GUJARAT TECHNOLOGICAL UNIVERSITY

Chandkheda, Ahmedabad

Affiliated

Marwadi Education Foundation
A NAAC A+ ACCREDITED INSTITUTE

Marwadi Education Foundation, Rajkot
Faculty of Engineering
A Report On

FoodHub

Under Subject of

DESIGN ENGINEERING – 2B

B.E. Semester – VI

(Computer Engineering)

Submitted by:

Group:

Sr.	Name of Student	Enrollment No.
1.	Yash Idhatiya	210570107007
2.	Harmi Sangani	210570107053
3.	Jainam Parmar	210570107118
4.	Pragnesh Vagadiya	220573107018

Prof. Pratik Chauhan
(Faculty Guide)

Dr. Munindra Lunagaria
(DE Coordinator)

Dr. Krunal Vaghela
(Head Of Department)

Academic Year
(2024)

CANDIDATE'S DECLARATION

We hereby declare that the work presented in this project entitled "**FoodHub"** submitted towards completion of project in **Sixth Semester** of B.E. (Computer) is an authentic record of our original work carried out under the guidance of"**Prof. Pratik Chauhan"**.

We have not submitted the matter embodied in this project for the award of any other degree.

Semester: 6th

Place: Rajkot

Signature:

1. Yash Idhatiya 210570107007

2. Harmi Sangani 210570107053

3. Jainam Parmar 210570107118

4. Pragnesh Vagadiya 220573107018

MARWADI EDUCATION FOUNDATION,
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RAJKOT

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CERTIFICATE

Date:

This is to certify that the "**FoodHub**" has been carried out by **Yash Idhatiya** under my guidance in fulfillment of the subject Design Engineering-2B in COMPUTER ENGINEERING (6thSemester) of Gujarat Technological University, Ahmedabad during the academic year 2024.

Sign of Faculty Guide
Prof. Pratik Chauhan

HOD, CE Department
Dr. Krunal Vaghela

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RAJKOT

CERTIFICATE

Date:

This is to certify that the "**FoodHub**" has been carried out by **Harmi Sangani** under my guidance in fulfillment of the subject Design Engineering-2B in COMPUTER ENGINEERING (6thSemester) of Gujarat Technological University, Ahmedabad during the academic year 2024.

Sign of Faculty Guide
Prof. Pratik Chauhan

HOD, CE Department
Dr. Krunal Vaghela

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Date:

This is to certify that the "**FoodHub**" has been carried out by **Jainam Parmar** under my guidance in fulfillment of the subject Design Engineering-2B in COMPUTER ENGINEERING (6thSemester) of Gujarat Technological University, Ahmedabad during the academic year 2024.

Sign of Faculty Guide
Prof. Pratik Chauhan

HOD, CE Department
Dr. Krunal Vaghela

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FACULTY OF ENGINEERING,
RAJKOT

CERTIFICATE

Date:

This is to certify that the "**FoodHub**" has been carried out by **Pragnesh Vagadiya** under my guidance in fulfillment of the subject Design Engineering-2B in COMPUTER ENGINEERING (6thSemester) of Gujarat Technological University, Ahmedabad during the academic year 2024.

Sign of Faculty Guide
Prof. Pratik Chauhan

HOD, CE Department
Dr. Krunal Vaghela

ACKNOWLEDGEMENT

We have taken many efforts in this project. However, it would not have been possible without the kind support and help of many individuals and organizations. We would like to extend our sincere thanks to all of them.

We are highly indebted to **Prof. Pratik Chauhan** for their guidance and constant supervision as well as for providing necessary information regarding the Design Engineering Project Titled **"FoodHub".** We would like to express our gratitude towards our Head of the Department **Dr. Krunal Vaghela** and other staff members of Computer Engineering Department, **Marwadi University** for their kind co- operation and encouragement which helped us in completion of this project.

We even thank and appreciate to our colleague in developing the project and people who have willingly helped us out with their abilities.

1. Yash Idhatiya
2. Harmi Sangani
3. Jainam Parmar
4. Pragnesh Vagadiya

ABSTRACT

The Food Hub is application, which make online food ordering very simple, fast and user-friendly. The main function of this app to provide efficient or easy way to order your food online by just few clicks. People send lot of time to find best restaurant and good food but this app make it very easy. There are many other apps are available in market but they can't user-friendly and don't provide efficient functionality. We also try to make app for all type of people so any user can use app without any difficulty. By this app user can find best restaurant with best dishes and order food. We try to satisfy all customer's needs.

List of Figures

INDEX

Contents

CHAPTER 1: INTRODUCTION

Problem summary

- These Project is all about online Food Ordering System. We have to tried to show how deliver fresh at doorstep.
- There are many more different facilities provided by our app.
- This is been achieved by dividing the project into various modules.
- Customer can order food from any restaurant at any time.
- We can also provide facilities like choose your food from any category from best restaurant.

Aim

- The main aim of the project is order food online from favorite restaurant in their day-to-day life.
- It is a system through customer can view any restaurant dishes, different types of food categories, order his/her food at any time from its favorite restaurant.
- The main advantage is customer no need walks out and search good food. They can do this by just clicks.
- This app can provide all information about any restaurant dishes, food grade, rating and much more.

Problem Specifications

People today have busy lives and often lack the time or energy to cook meals. Online food ordering applications provide a convenient solution, allowing users to browse restaurant menus, place orders, and receive food delivery directly to their doorstep. However, existing applications may have limitations or lack features that could improve the user experience.

CHAPTER 2: DESIGN ENGINEERING CANVAS

2.1 AEIOU CANVAS

AEIOU Means

A = Activities

E = Environment

I = Interaction

O = Object

U = Users

- **ACTIVITIES:** Activities Used Like view restaurant menu, view restaurant address, order items, manage profile, manage cart, etc.

- **ENVIRONMENT:** There Are Environment Like Meaningful Ui, User friendly system, Secure data environment.

- **INTERACTIONS:** Interaction Like order food, Register or login, Add details, View order.

- **OBJECT:** There Are So Many Objects Like mobile, tablet.

- **USERS:** There Are Users Like Restaurant owner, End user, Admin.

2.2 EMPATHY CANVAS

Empathy means the experience of understanding another person's condition from their perspective. From Empathy Mapping canvas we discovered and learned about the emotional aspect of our users. Empathy is the foundation of any human design process. The Empathy Mapping is comprised of Users, Stakeholders, Activities and Some Happy & Sad moments.

- **USERS:** The Users Involved Like Restaurant owner, End user, Admin.

- **STACKHOLDERS:** The Stakeholders Are Those Part of The Project Whose Support Are Necessary. The Stakeholder Includes Customers, Restaurants, Developing compony Etc.

- **ACTIVITIES:** The Activities Like Browse restaurant, Place order, Track order, View menu, Provide rating.

STORY BOARDING

- **Happy Story**: upon a time in a bustling city hungry friend gathers for a spontaneous evening hangout With a few taps on their favorite online food ordering ass, they effortlessly explored a variety of cuisines and quickly placed their orders as they chatter and online laughed their food order is revived. All thanks to the good and trusty food ordering app.

- **Happy Story**: in a bustling city a busy couple Alex and Emily crewing their favorite comfort food, opted to order Pizza online one evening With a few fans on their phone, they eagerly awaited their delivery which arrived properly snuggled up on the couch. they indulged in their cheesy delight savoring the simple way of sharing is delicious the simple joy of have a delicious meal together and creating finished cherish memories ad midst their hectic lives.

- **Sad Story**: Excited for a craze dinner night, a couple placed an online food order. However, as they waiting for delivery, they received notification that their order has been cancelled due to some problem.

- **Sad Story**: After a long day at work, a tired individual eagerly ordered their favorite food from nearby restaurant. But he received wrong order from restaurant due to some error in application.

2.3 Problem definition by Prior Art Search

Exiting Solution:

- Restaurant-Specific Apps: Many restaurants have their own apps for ordering food directly from them (https://www.restroapp.com/). This offers a streamlined experience but limits choice.
- Multi-Restaurant Apps: Apps like Zomato and Swiggy allow users to order from a wide variety of restaurants, providing convenience and choice.

Identified Problems:

- Limited Choice: Restaurant-specific apps restrict users to one restaurant's menu.
- Inconvenience: Without a multi-restaurant app, users need to visit multiple apps to compare options.
- Discovery: Finding new or hidden gem restaurants can be difficult on existing platforms.
- Minimum Order Requirements: Some apps have minimum order requirements, forcing users to spend more than desired.
- Delivery Fees: Delivery fees can add significant cost to an order.

2.4 Mind Mapping

Mind mapping is a rough sketch of what we observe during our observation. It is bringing out all observation from mind and implementing it on one place.

As a part of observation following rough sketch was made observing activities on interactions, objects used, environment of surrounding and problems facing by them and their appropriate solution. This mapping is further implemented on canvas making appropriate changes.

2.5 Ideation Canvas

This Canvas Consist of The Idea Behind the User, So in This Canvas Some Brief Ideas Are Express Which Are Express in Empathy Canvas. People Section Consist of Persons Related to User Technically and Similar Persons May Related to User. Then We Divided Activities in Social & Technical and Try to Find Out the Importance of Each Activity and Situations & Location Regarding Are Find Out Related to Each.

- **PEOPLE:** People Include in Product Development Are End User, Restaurant Owner and Admin.

- **ACTIVITIES:** Activities Used Like Order Food, Manage Cart, Manage Profile, Add or Edit Items, View Menu, etc.

- **SITUATION/CONTEXT/LOCATION**: Situation is Easy to Use, User Friendly, etc.

- **PROPS/PROBLEM SOLUTION:** This App Provide possible solutions like Fast Ordering, Easy Cart Management, Simplify UI.

2.6 Product Development Canvas

- **PURPOSE:** The Purpose of The Our Project Is improving online food ordering system, improve system UI, build user friendly application.
- **PEOPLE**: People Include in end user, restaurant owner and admin.
- **PRODUCT FEATURES:** Features Of Our Products are easy to navigate, fast response, better functionality.
- **PRODUCT EXPERIENCE**: Experience Of Our Products is good Ui, good response, fast review.
- **PRODUCT FUNCTIONS**: Functions Of Our Products are browse and search, review and rating, order, payment.
- **PRODUCT COMPONENTS**: Components are profile, restaurants, cart, orders, menus.
- **CUSTOMER REVALIDATION:** The Customer Reveled the Following Things in The Project Like reduce login time, provide offers, add more details.
- **REJECT, REDESIGN, RETAIN:** Customers Has Reject Thing in Our Product Is high image load time sometime. Redesign For This Rejected Things is for change in some components. Retain Technologies Are database query and efficient library.

2.7 LEARNING NEEDS MATRIX

In this semester we study about LNM (learning needs matrix). in this LNM sheet include four sections. In LNM we study about tools / methods / theories / application process in involved of our project in first section. after in second section we study about application standards and specification / principal and experiments of project. In third section we study about component material strength criteria (exploration-varieties / testing requirements) and last in four section we study about software / simulation / skill / mathematical requirements of our project topic.

CHAPTER 3: FEEDBACK ANALYSIS WITH USER

Interaction-1

- **User-feedback**: The takes about 8-10 seconds to load; it'll be better if it loadsfaster.

- **Our implementation**: We optimized the database in such a way, it'll take less time while loading as well as while going to one page from another page.

Interaction-2

- **User-feedback**: The language being used is not understandable for every person.

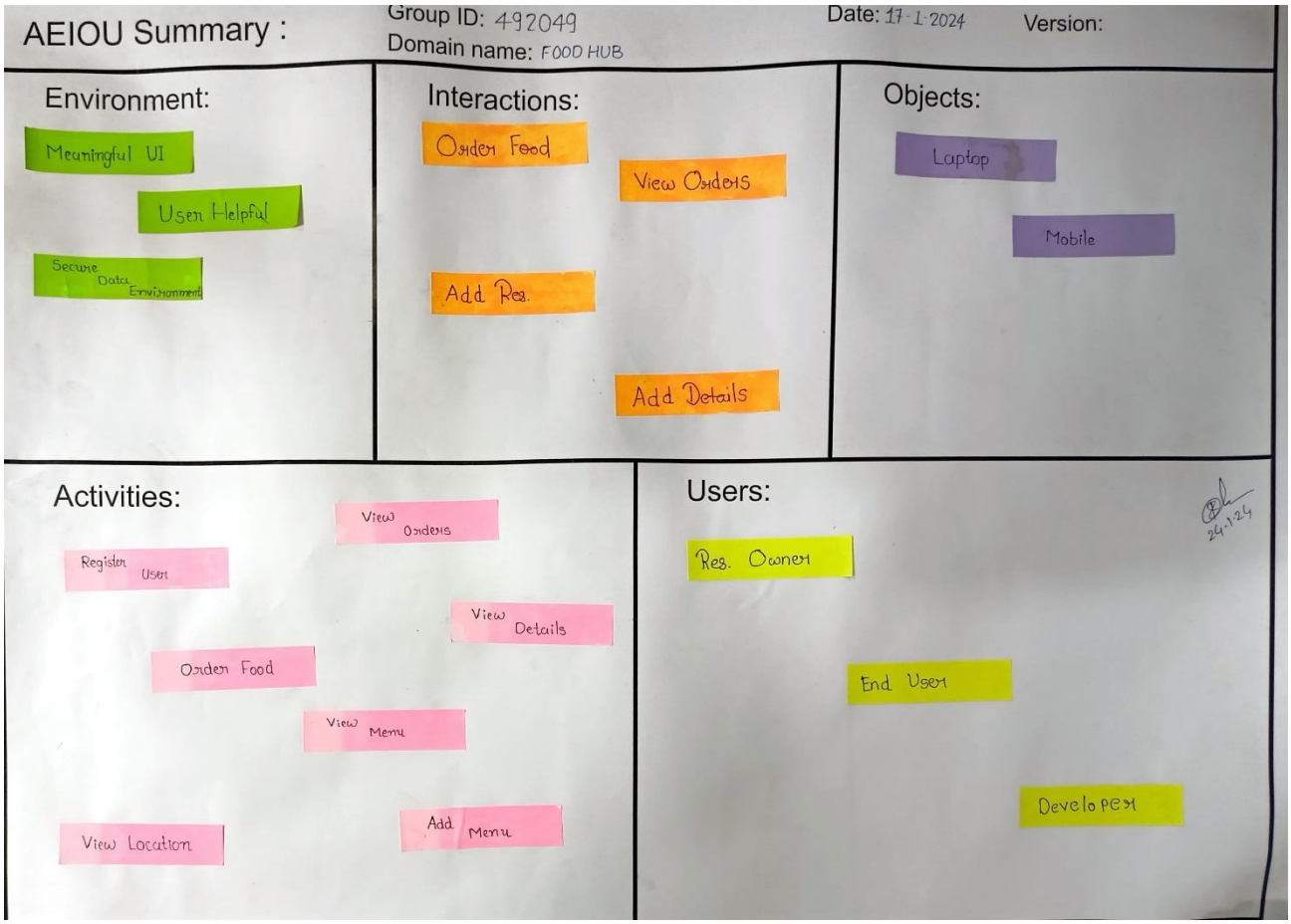
- **Our implementation**: We will provide the content in multiple common and understandable languages.

CHAPTER 4: REFERENCES

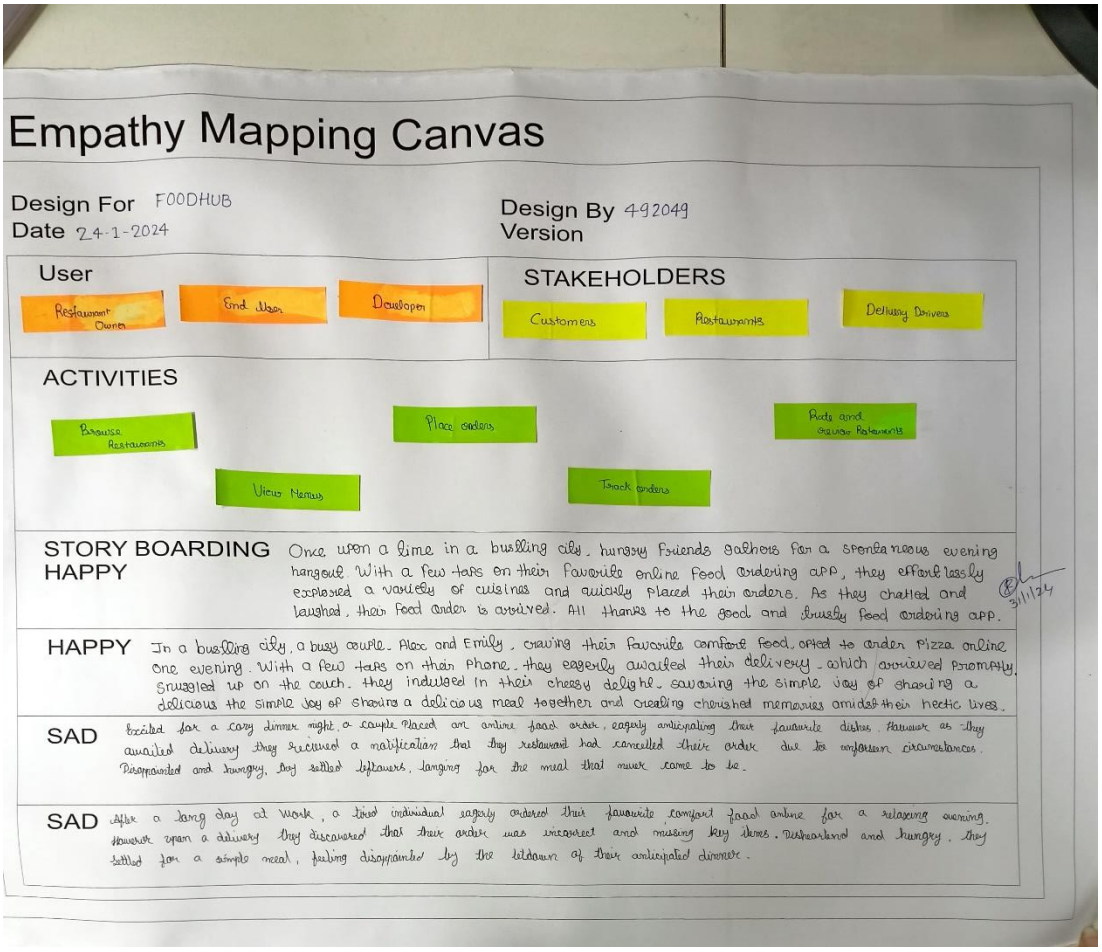
- www.google.com
- Zomato App
- Swiggy App
- https://developer.android.com/docs
- https://firebase.google.com/docs

CHAPTER 5: APPENDIX – A

AEIOU CANVAS



EMPATHY CANVAS



Empathy Mapping Canvas

Design For FOODHUB
Date 24-1-2024

Design By 492049
Version

User

- Restaurant Owner
- End User
- Developer

STAKEHOLDERS

- Customers
- Restaurants
- Delivery Drivers

ACTIVITIES

- Browse Restaurants
- Place orders
- Rate and review Restaurants
- View Menus
- Track orders

STORY BOARDING HAPPY Once upon a time in a bustling city, hungry friends gathers for a spontaneous evening hangout. With a few taps on their favourite online food ordering app, they effortlessly explored a variety of cuisines and quickly placed their orders. As they chatted and laughed, their food order is arrived. All thanks to the good and trusty food ordering app.

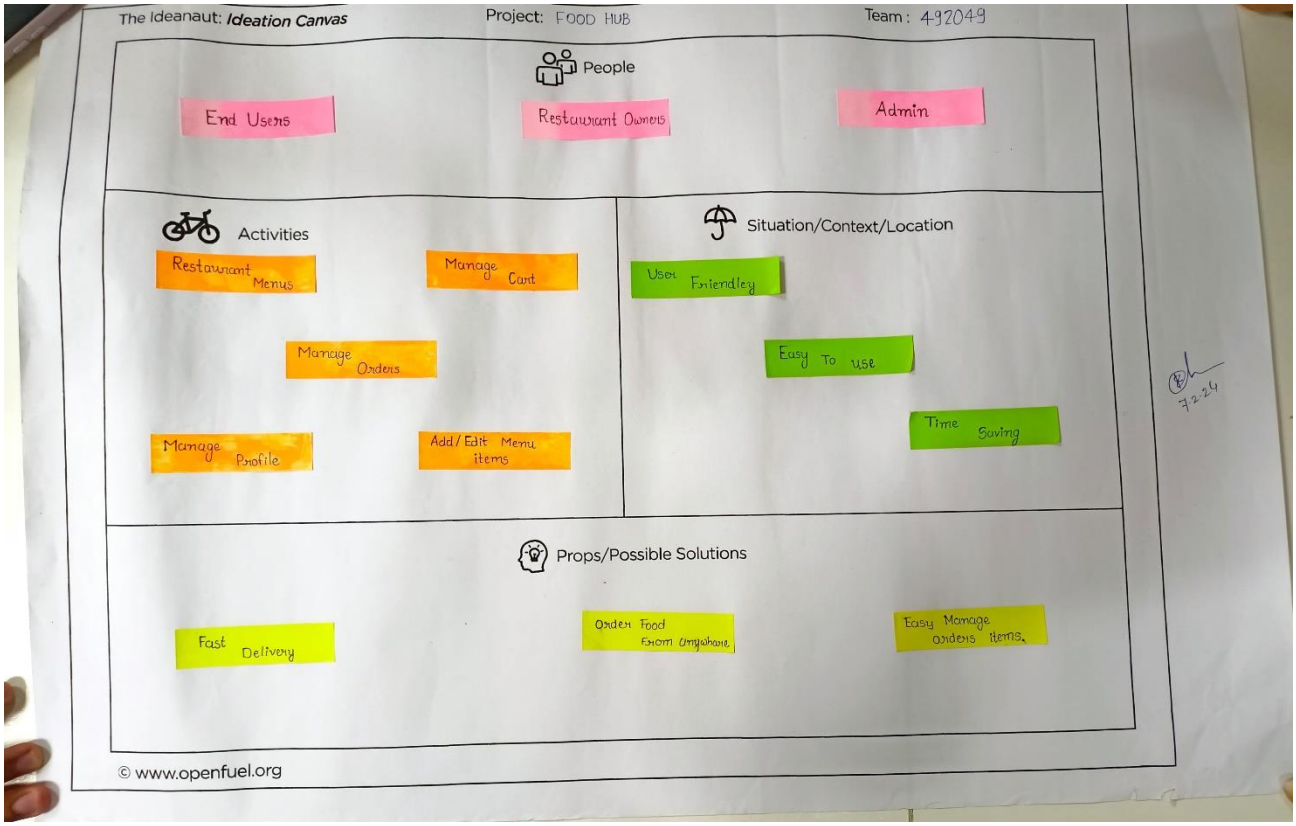
3/1/24

HAPPY In a bustling city, a busy couple- Alex and Emily, craving their favourite comfort food, opted to order Pizza online one evening. With a few taps on their phone, they eagerly awaited their delivery, which arrived promptly. Snuggled up on the couch, they indulged in their cheesy delight, savoring the simple joy of sharing a delicious the simple joy of sharing a delicious meal together and creating cherished memories amidst their hectic lives.

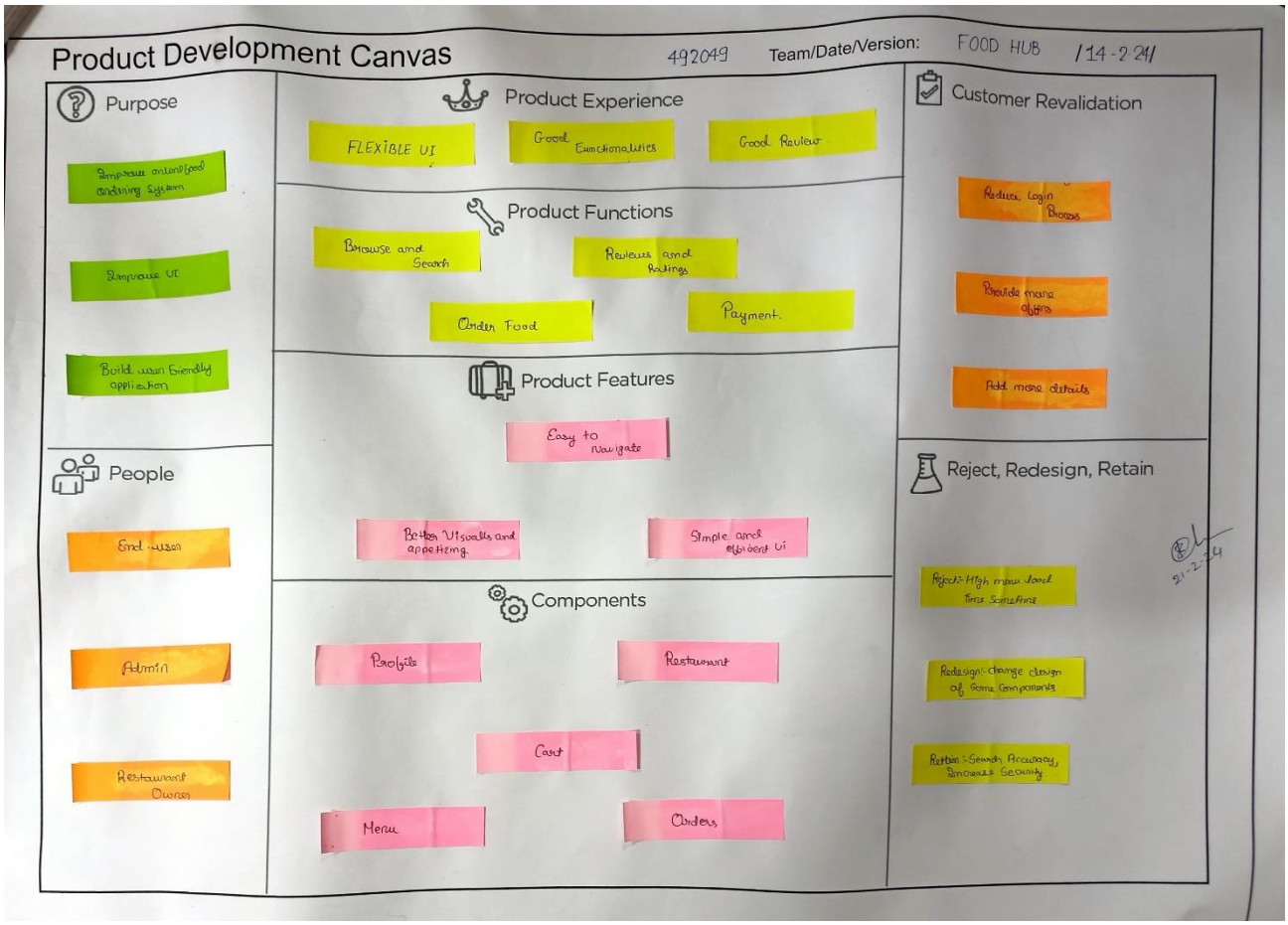
SAD Excited for a cozy dinner night, a couple placed an online food order, eagerly anticipating their favourite dishes. However as they awaited delivery they received a notification that the restaurant had cancelled their order due to unforseen circumstances. Disappointed and hungry, they settled leftovers, longing for the meal that never came to be.

SAD After a long day at work, a tired individual eagerly ordered their favourite comfort food online for a relaxing evening. However upon a delivery they discovered that their order was incorrect and missing key items. Disheartened and hungry, they settled for a simple meal, feeling disappointed by the letdown of their anticipated dinner.

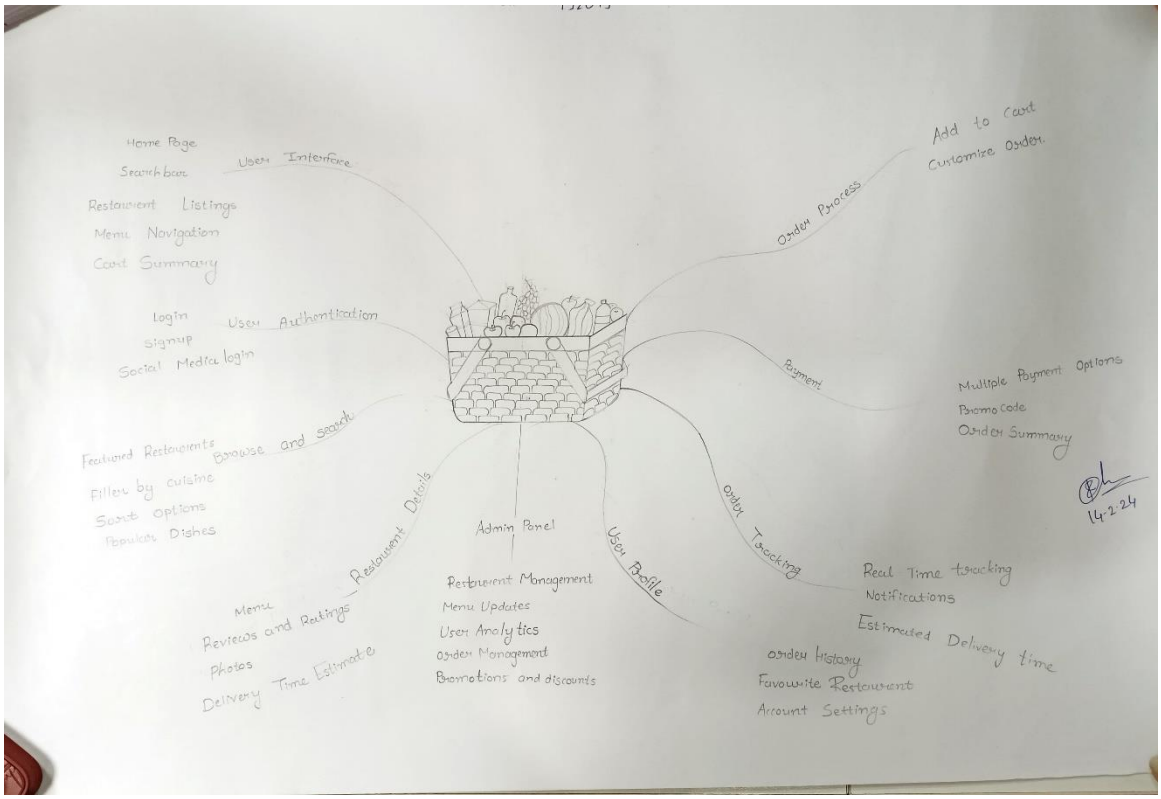
IDEATION CANVAS



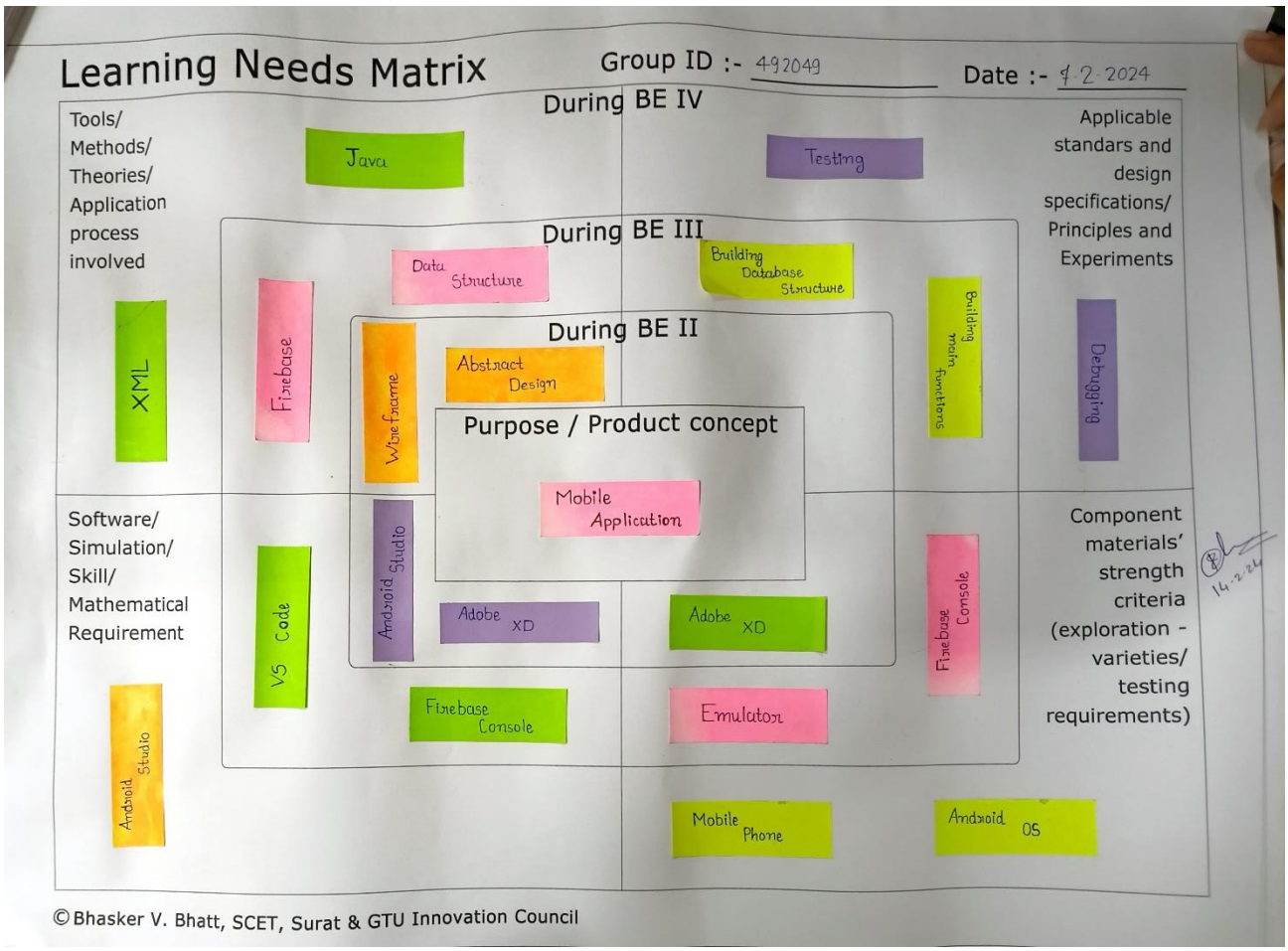
PRODUCT DEVELOPMENT CANVAS



MIND –MAPPING



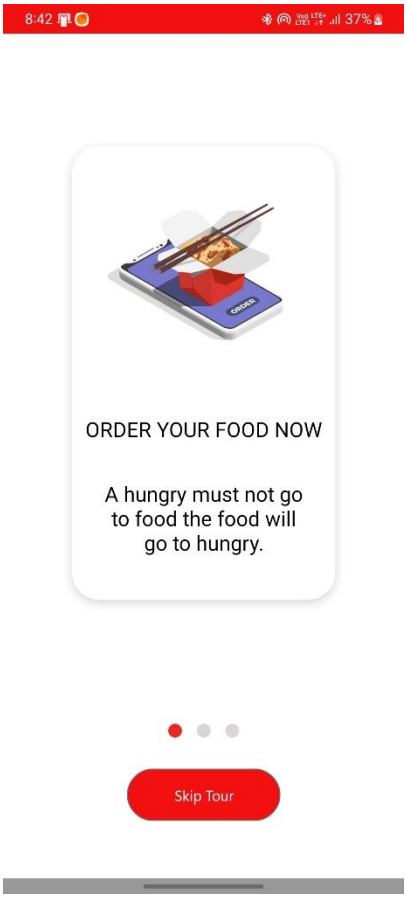
LEARNING NEEDS MATRIX



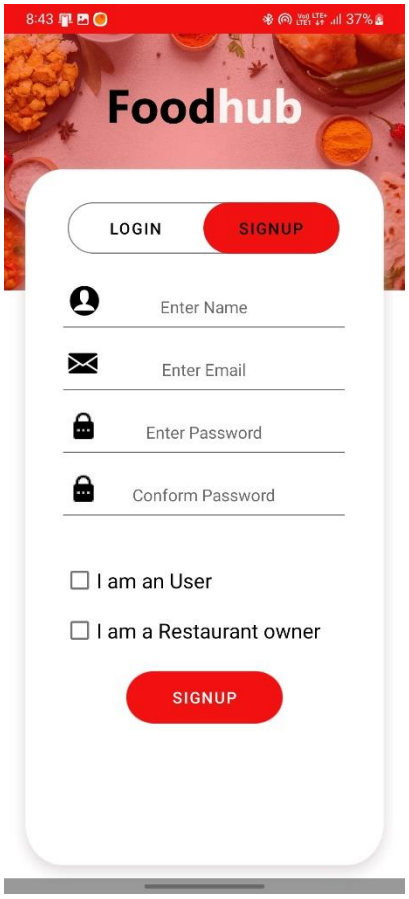
CHAPTER 5:APPENDIX – B

Prototype:

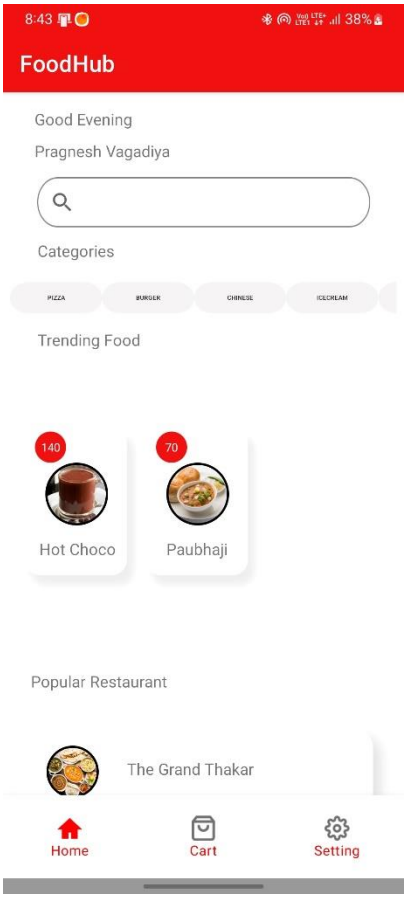
- **Onboarding Page:**



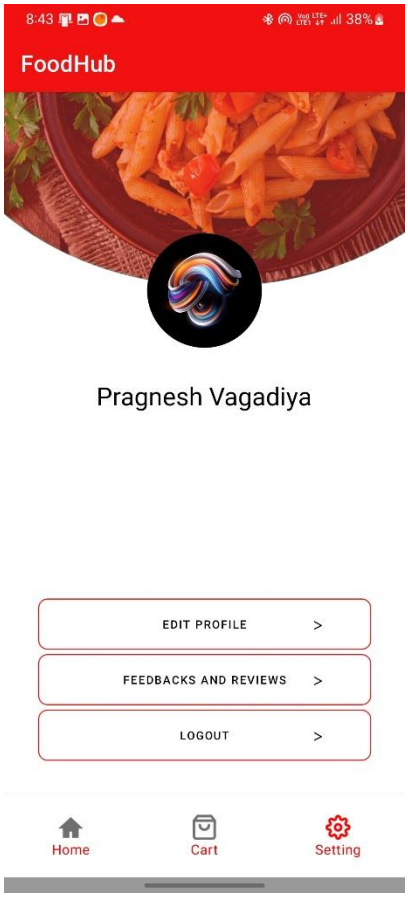
Login/Signup Page:



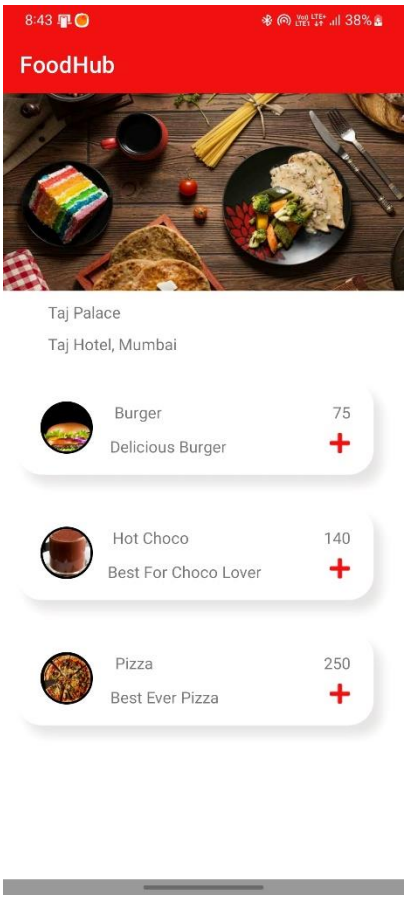
- **Home Page:**



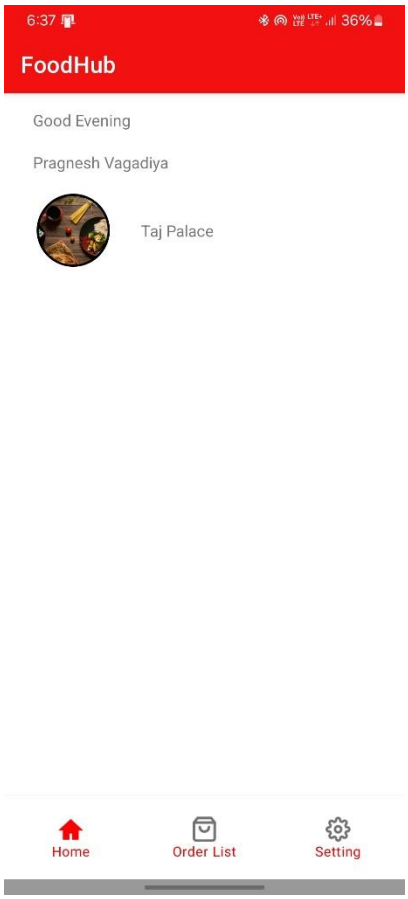
Profile Page:



- **Restaurant Page:**

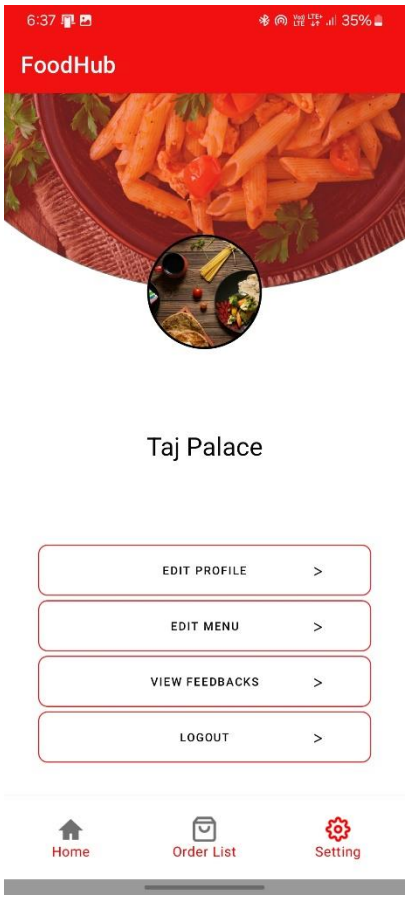


Admin Home Page:

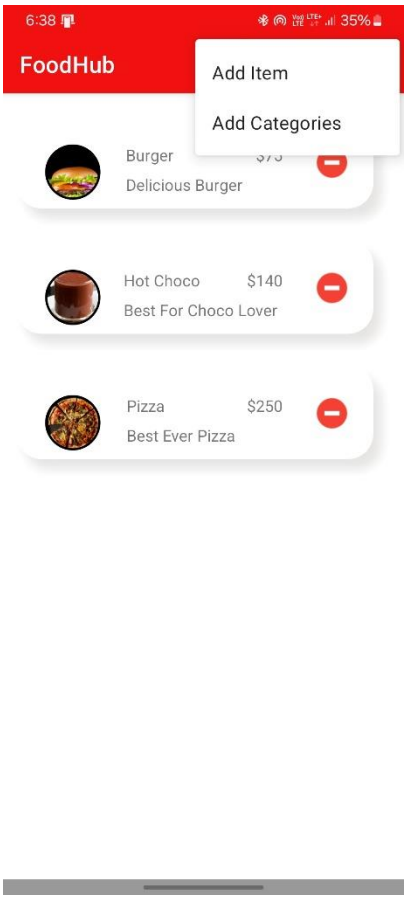


- **Order Page:**

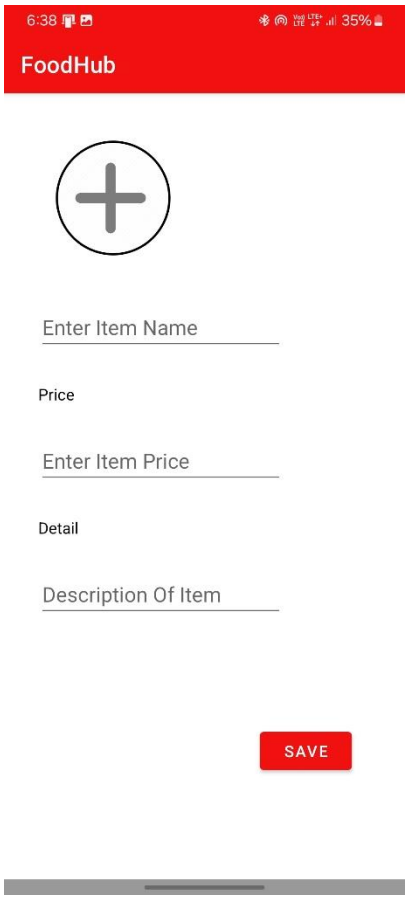
Restaurant Profile Page:



- **Edit Menu Page:**

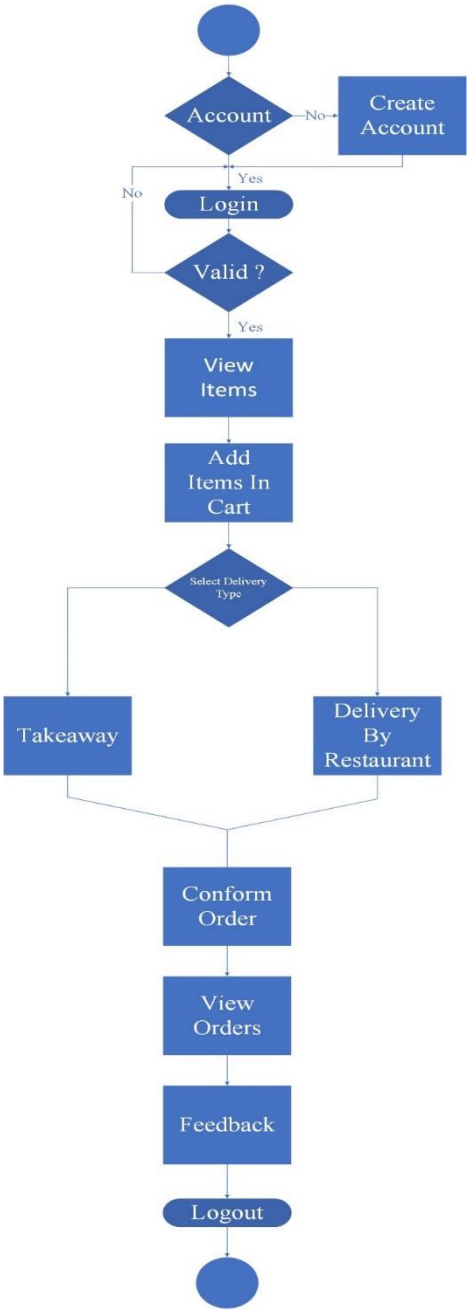


Add Item Page:

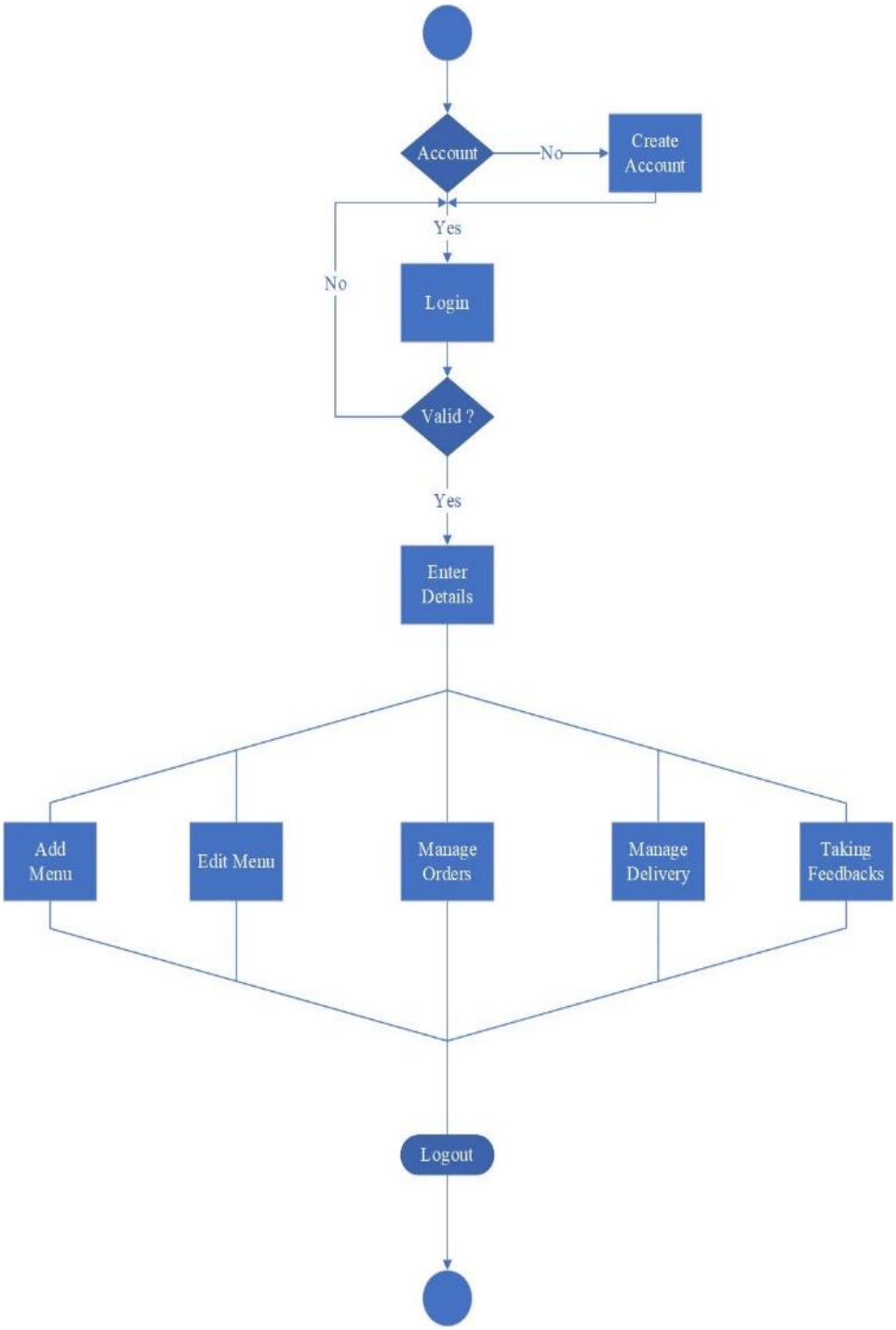


Work Flow Diagram:

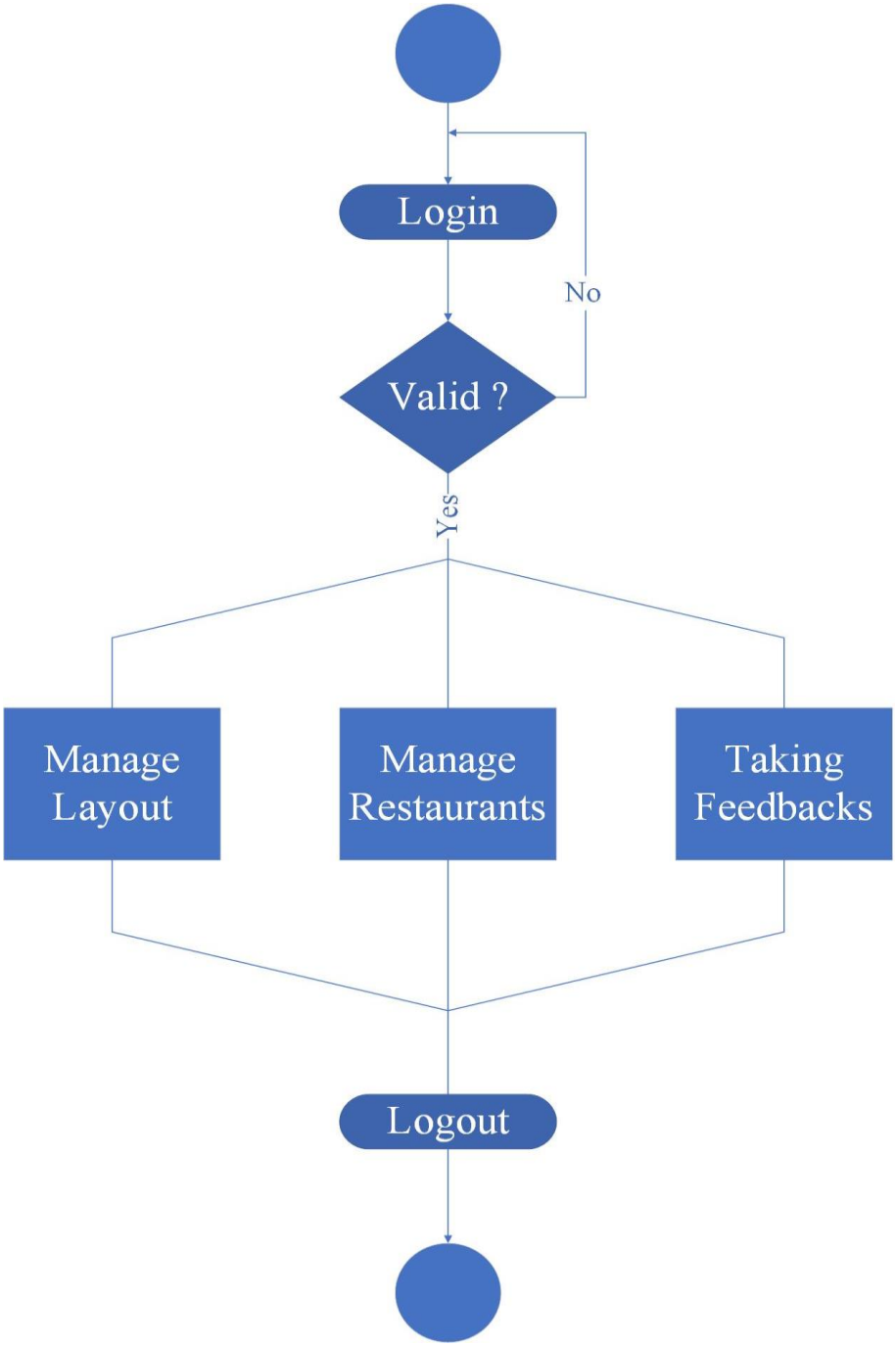
- End User:



- Restaurant Owner:



- Admin:


Login
No
Valid ?
Yes
Manage Layout
Manage Restaurants
Taking Feedbacks
Logout

Database Tables:

- Users

Sr No.	Name	Data Type	Size	Constraints	Description
01	Id	Number	50	Primary Key	Id For User
02	Name	Varchar	30	Not Null	Name Of User
03	Email	Varchar	30	Not Null	Email Of User
04	Is_Ro	Varchar	5	Not Null	Check For Access Level

- Restaurants

Sr No.	Name	Data Type	Size	Constraints	Description
01	Id	Number	50	Primary Key	Id For Restaurant
02	Name	Varchar	30	Not Null	Name Of Restaurant
03	Address	Varchar	50	Not Null	Address of restaurant
04	Menu	Varchar	50	Not Null	Menu of restaurant
05	Is_Del	Varchar	5	Not Nul	Check Delivery Facility

- Cart

Sr No.	Name	Data Type	Size	Constraints	Description
01	User Id	Number	50	Primary Key	Id For User
02	Items	Varchar	50	Not Null	All items added by customer
03	Total items	Number	5	Not Null	Number of items added by customer
04	Total Bill	Number	5	Not Null	Total bill of customer

- Orders

Sr No.	Name	Data Type	Size	Constraints	Description
01	Restaurant Id	Number	50	Primary Key	Id Of Restaurant
02	User Id	Number	50	Not Null	Id of User
03	Items	Varchar	50	Not Null	Name Of User

- Feedback

Sr No.	Name	Data Type	Size	Constraints	Description
01	User Id	Number	50	Primary Key	Id For User
02	Name	Varchar	30	Not Null	Name Of User
03	Email	Varchar	30	Not Null	Email Of User
04	Message	Varchar	50	Not Null	Feedback message from user

- Homepage Items

Sr No.	Name	Data Type	Size	Constraints	Description
01	Trending restaurants	Varchar	50	Primary Key	Trending restaurants list
02	Think to drink	Varchar	30	Not Null	Best place for drinks

Future scope

Future scope: we can consider many scopes of this project for implement it in future, we can include:

- To make website or webapp.
- Provide home delivery system by us.
- Provide online payment system.

Conclusion

- At the end of project, we can conclude that it was very easy and user-friendly application for online food ordering.
- For past few years many food ordering applications are available but all of those have some kind of problems. So, we have to tried to overcome those problems.
- We hope this application developed by us shall satisfy all requirement of customers.

Advantages

- One of the best ways to order food online from any restaurant.
- We trying satisfy all needs of customer and full field they demand.
- This application is solving the problem of people to wasting time to find good restaurant and good and healthy food.
- By this system people can order any food from any restaurant by just few clicks.

Disadvantages

- No proper identification of restaurants.
- There no any facility of online payment.
- There no any facility of home delivery from our side.
- No online website or any kind of webapp.