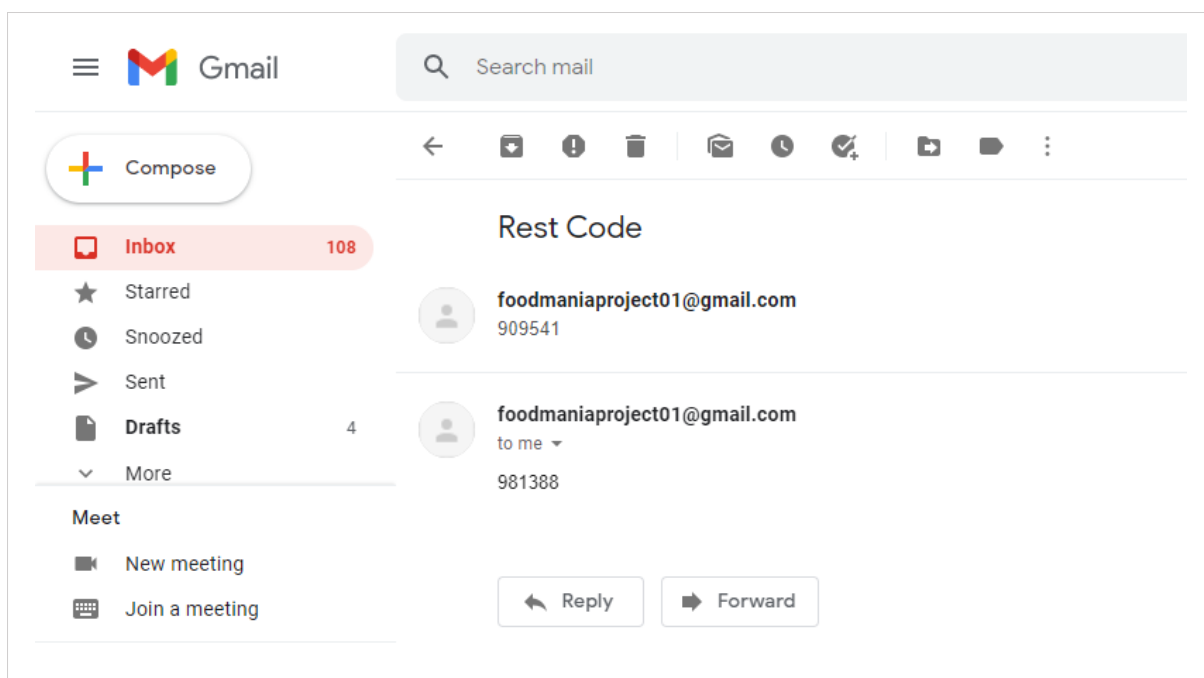


Figure 18 - Resent verification code

Interface Number : **04**

Interface Name : **Reset Password Screen**

Description : After entering the verification code, it will redirect to the reset password screen.
Here we can set a new password to log in again.

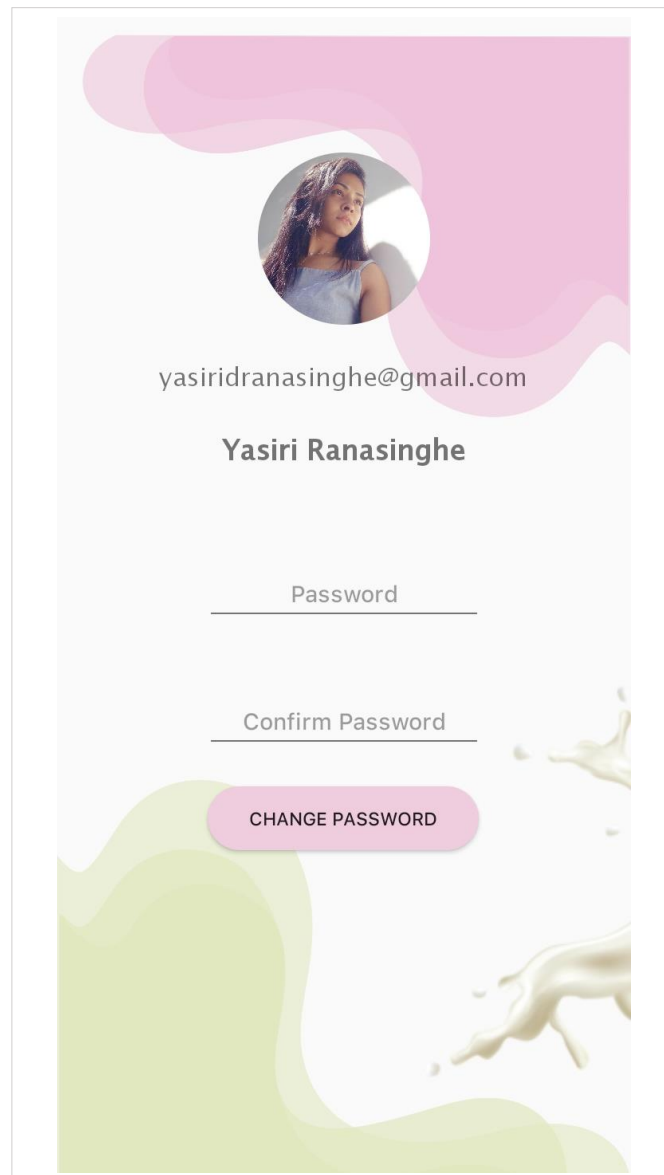
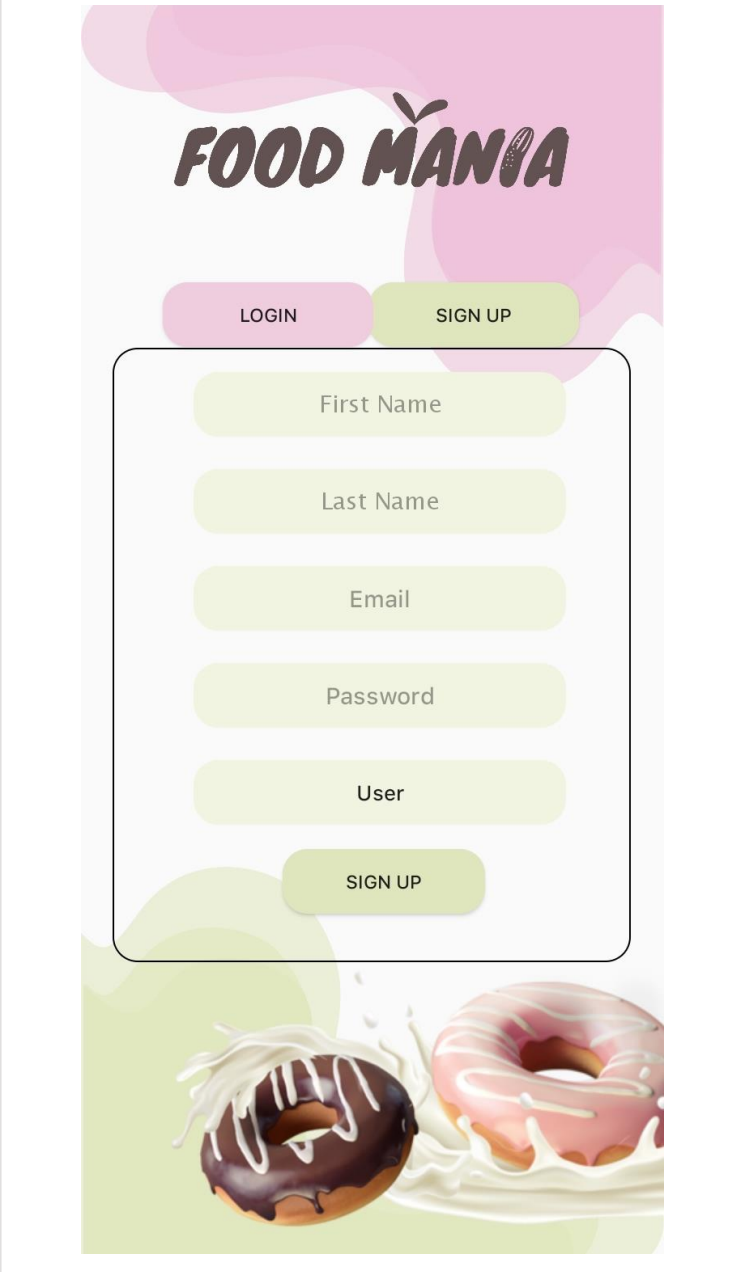
The image shows a mobile app interface for resetting a password. At the top, there is a circular profile picture of a woman with long dark hair. Below the photo, the email address 'yasiridranasinghe@gmail.com' is displayed. Underneath the email, the name 'Yasiri Ranasinghe' is shown in a bold font. There are two input fields for passwords, each with a horizontal line and a label: 'Password' and 'Confirm Password'. Below these fields is a pink button with the text 'CHANGE PASSWORD'. The background features abstract pink and green shapes and a splash of liquid on the right side.

Figure 19 - Reset password screen

Interface Number : **05**

Interface Name : **Registration Screen**

Description : This UI is designed to register to the application.
Users can enter their details to be able to make their user profiles.



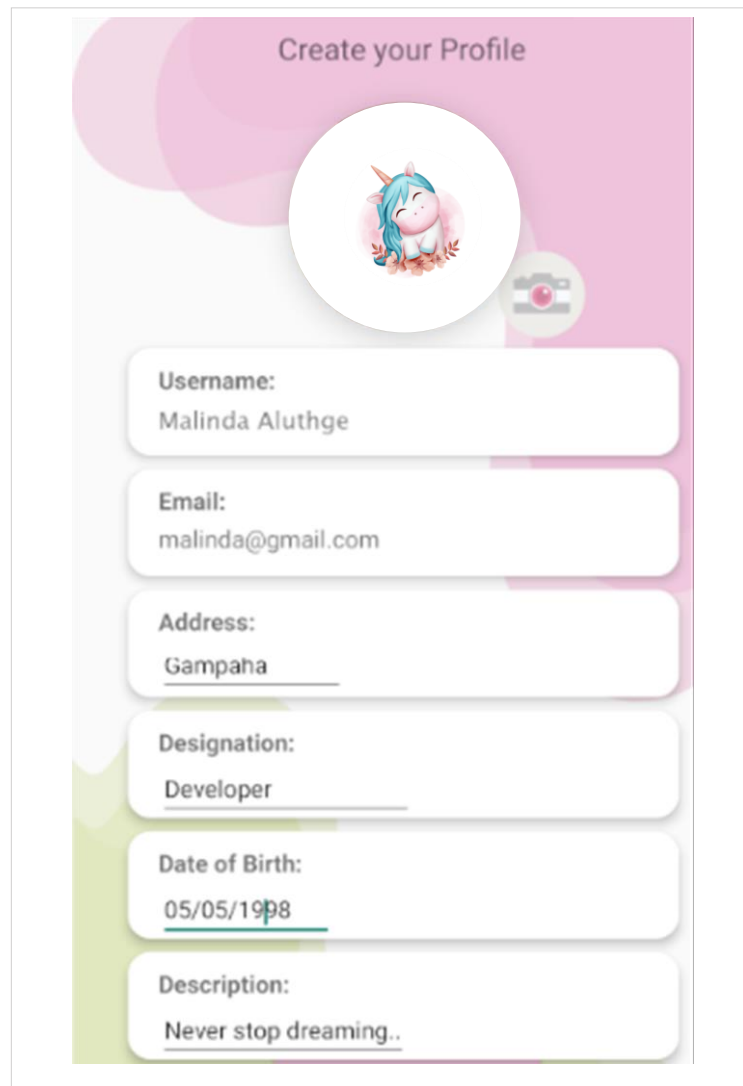
The registration screen features a pink and white background with the 'FOOD MANIA' logo at the top. Below the logo are two buttons: 'LOGIN' (pink) and 'SIGN UP' (green). A central white box with a black border contains five input fields: 'First Name', 'Last Name', 'Email', 'Password', and 'User'. Below these fields is a green 'SIGN UP' button. At the bottom, there is an illustration of two donuts (one chocolate, one pink) with a milk splash.

Figure 20 - Registration Screen

Interface Number : **06**

Interface Name : **Create Profile Screen**

Description : This UI is designed to create the user account by adding a profile picture, description, address, designation, DOB, etc.



The image shows a mobile app screen titled "Create your Profile". At the top, there is a circular profile picture placeholder containing a cartoon unicorn. To the right of the profile picture is a camera icon. Below the profile picture, there are several input fields for user information:

- Username:** Malinda Aluthge
- Email:** malinda@gmail.com
- Address:** Gampaha
- Designation:** Developer
- Date of Birth:** 05/05/1998
- Description:** Never stop dreaming..

Figure 21 - Create Profile Screen

Interface Number	:	07
Interface Name	:	News Feed
Description	:	<p>This is the UI that is constantly updating the list of stories in the middle of the home page.</p> <p>It includes status updates, photos, videos, links, app activity and likes/comments from people you follow on Food Mania.</p> <p>It will suggest posts according to our preferences.</p>

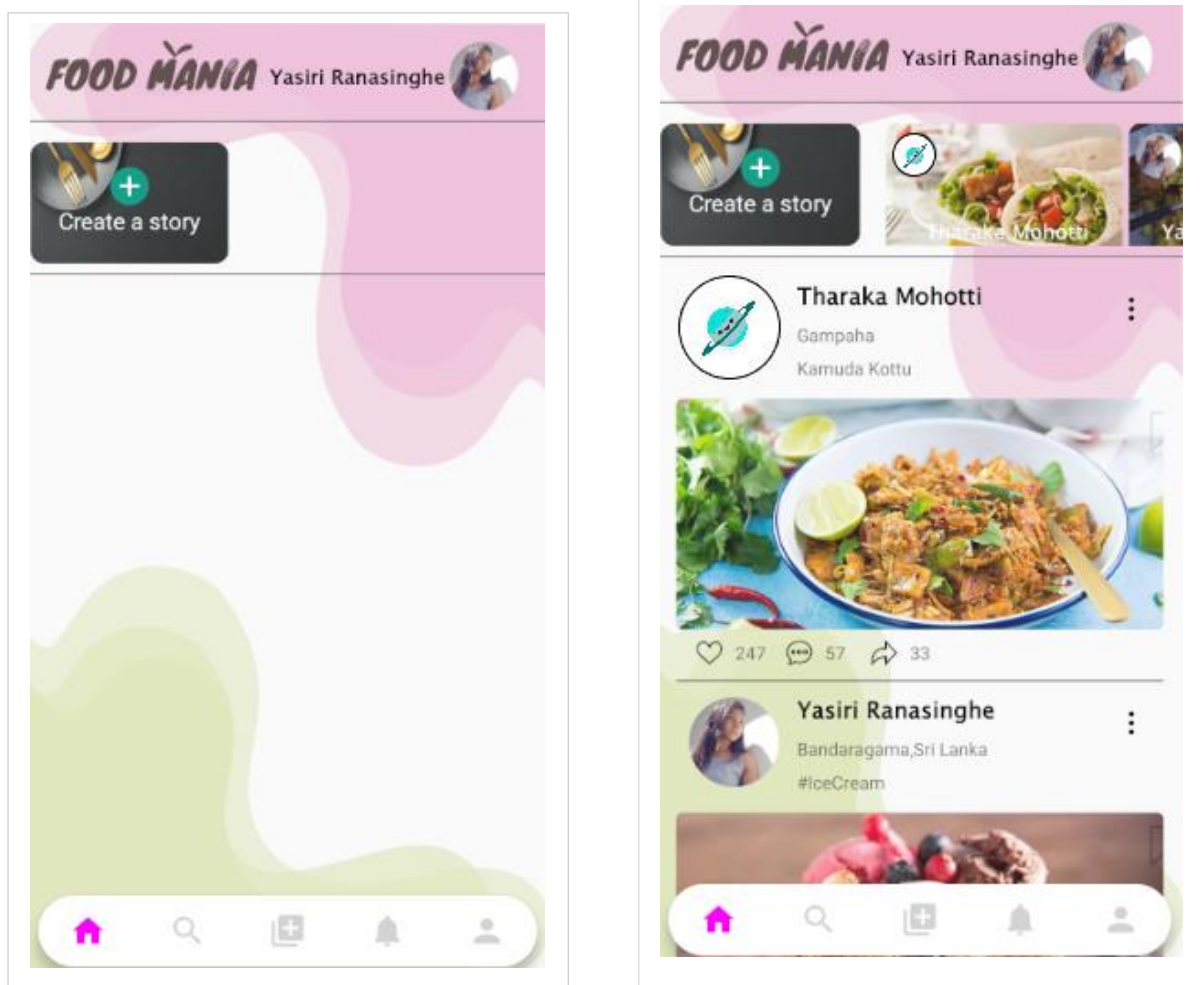


Figure 22 - News Feed

Interface Number : **08**

Interface Name : **Search Screen**

Description : Users can search for other users by entering their username in the given search box. By clicking on the searched user's name, it will redirect to the relevant user's account.

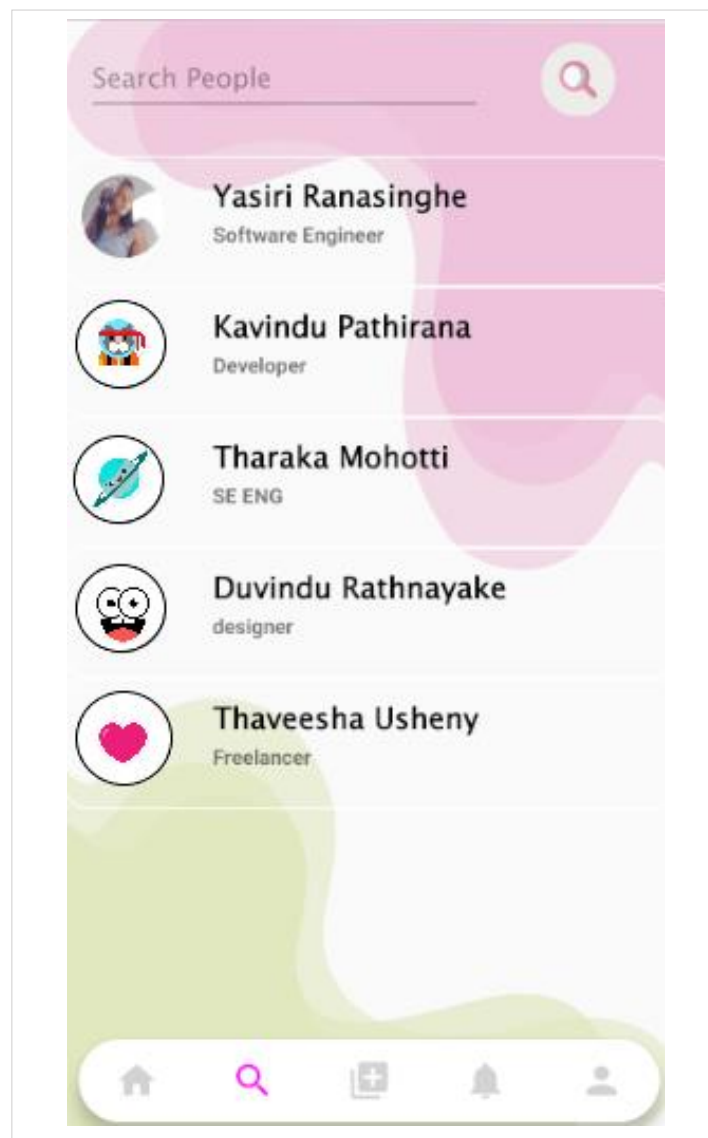


Figure 23 - Search screen

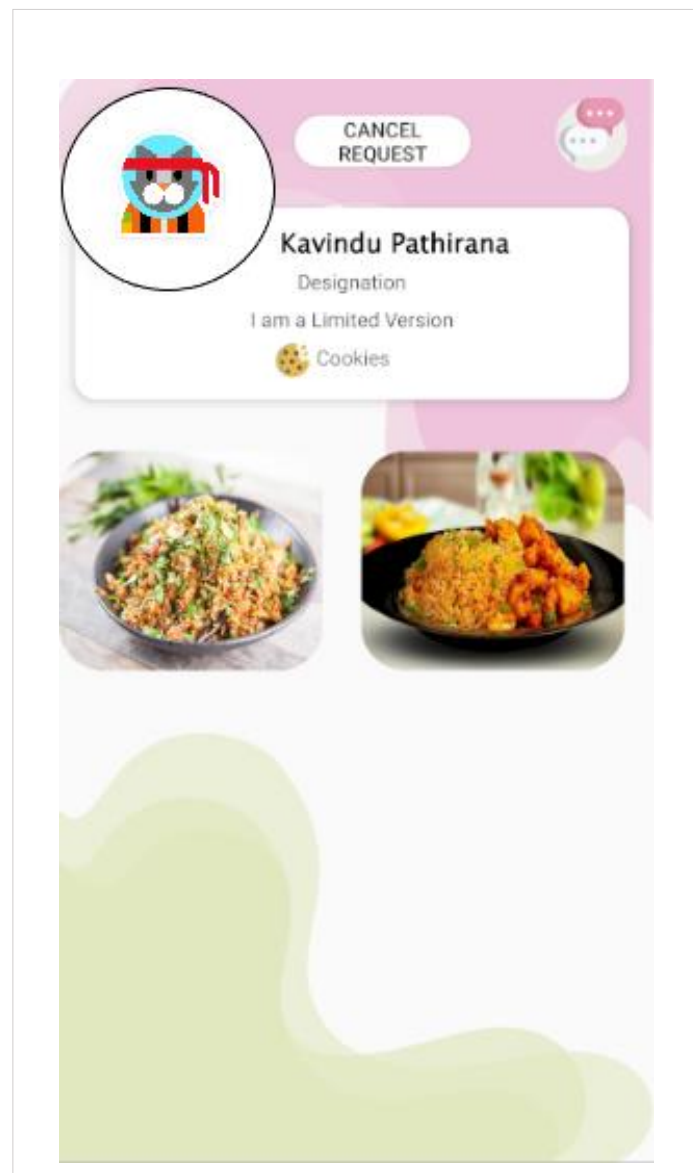


Figure 24 - Searched User's Profile

Interface Number : **09**
Interface Name : **Create Post Screen**
Description : Users can add posts with a caption and location from this UI.

By clicking the “plus button” it will open your files to be able to browse and select the post that you need to share.

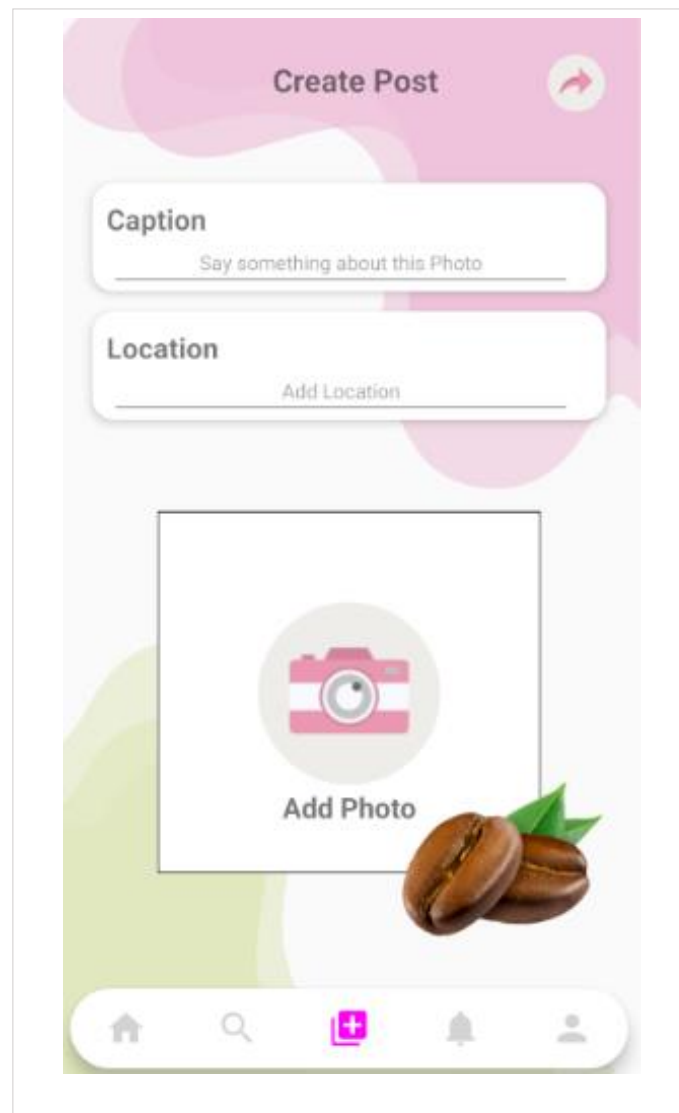


Figure 25 - Add Post Screen

Interface Number : 10

Interface Name : **User Profile**

Description : This UI shows the user's account. It is having user details and 3 fragments such as Edit Profile, Cookbook, Cookies, Collection.

Cookbook shows the posts that we added to our profile, the collection is holding the saved posts and cookies are known as friends.

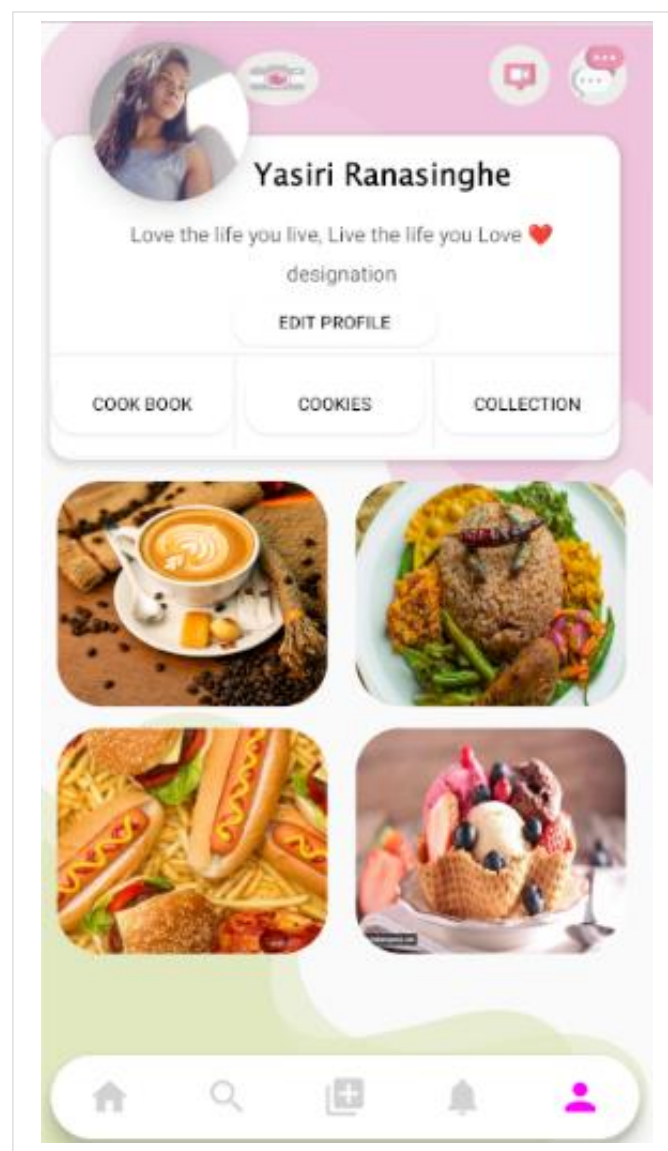


Figure 26 - User profile

Interface Number : 11

Interface Name : Edit Profile Screen

Description : Users can edit their profile details by using this UI.

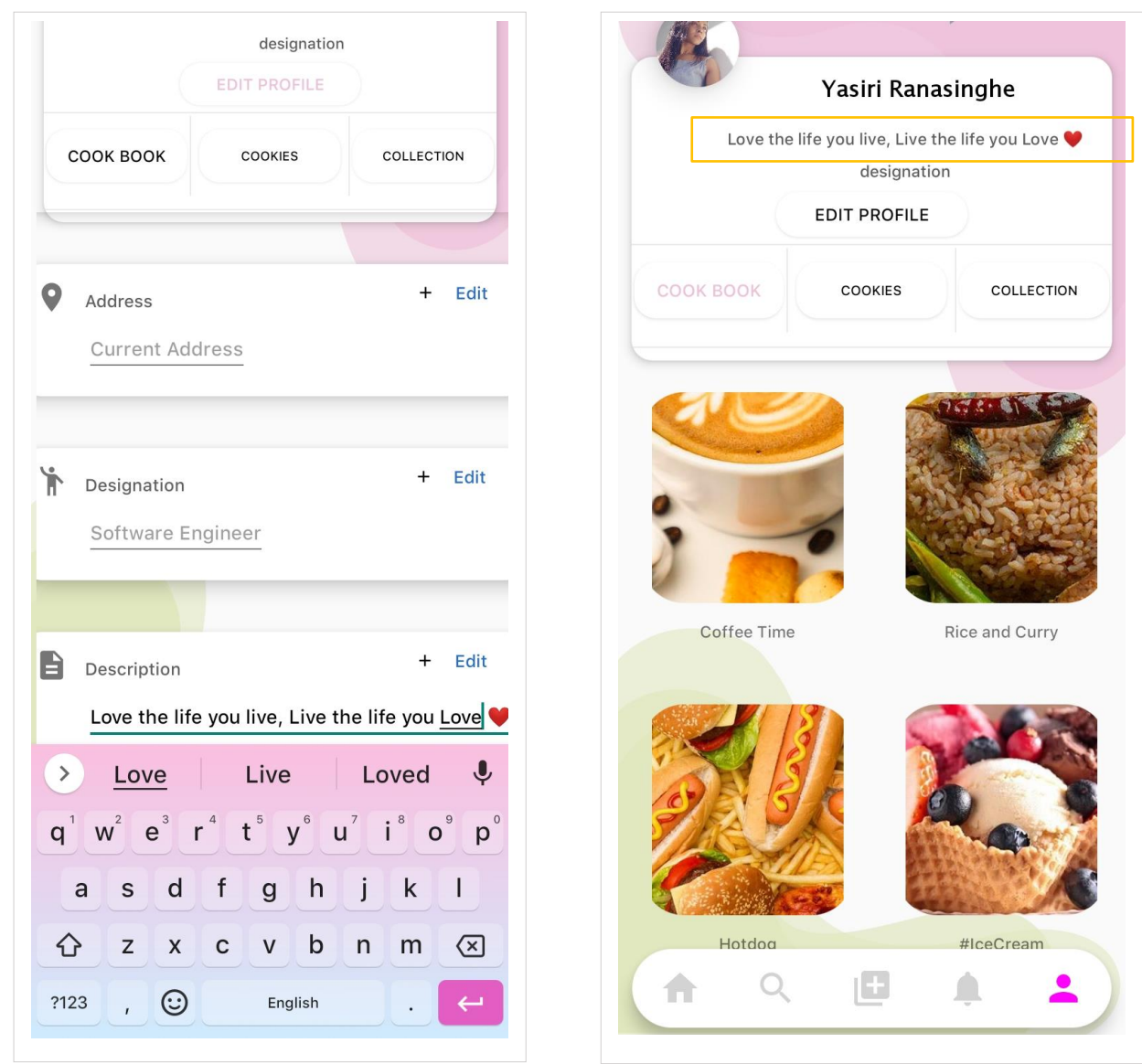


Figure 27 - Edit Profile

Interface Number : 12

Interface Name : **Video Streaming**

Description : By clicking on the video button, it will redirect to the video streaming platform.

We can add other users to this call and at the same time we can invite friends via an invite link.

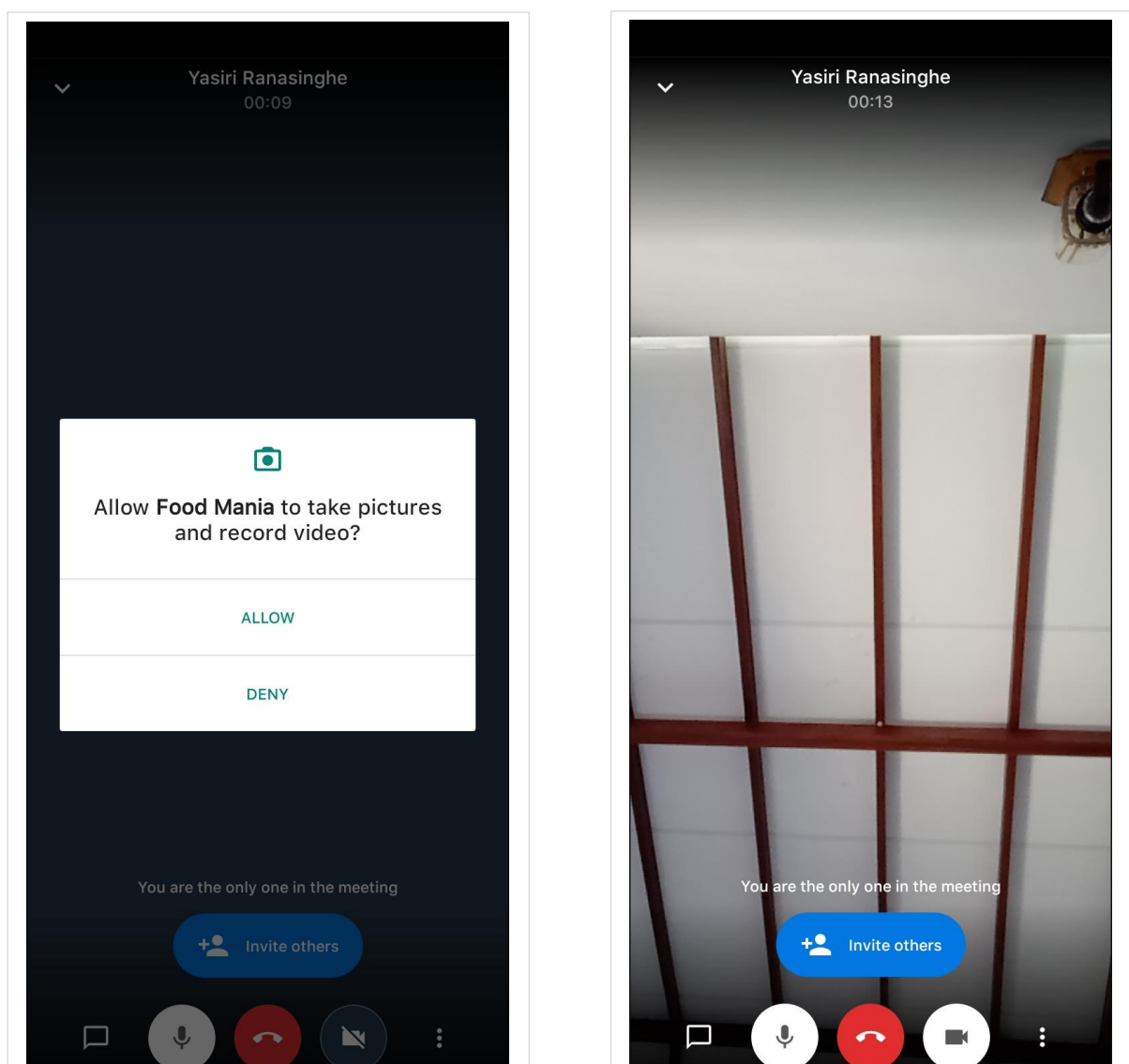


Figure 28 - Video conferencing

Interface Number : **13**

Interface Name : **Join Meeting**

Description : At the top of the notification tab, there is a button called "Join Meeting". Users can enter the meeting organizer's username and join the meeting.

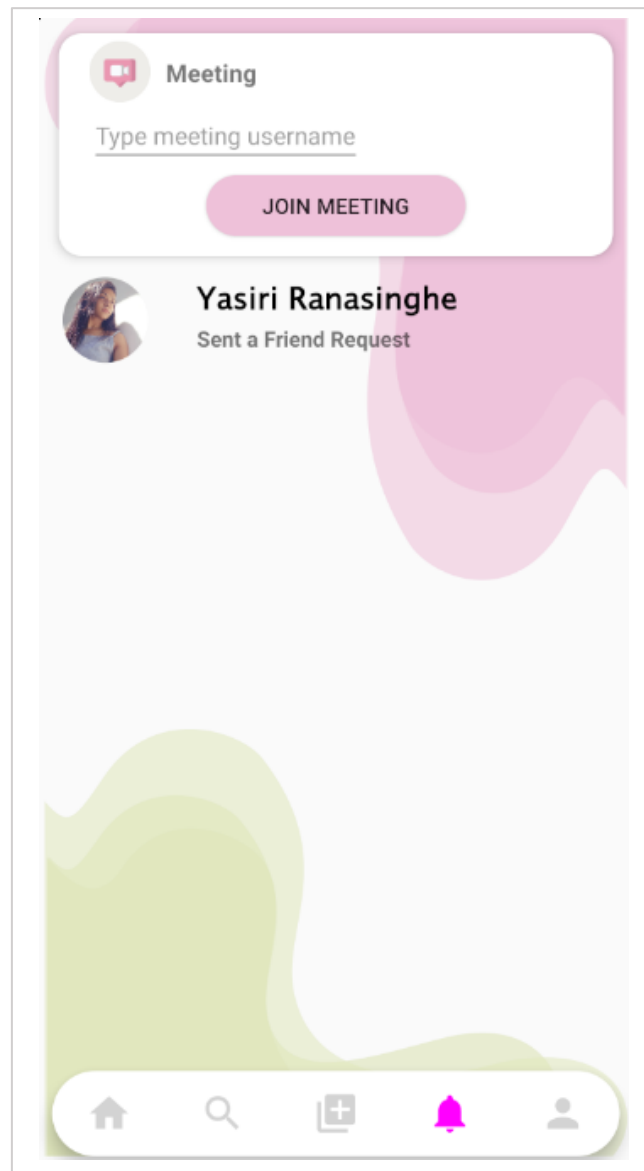


Figure 29 - Join Meeting

Interface Number	:	14
Interface Name	:	Create Story
Description	:	On the top of the news feed, there is a feature called “create story”. By clicking the plus button, it will allow adding a story (status) from your profile.

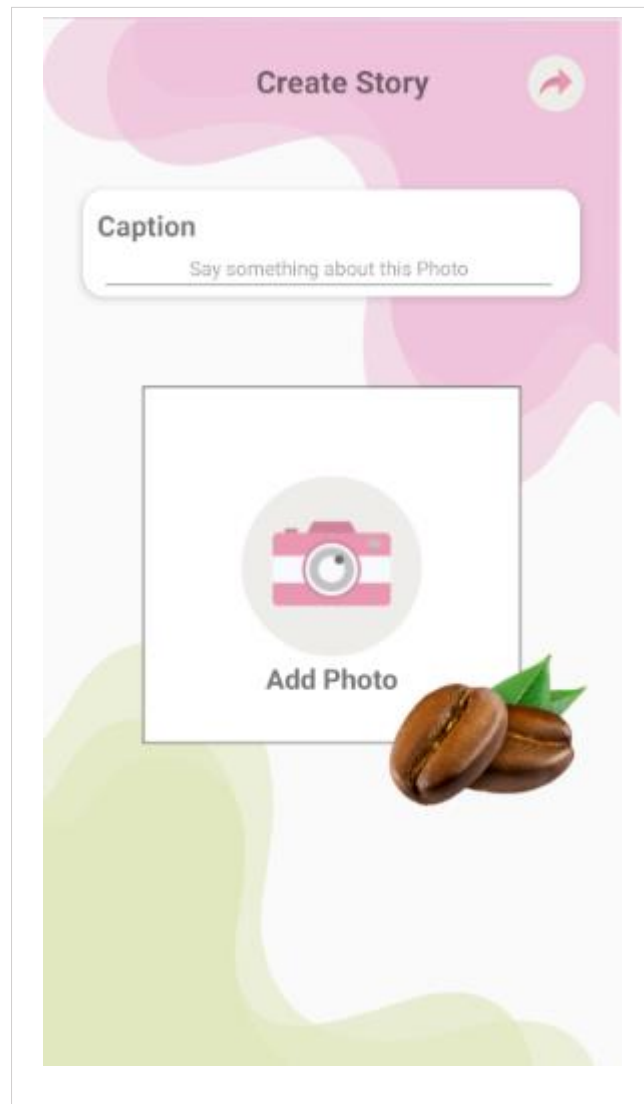


Figure 30 - Create Story

Interface Number : **15**

Interface Name : **Friend Request**

Description : Users can send the friend requests by clicking the “Add Friend” which is located on top of the user’s account.

At the same time, they can cancel the sent friend request by clicking the same button. And now the button has changed the status to “Cancel Request”.

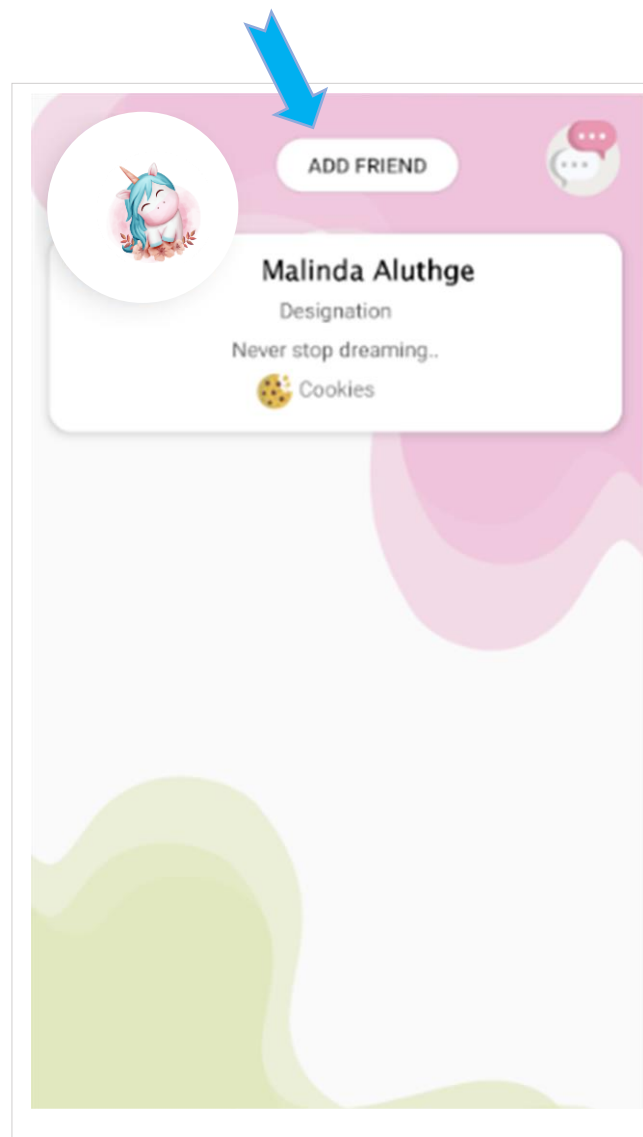


Figure 31 - Add Friend

Interface Number : **16**
Interface Name : **Notification**
Description : This UI shows the notifications that receive to our profile.

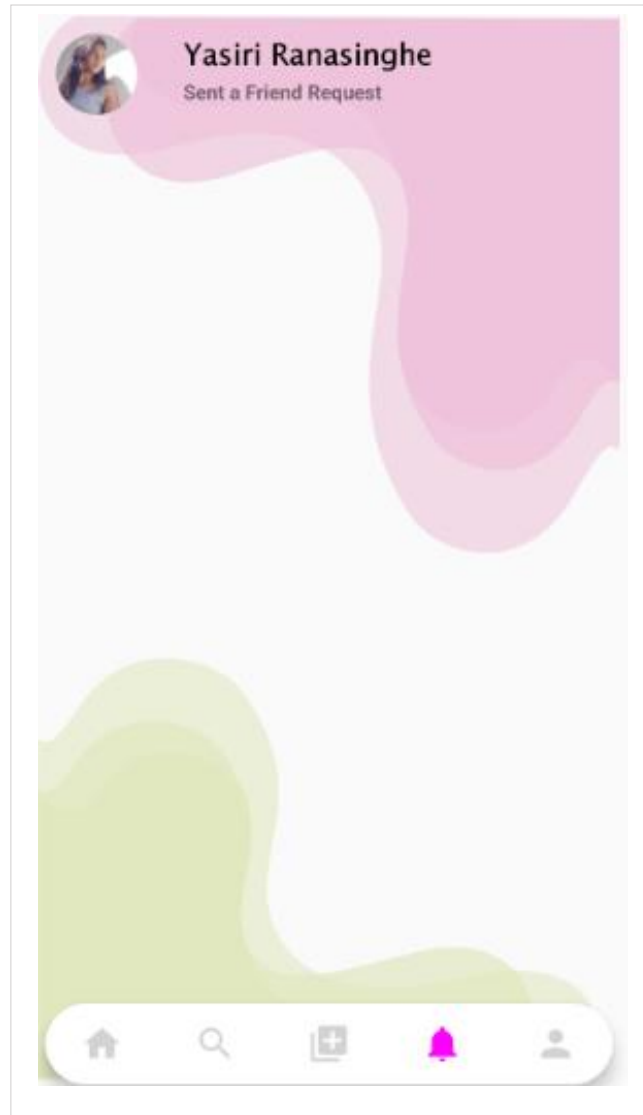


Figure 32 - Notification

4.4 Admin Panel UI Designs

UI Number : 01

UI Title : Admin Panel UI

Description : This is the admin panel content management system.

URL: <http://foodmaniaapi.000webhostapp.com/>

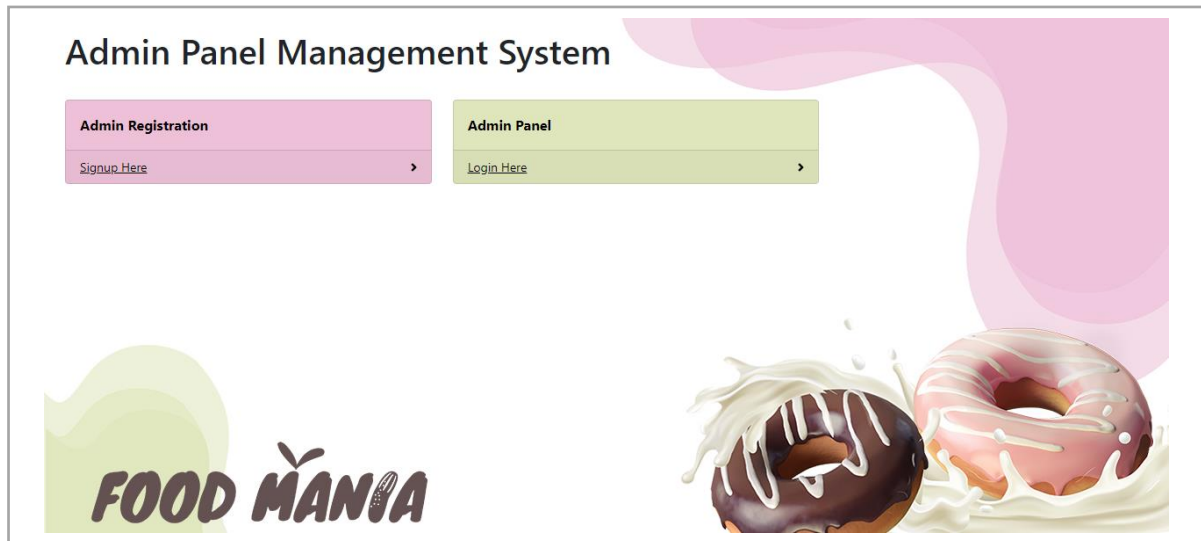


Figure 33 - Admin panel UI

UI Number : 02

UI Title : Admin Login

Description : Admin users can login to the content management system by using their username and password.

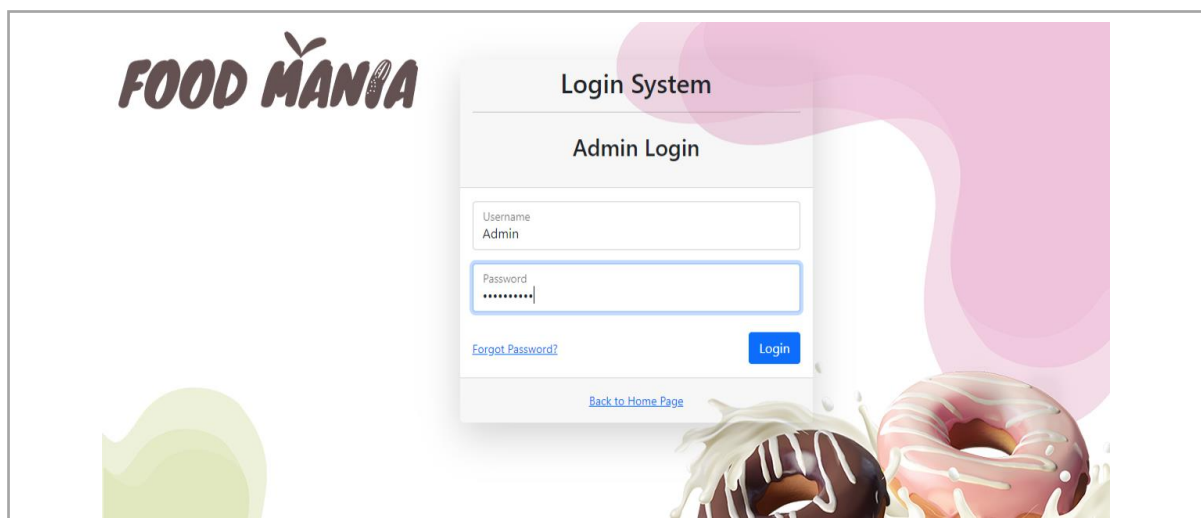
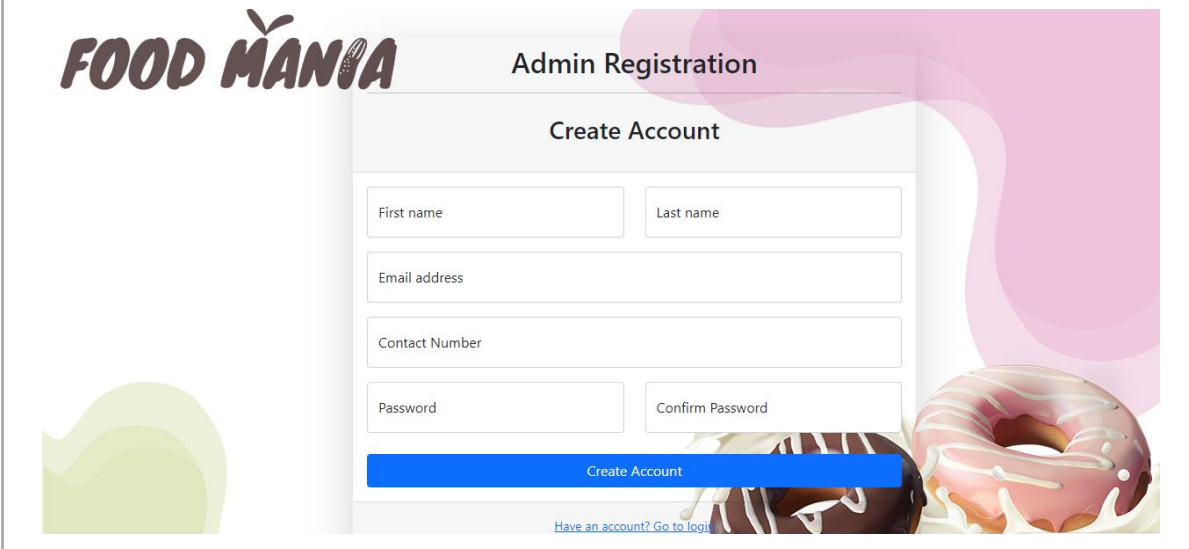


Figure 34 - Admin login

UI Number : **03**

UI Title : **Admin Registration**

Description : New admins can register to the system through this.



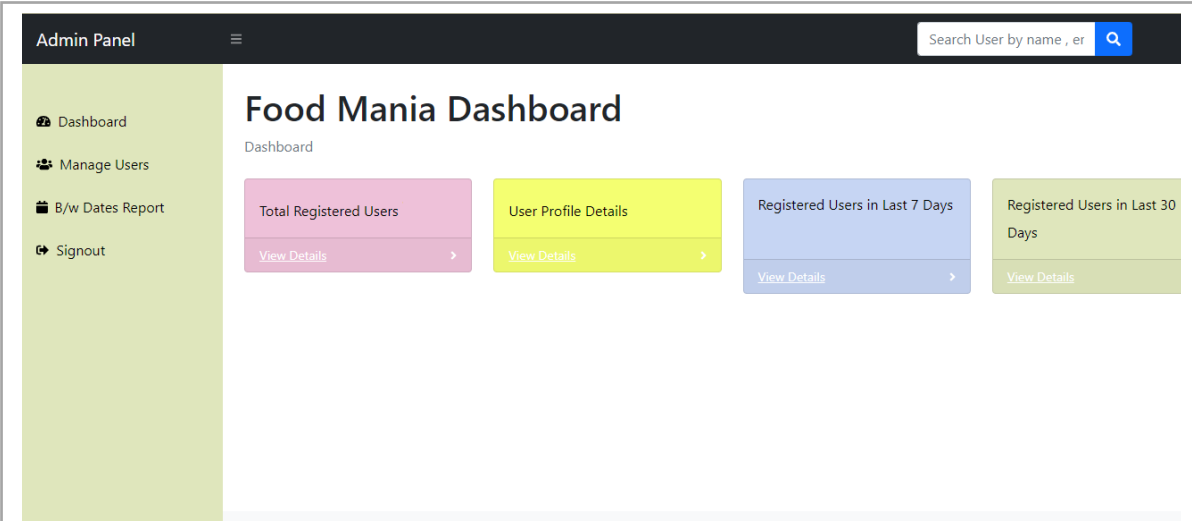
The image shows a web form titled "Admin Registration" for "FOOD MANIA". The form is titled "Create Account" and contains the following fields: "First name", "Last name", "Email address", "Contact Number", "Password", and "Confirm Password". A blue "Create Account" button is at the bottom. A link "Have an account? Go to login" is visible below the button. The background features a pink abstract shape and two donuts.

Figure 35 - Admin registration

UI Number : **04**

UI Title : **Admin Dashboard**

Description : This UI is displaying the dynamic reports of the food mania app.



The image shows the "Admin Panel" for "Food Mania". The dashboard includes a sidebar with links: "Dashboard", "Manage Users", "B/w Dates Report", and "Signout". The main content area is titled "Food Mania Dashboard" and contains four cards: "Total Registered Users", "User Profile Details", "Registered Users in Last 7 Days", and "Registered Users in Last 30 Days". Each card has a "View Details" link. A search bar "Search User by name , er" is located at the top right.

Figure 36 - Admin dashboard

4.5 Report Layout Designs

Report Number : 01

Report Title : Manage Users

Description : This report shows all the registered users in the system.

Admin Panel

Search User by name , er

Manage users

[Dashboard](#) / [Manage users](#)

Registered User Details

5 entries per page

Sno.	First Name	Last Name	Email Id	Reg. Date	Action
1	fname 1	lname 1	email1@gmail.com	08/07/2021	Edit Delete
2	fname 2	lname 2	email2@gmail.com	08/07/2021	Edit Delete
3	fname 3	lname 3	email3@gmail.com	08/07/2021	Edit Delete
4	fname 4	lname 4	email4@gmail.com	08/07/2021	Edit Delete
5	fname5	lname5	email5@gmail.com	08/07/2021	Edit Delete

Showing 1 to 5 of 7 entries

1 2

Figure 37 - Manage users report

Report Number : 02

Report Title : Registered Users in Last 7 Days

Description : This report shows registered users within last 7 days.

Admin Panel

Search User by name , er

Registered Users in Last 7 Days

[Dashboard](#) / [Registered Users in Last 7 Days](#)

Registered Users in Last 7 Days Details

5 entries per page

Sno.	First Name	Last Name	Email Id	Reg. Date	Action
1	fname 6	lname 6	email6@gmail.com	08/08/2021	Edit Delete

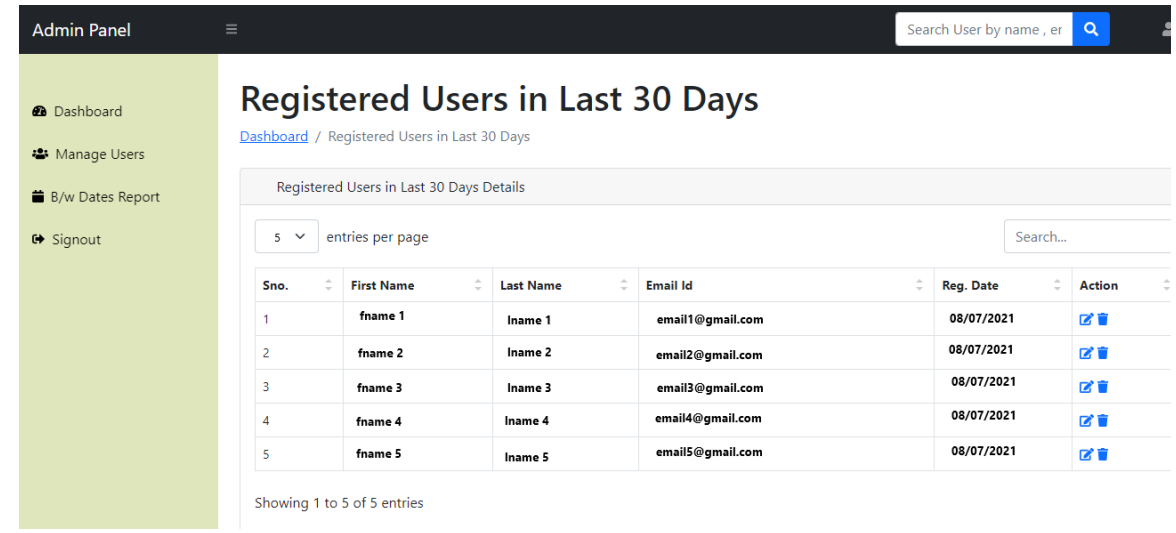
Showing 1 to 1 of 1 entries

Figure 38 - Registered users in last 7 days report

Report Number : 03

Report Title : Registered Users in Last 30 Days

Description : This report shows registered users within 30 days.



Admin Panel Search User by name , er

Registered Users in Last 30 Days
[Dashboard](#) / [Registered Users in Last 30 Days](#)

Registered Users in Last 30 Days Details

5 entries per page Search...

Sno.	First Name	Last Name	Email Id	Reg. Date	Action
1	fname 1	lname 1	email1@gmail.com	08/07/2021	Edit Delete
2	fname 2	lname 2	email2@gmail.com	08/07/2021	Edit Delete
3	fname 3	lname 3	email3@gmail.com	08/07/2021	Edit Delete
4	fname 4	lname 4	email4@gmail.com	08/07/2021	Edit Delete
5	fname 5	lname 5	email5@gmail.com	08/07/2021	Edit Delete

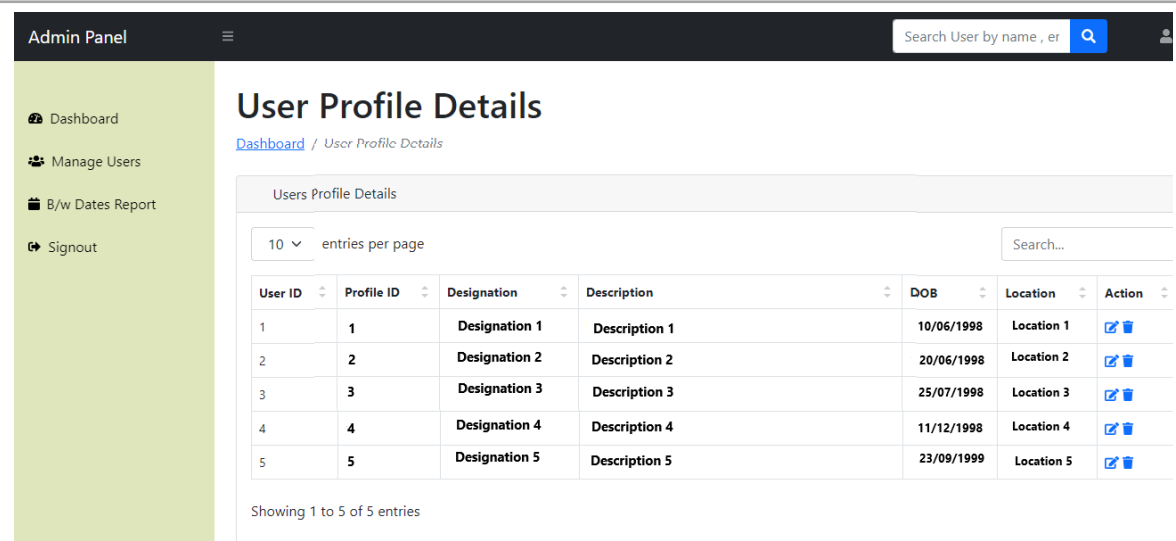
Showing 1 to 5 of 5 entries

Figure 39 - Registered users in last 30 days report

Report Number : 04

Report Title : User Profile Details

Description : This report shows all user profile details.



Admin Panel Search User by name , er

User Profile Details
[Dashboard](#) / [User Profile Details](#)

Users Profile Details

10 entries per page Search...

User ID	Profile ID	Designation	Description	DOB	Location	Action
1	1	Designation 1	Description 1	10/06/1998	Location 1	Edit Delete
2	2	Designation 2	Description 2	20/06/1998	Location 2	Edit Delete
3	3	Designation 3	Description 3	25/07/1998	Location 3	Edit Delete
4	4	Designation 4	Description 4	11/12/1998	Location 4	Edit Delete
5	5	Designation 5	Description 5	23/09/1999	Location 5	Edit Delete

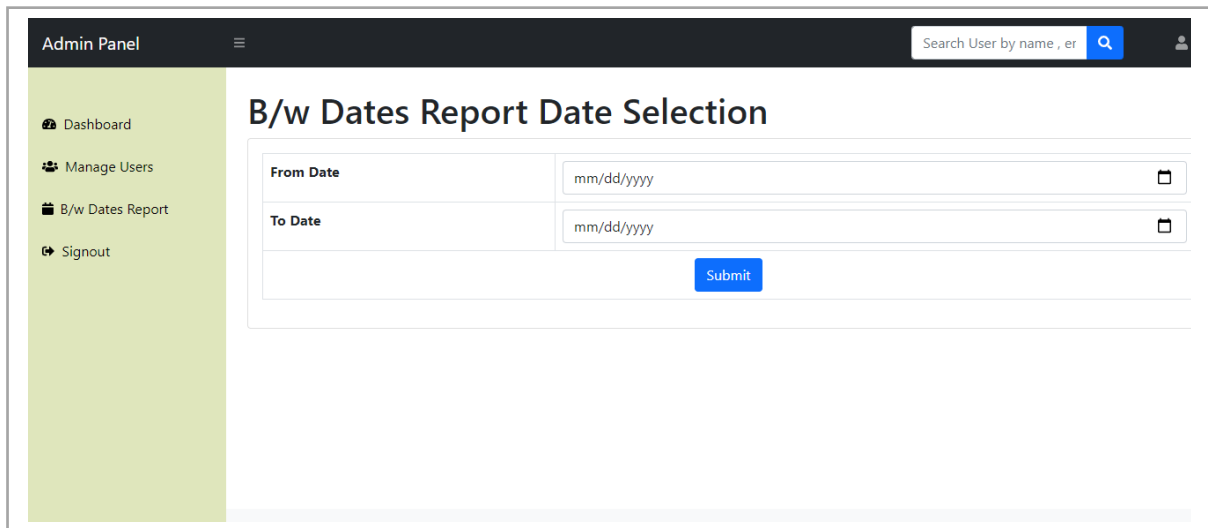
Showing 1 to 5 of 5 entries

Figure 40 - Yesterday registered users report

Report Number : 05

Report Title : B/W date reports

Description : Business Warehouse reports frequently require the specification of a period for which data is to be displayed.



The screenshot shows a web application interface titled "Admin Panel" at the top. On the left is a green sidebar with navigation links: "Dashboard", "Manage Users", "B/w Dates Report", and "Signout". The main content area is titled "B/w Dates Report Date Selection". It contains two input fields: "From Date" and "To Date", both with placeholder text "mm/dd/yyyy" and a calendar icon. Below these fields is a blue "Submit" button.

Figure 41 - B/W dates report

4.6 Chapter Summary

Solution planning serves as a broad focus on the overall project design, including the direction and prospects of the implementation phase. It addresses the solution from a functional, technical, and UI/UX (user interface/ user experience) standpoint.

Table designs help to create a database without wasting our storage. Interface and report layout designs can provide great guidance for front-end growth.

Chapter 5: Conclusion

This system has been developed to be user-friendly. As mentioned in the introduction, we are trying to fulfill the lack of a social platform that provides all buying, selling, hiring, sharing food related things in one place. For that, we have developed a food-based social media app called “**Food Mania**”.

Users can create their own accounts and share food recipes, perform businesses activities (Restaurants, cake bakers, etc.), share photos, stories, videos, conduct classes and learning sessions via our video streaming feature and sell their cooking skills with their friends and followers, you care about

This Application is full secured about your personal details because it will handle by an admin panel. The admin panel ensures the customers’ privacy policies. Plus, they maintain the reports of the system to be able to keep real-time supervision.

We are planning to develop the application not only locally but globally. Also, we are planning to upload the application to the play store and host the application in our own host instead of 000Webhost (the current hosting platform). Furthermore, we planned to do a marketing campaign to promote the system among Sri Lankan society.

“Food Mania” is easy to use and offers a variety of irresistibly tasty and healthy recipes that appeal to beginners and experts alike

Chapter 6: References

Websites:

Stack overflow - The List of References Illustrated [online] available from
<https://stackoverflow.com/questions> [2008]

Android - PHP/MYSQL- Tutorialspoint (2021)- The List of References Illustrated
[online] available from
https://www.tutorialspoint.com/android/android_php_mysql.htm

Parse JSON & Display in RecyclerView Using Volley | Part 3/3 | Android App
Development Tutorial.

The List of References Illustrated [online You Tube] available from
<https://www.youtube.com/watch?v=3HycJRwcYxQ&t=503s> [19 January 2020]

Android Grid View || Grid View with Image and Text || Grid View Open new activity
on item is click. #larntech #gridview

The List of References Illustrated [online You Tube] available from
<https://youtu.be/RtitGGmvvTI> [22 May 2020]

Mobile App Development Process: Step-by-Step Guide for the implementation plan

The List of References Illustrated [online] available from
<https://www.invonto.com/insights/mobile-app-development-process/> [2021]

Appendices

Project Proposal

“Food Mania”- Android Application

Higher National Diploma in Software Engineering -20.1F Final Project Proposal

COHDSE201F- 011	A. D. M. L. Aluthge
COHDSE201F- 040	H. P. K. G. Pathirana
COHDSE201F- 041	Y. D. Ranasinghe
COHDSE201F- 042	V. T. Mohotti

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Introduction of the Application

Food is the basic human need to stay alive. Moreover, it is the need of every living organism. Nowadays food has become trending among the society, because of that people are willing to try different kind of dishes. Therefore, it is better to have a social platform which allows to sell, buy, and share their food ideas.

Especially young generation likes to try out various tastes. Not only that we can keep our focus on restaurants to expand their marketplace, but also content creators who create food recipes, people who are willing to sell their cooking skill and all other food lovers.

Problem Definition

There is no proper digital application to hire a chef as soon as you needed. Not only that, but there is also a lack of social platform which provides all buying, selling, hiring, sharing food related things in one place.

Proposed Solution

We are hoping to develop an android application called “**Food Mania**” which allows to create accounts and share recipes, businesses, photos, stories, videos and cooking skills with the friends and followers you care about.

Functional Requirements

- **Login and Registration –**
People can login as a normal user or a business user (restaurants and shops) or a skill seller by creating a user account.
- **Manage user account –**
User can customize the account according to his/her dietary preference and they can manage their personal profile information along with the user image.
- **Manage news feed –**
By using “Food Mania” app you can connect with friends, share what you are up to, or see what is new from others. It will suggest posts to your news feed as you preferred and according to your followers.
Food mania app makes it even easier to find the best recipes, watch incredible food videos and cook delicious meals.


- **Place orders –**
Users can contact a range of restaurants and suppliers to order the cuisine and food items they crave according to their dietary preference any time of the day by dropping a direct message.
- **Skill selling and buying –**
Users can hire a skill seller such as a chef, cake baker and many more, by using the location.
- **Browse restaurants –**
Users can browse Restaurants and Suppliers within their vicinity by using the location to search for food according to item name and type of dish.
- **Video conference –**
Users can use video conference feature for live stream, conduct classes for food lovers and any other entertaining stuff.

Non-Functional Requirements


- **Performance –**
This is a simple and lightweight android application.
- **Portability –**
This application can be download easily from Google play store.
- **Security -**
We maintain separate user profiles normal users, business users and skill sellers by creating accounts.
Unauthorized users should not be able to access the application.
Irrelevant posts and profiles will be automatically banned.
- **Maintenance –**
We would be able to do all the new updates according to the technology change.
By considering customer reviews, we would be able to update the app to be able to continue a well maintenance.
- **Reliability –**
The application will run with less failures.
The definition of a failure will be clearly identified by using validations and exception handling. We will specify the consequences of application failure, how to protect from failure, a strategy for error detection, and a strategy for correction.

Log sheets

Date: 28/ 06/ 2021

Meeting Date	Student Indices (participated)	Supervisor Comments	Signature of the Supervisor
28.06.2021	COHDSE201F – 011 COHDSE201F – 040 COHDSE201F – 041 COHDSE201F – 042	Clearly define the problem. Study similar applications. Identify solution features.	

Date: 05/ 07/ 2021

Meeting Date	Student Indices (participated)	Supervisor Comments	Signature of the Supervisor
05.07.2021	COHDSE201F – 011 COHDSE201F – 040 COHDSE201F – 041 COHDSE201F – 042	Use case diagram should be clearly drawn. Need to include more useful features.	

Date: 20/ 07/ 2021

Meeting Date	Student Indices (participated)	Supervisor Comments	Signature of the Supervisor
20.07.2021	COHDSE201F – 011 COHDSE201F – 040 COHDSE201F – 041 COHDSE201F – 042	Update document with feedback. Complete pending of the application.	

Date: 01/ 09/ 2021

Meeting Date	Student Indices (participated)	Supervisor Comments	Signature of the Supervisor
01.09.2021	COHDSE201F – 011 COHDSE201F – 040 COHDSE201F – 041 COHDSE201F – 042	Update document with feedback. Complete pending of the application.	

Final Evaluation

Criteria	Marks %	Index Number - COHDSE201F			
		011	040	041	042
		A.D.M.L. Aluthge	H.P.K.G. Pathirana	Y.D. Ranasinghe	V.T. Mohotti
Proposal	20%				
Final Report	30%				
Final Software	30%				
Final Viva	20%				
Total Marks	100%				