HOMEMADE FOOD DELIVERY



DA-IICT

Mentored By: Prof. JayPrakash Lalchandani

PC641: Winter Internship Report – On Campus

Prepared By:

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Acknowledgment

We take this opportunity to express our profound gratitude and deep regards to our mentor Prof JayPrakash Lalchandani for his exemplary guidance, monitoring and constant encouragement throughout the course of this project.

Further, we would like to thank our team members for the effort and co-operation.

With sincere thanks,

Sneha Tomar (201912029)

Shanu Nirwal (201912074)

Bhatt Naika Nileshkumar (201912093)

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Introduction

Project Name: Homemade Food Delivery

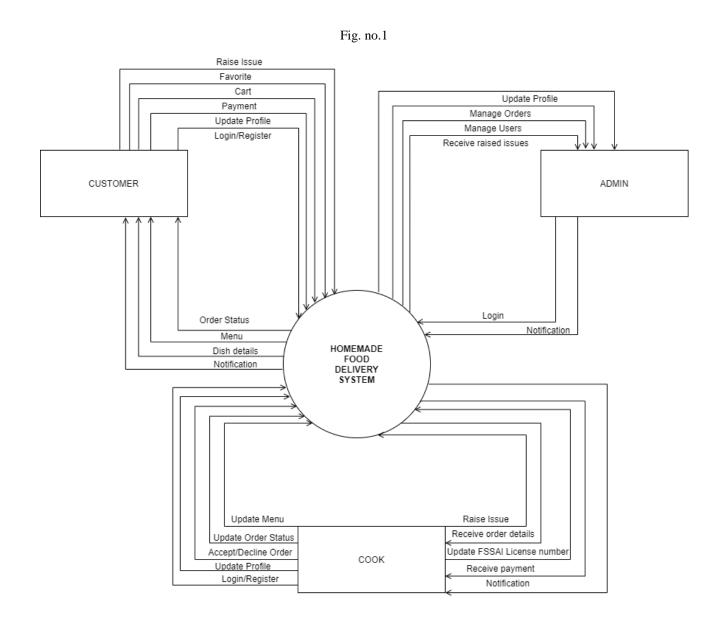
Project Type: Mobile Application (Cross-platform)

A Homemade food ordering application which is developed with the means of providing working people with the option of having home cooked healthy food. Since, a lot of people don't know how to cook, or are not able to cook due to a heavy schedule, and since in this pandemic a lot of them wish to eat homemade cooked food rather than restaurant, they can order food from our application.

It also serves as a platform where home cooks can exhibit their culinary skills and even get employment opportunities. It is a cross-platform application.

Context Diagram

Context diagram helps us in identifying the interfaces we need to account for- to identify scope, identify potential stakeholders, and build a better understanding of the context in which we worked.



Functionalities

Admin

- Login
- Manage Users(block/ unblock/ active/ deactivate)
- Manage order (status, payment details)
- Menu (food category(subcategory if possible))
- Manage feedbacks
- Notification

Cook

- Registration/Login
- Verification of account
- Manage profile
- Manage menu
- Manage order (get order details, accept/ decline)
- Order Status update(in-process/completed)
- Get payment
- Feedback/Raise issue to admin
- Notification

Customer

- Registration/Login
- Manage profile
- View menu
- Customize order
- Order status
- Make payment
- Favorite
- Feedback/Raise issue to admin
- Notification

Project Scope

- Maximum exposure: our application can target both Android as well as iOS platforms because it is a cross-platform mobile application, hence maximizing the reach.
- Cost effective: because it is a cross-platform application, the code has to be written once, and it can run on multiple platforms, so only once the application has to be developed and it has reusable code.
- Easy maintenance: since it is just one application which can run on all platforms, it is easier to maintain.
- Online payment options available.
- Users can order from a variety of dishes.
- Supports Local business.
- Can track their order and favorite too.

Use Case

The use case diagrams represent the core parts of a system and the workflow between them.

Admin side use case

Fig. no.2

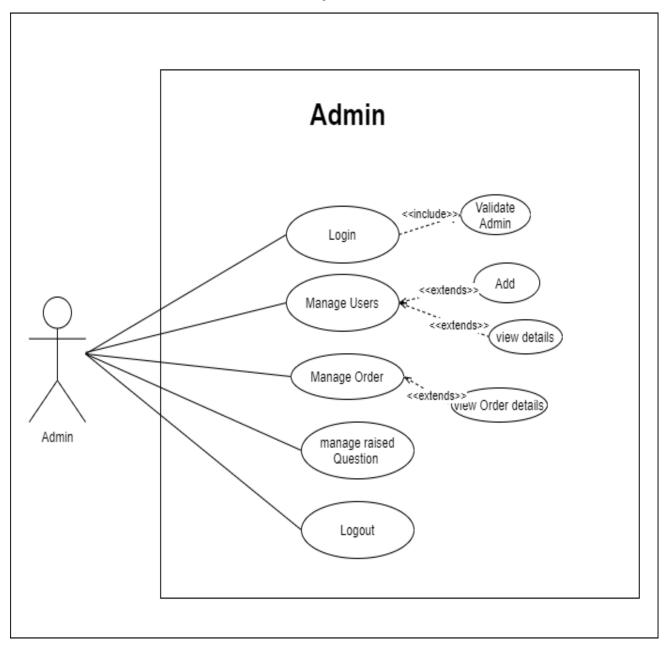


Fig. no.3

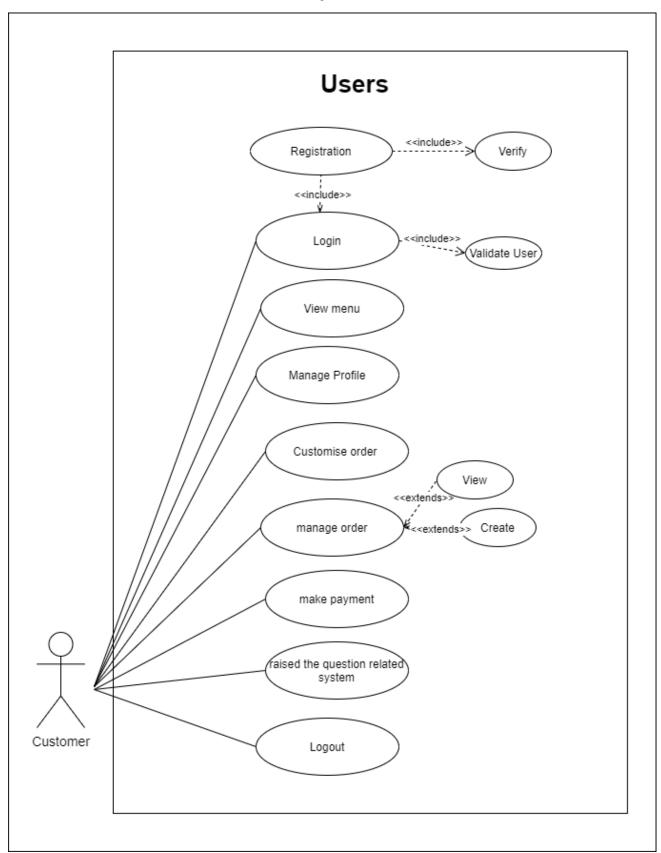
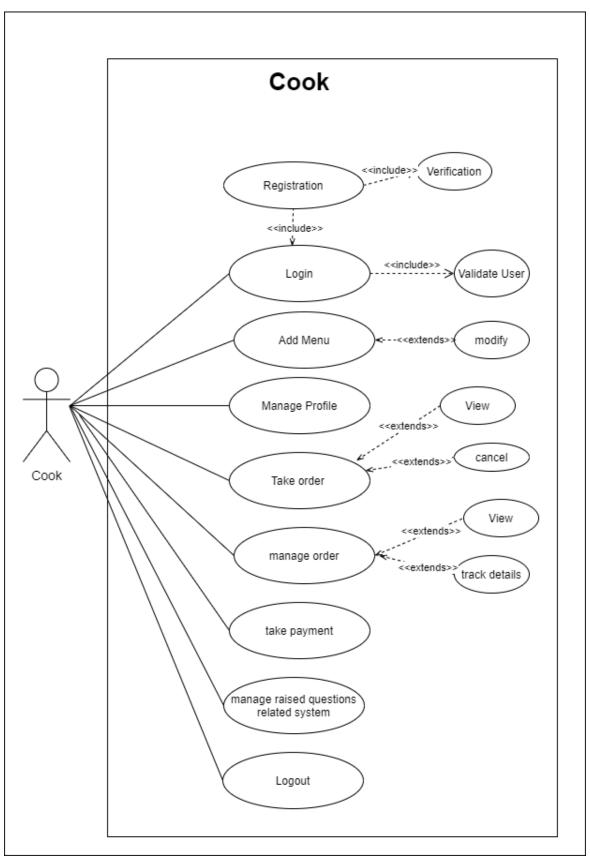


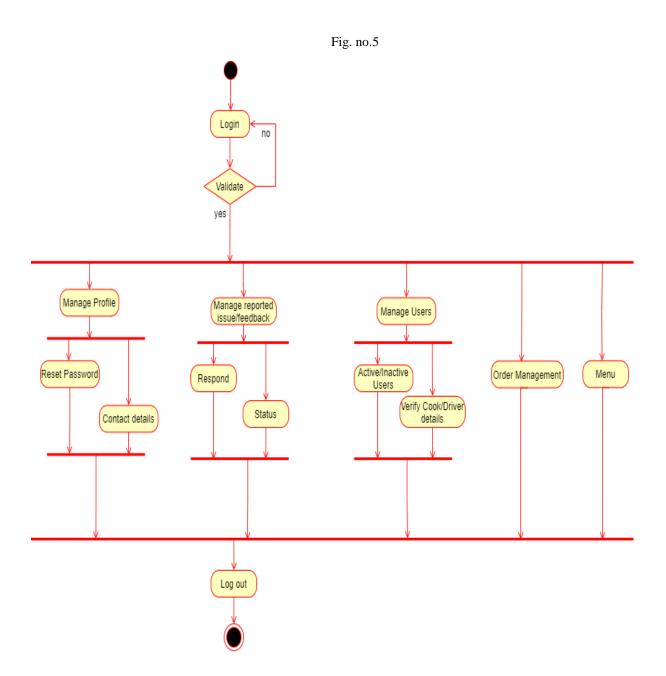
Fig. no.4



Activity Diagram

Activity diagram is basically a flowchart to represent the flow from one activity to another activity. The activity can be described as an operation of the system.

Admin side activity diagram



Customer side activity diagram

Fig. no.6

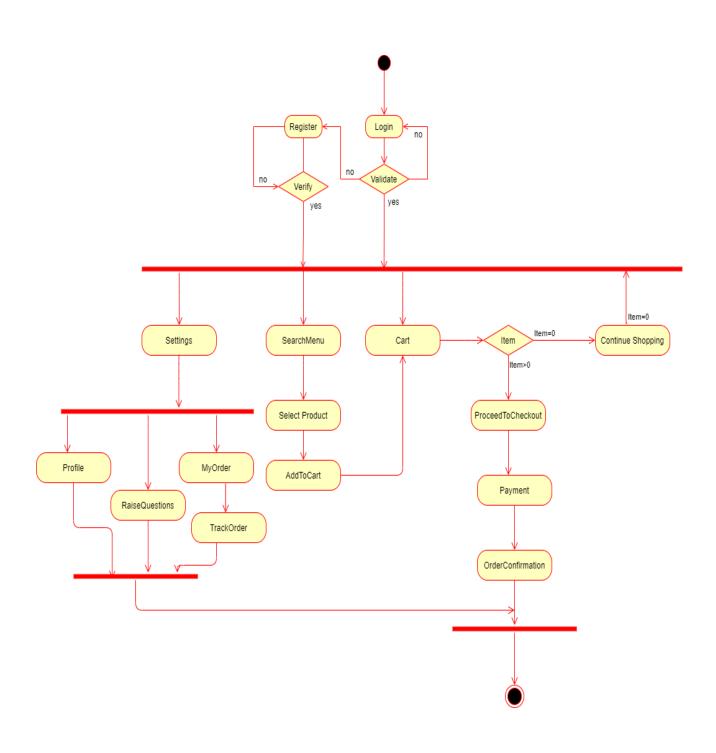
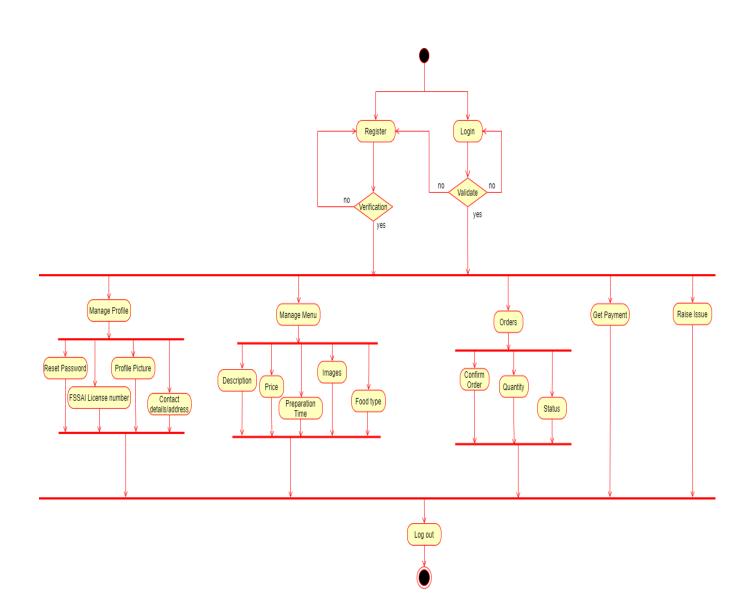


Fig. no.7



User Stories

A user story describes how a customer or user employs the product, it is told from the user's perspective.

Admin side user stories

table no.1

AS A/AN < type of user/role >	I WANT TO < some goal >	SO THAT < some reason/benefit >
admin	register	for the application by entering my email, password & confirm my password
admin	login/reset password	access & manage the system
admin	block/ unblock/ active/ deactivate	manage - cook and customer
admin	receive report/issue	can work upon the issue raised by customer or cook
admin	give report/issue status	concerned party can get know about the status about their issue
admin	send notification	I can notify users about any update
admin	manage order	edit menu and order
admin	log out	to end the session & protect my data to unauthorized people

Cook side user stories

table no.2

AS A/AN < type of user/role >	I WANT TO < some goal >	SO THAT < some reason/benefit >
cook	register	for the application by entering my email, password & confirm my password
cook	enter FSSAI license/registration number (NOT MANDATORY)	register as a cook on this system
cook	login/reset password	access the application
cook	update my profile	manage profile - contact details, address, photo,etc.
cook	receive notification	I can know about any new order or any update or announcement
cook	complement dish description in the menu with a photo	it looks more attractive to the customers

cook	mention working hours	gets order during my mentioned time only
cook	get order details	can start working on my food preparation process
cook	update order status	customer can know their order's status
cook	get payment	receive my payment for my service
cook	give report/issue	can contact admin about issue
cook	log out	to end the session & protect my data to unauthorized people

Customer side user stories

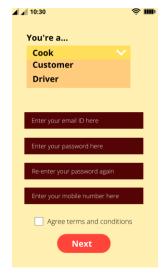
table no.3

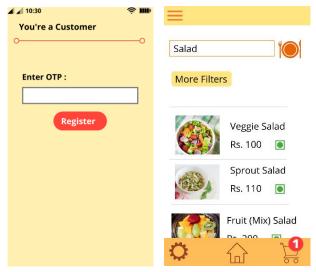
AS A/AN < type of user/role >	I WANT TO < some goal >	SO THAT < some reason/benefit >
customer	register	for the application by entering my email, password & confirm my password
customer	login/reset password	access the application
customer	update my profile	manage profile - contact details, address, photo,etc.
customer	browse & filter menu	check dishes & then set an order accordingly
customer	mark favorite	I can know my favorite dishes
customer	receive notification	I can know about any new order or any update or announcement
customer	customize order quantity	so that my food can be prepared accordingly
customer	check order status	I can check my order's status,i.e. is it in-progress/ completed/accepted/declined
customer	give payment	can pay my bills
customer	get cook location	I can pick up my order on my own
customer	give report/issue	can contact admin about issue
customer	log out	to end the session & protect my data to unauthorized people

UI Design

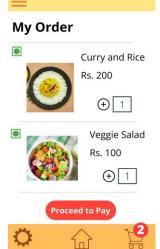
UI Designs were made in Figma.

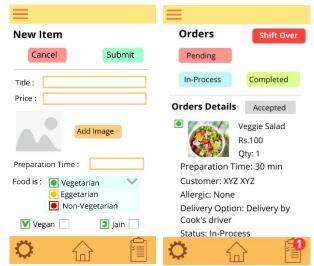












Design Contribution

UI design for our application was prepared in Figma, and the whole team participated in it. Contribution by:

--ID-- --Name--201912029 Sneha Tomar 201912074 Shanu Nirwal

201912093 Bhatt Naika Nileshkumar

Programming Contribution

Whole team participated in front-end and back-end programming, and database. Contribution by:

--ID-- --Name--201912029 Sneha Tomar 201912074 Shanu Nirwal

201912093 Bhatt Naika Nileshkumar

Mobile application side is developed in React Native, Expo was used for testing application on multiple platforms.

Admin side is developed in Python using Flask, which is the framework of Python.

For Database, we've used Firebase.

Tools and Technologies Used

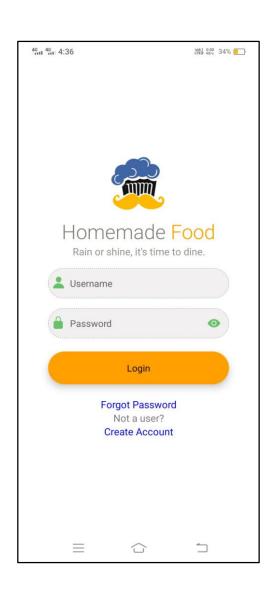
table no.4

Tools		
VSCode	Visual Studio Code is a source-code editor that can be used with a variety of programming languages, including Java, JavaScript, Go, Node. js,React NativePython and C++. It is based on the Electron framework, which is used to develop Node. js Web applications that run on the Blink layout engine.	
Expo	Expo is a tool chain built around React Native to help you quickly start an app. It provides a set of tools that simplify testing of React Native app on multiple platforms like android, web, iOS	
Android Studio Emulator	The Android Emulator simulates Android devices on your computer so that you can test your application on a variety of devices and Android API levels without needing to have each physical device. The emulator provides almost all of the capabilities of a real Android device	

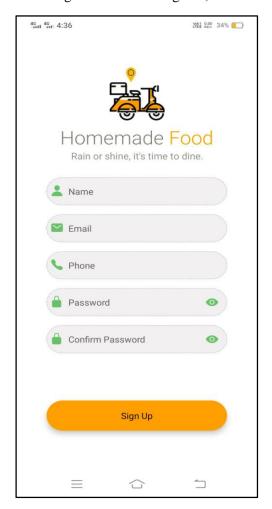
Technologies				
React Native	React Native is an open-source mobile application framework created by Facebook.It is used to develop applications for Android, Android TV, iOS, macOS, tvOS, Web, Windows and UWP by enabling developers to use React's framework along with native platform capabilities.			
Node js	Node. js is primarily used for non-blocking, event-driven servers, due to its single-threaded nature. It's used for traditional web sites and back-end API services, but was designed with real-time, push-based architectures in mind.			
Firebase	Firebase is a Backend-as-a-Service (Baas). It provides developers with a variety of tools and services to help them develop quality apps, grow their user base, and earn profit. It is built on Google's infrastructure. Firebase is categorized as a NoSQL database program, which stores data in JSON-like documents			
Jinja	Jinja2 is a modern day templating language. It is used to create HTML, XML or other markup formats that are returned to the user via an HTTP request.			
Flask (Framework of Python)	Flask is a small and lightweight Python web framework that provides useful tools and features that make creating web applications in Python easier. It gives developers flexibility and is a more accessible framework for new developers since you can build a web application quickly using only a single Python file			
	UI Designing			
Figma	Figma is a web-based user interface design app. Used for doing all kinds of graphic design work from wireframing websites, designing mobile app interfaces, prototyping designs, and everything in between, also components in Figma allow you to control commonly reused UI elements.			
	Diagrams			
Draw io	draw.io is proprietary software for making diagrams and charts. UML diagrams were made using daw.io			
Version Control				
Github	Github is a web-based platform used for version control. Git simplifies the process of working with other people and makes it easy to collaborate on projects.			
Graphic Designing and Icons				
Canva	Canva is a graphic design platform, used to create graphics, logos etc.			
Icons8	Icons8 has vast library royalty free icons, they were used in our project.			
Paint 3D	Paint 3D is graphics and 3D modeling by Microsoft, used for creating graphics.			

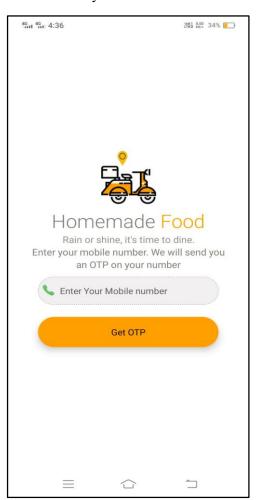
Screenshots





Register Screens - register, enter mobile number on which you'll receive OTP

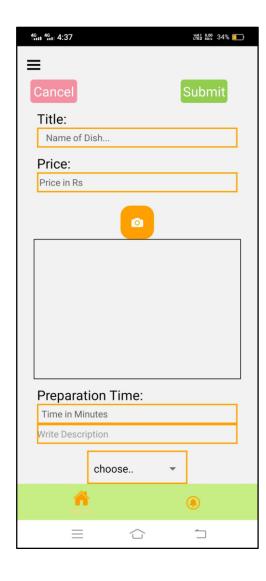


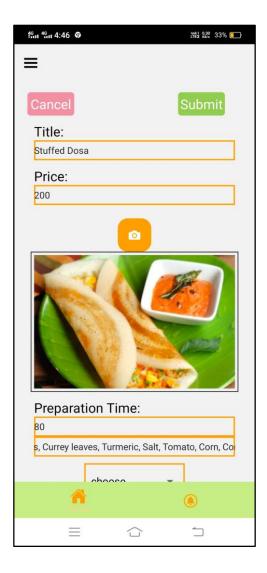




COOK SIDE APP

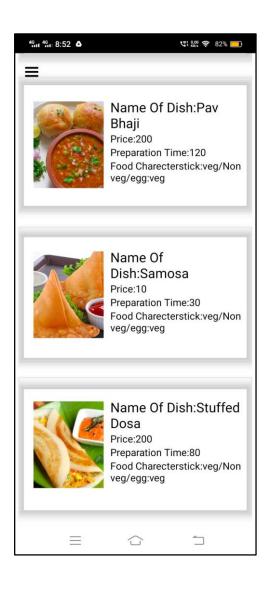
Add food item in menu

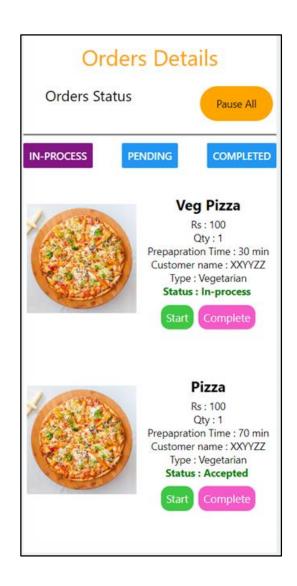


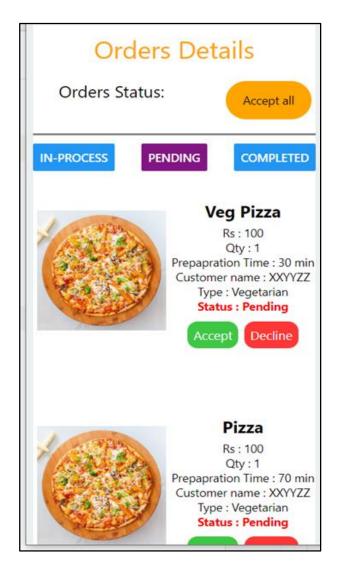


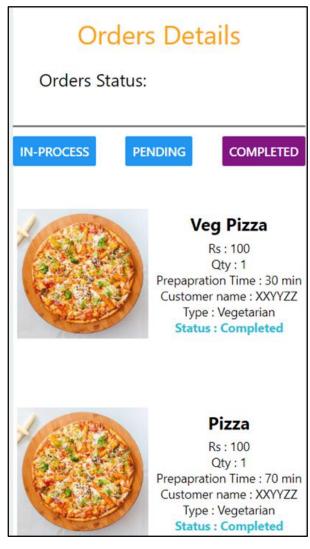
Order Management

Orders which are accepted and are in-process



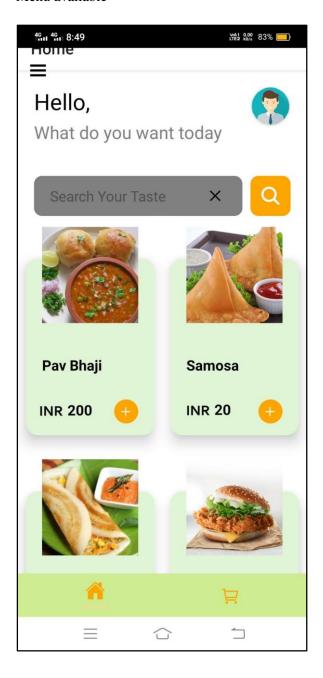




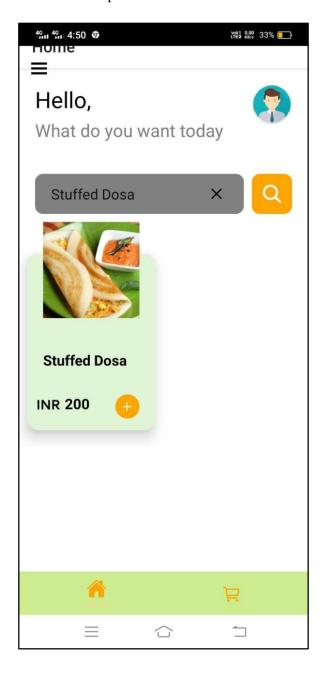


CUSTOMER SIDE APP

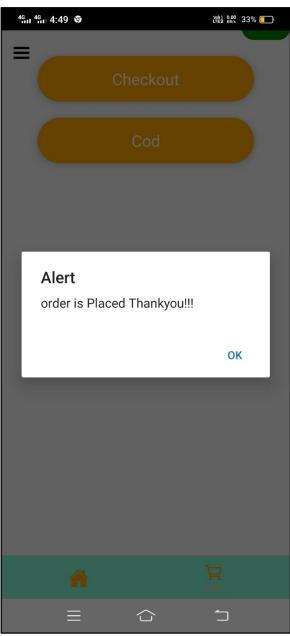
Menu available

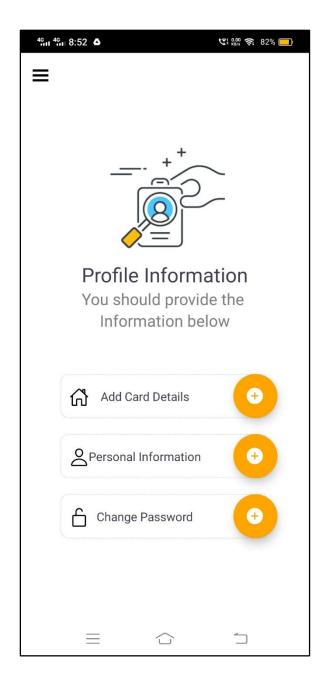


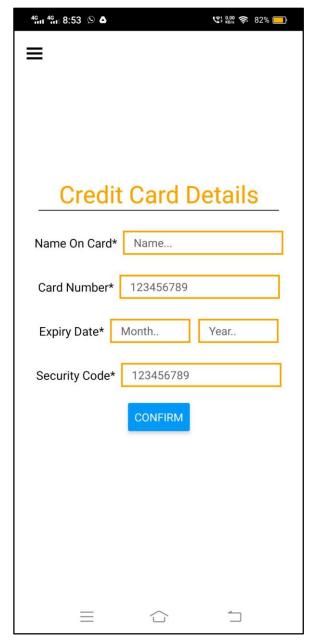
Search for particular menu item



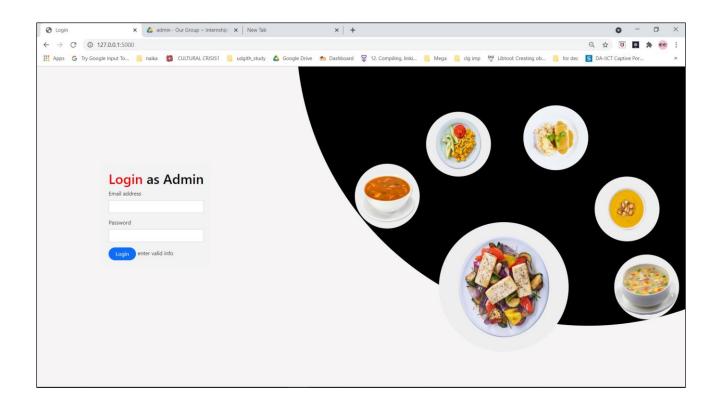


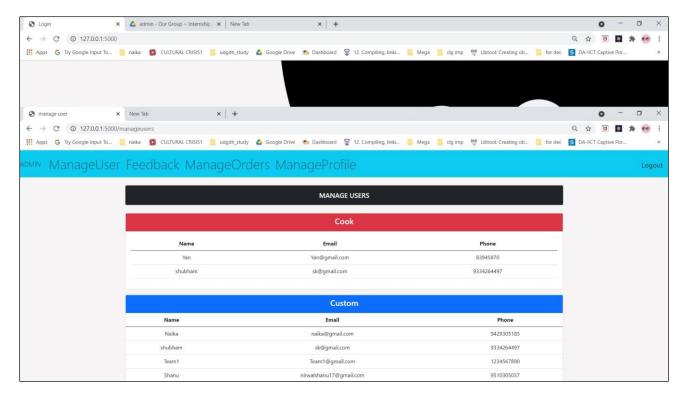


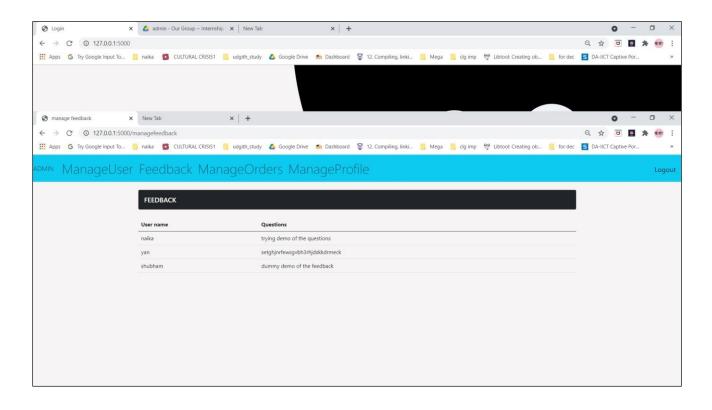


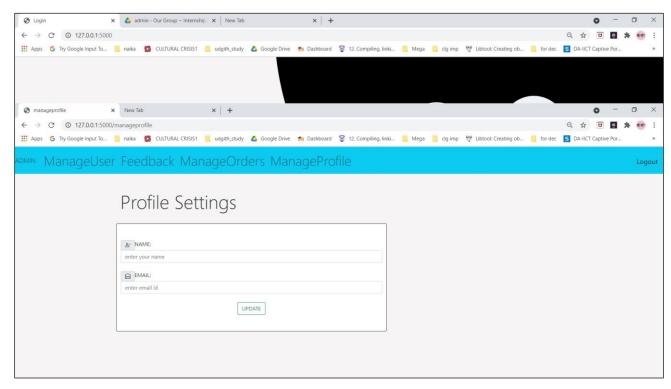


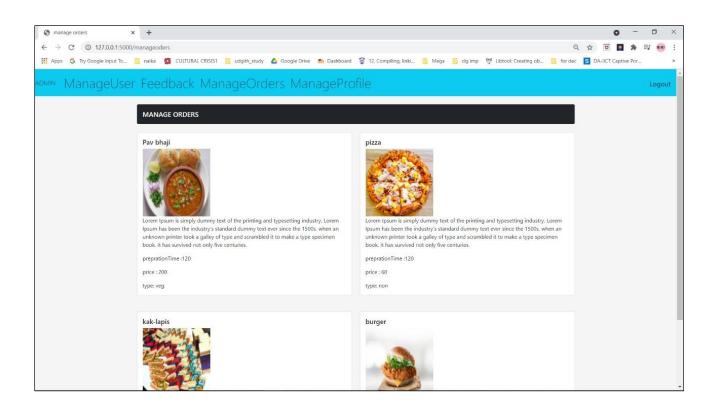
ADMIN SIDE





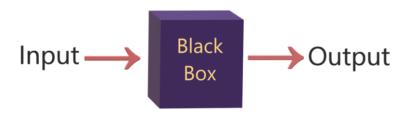






Testing Strategies and Reports

Black box testing is used in our project. Expo Go is used in our project, it lets us open our projects while we are working on it, so we can test side-by-side easily, providing different platforms to be tested in - Android, iOS and Web.



Functionality	Result	Note	Status
Check app icon displaying properly in android and iOS	passed		
Chech graphic elements, text, animation, images in good resolution	passed		
Check scroll and swipe working in application	passed		
Check ability to return to previous screen	failed	previous nav not working	solved
Check login form	passed		
Check search bar working	passed		
Check menubar working	passed		
Check menu item details displaying properly	passed		
Check logout working	passed		
Check navigation bar working	passed		
Check drawer working	passed		
Check quantity addition working	passed		
Check adding cart submission	passed		
Check image upload in add menu	passed		
Check food list	passed		
Check sending feedback	passed		
User can't create another account with same email	passed		
Verify the login functionality of the app with valid credentials)	passed		
Password validation (case sensitive, minimum 6 letter should be present in the password)	passed		
Check Pending food item buttons	passed		
Check In-Process food item buttons	passed		
Check order status is updated	passed		
Check card details entry	passed		
Check profile update	passed		
Check users management functionality	passed		
Check order management functionality	passed		

TECHNOLOGY	EVENTS	SOLUTION
REACT NATIVE EXPO	Version Control-every system had its own version of dependencies, and those versions were not compatible with all modules.	Make sure to check compatibilities before, there are some components which doesn't work with all platforms, eg. Checkbox isn't compatible with the Android platform, though it is compatible with iOS.
	Navigation in react native-there were different kinds of navigation present in the technology, so there was some difficulty to navigate through the screens.	Try to keep all the navigation components present in the code separately from each other.
	Screen Dimensions: each android device has different screen resolution so styling the pages was also a tough task to perform	Take the height and width variable with the help of dimension property present in the react native that will provide the perfect ratio of the device.
FLASK , JINJA, PYTHON	CSS in flask: in flask CSS is not working properly if you are using direct approach also if you want to end more then one file of CSS or js it will not work properly it will override the 1st file with declared first.	for resolved that problem you have to use url_for(which is jinja syntax for declaration of any files) for declaring the CSS file also if you want to add more CSS files or js files you have to create a separate files and create asset of them after that you may use all file randomly.
	Flask with firebase: Flask uses a single file of python for making webapp. In firebase we are using a real time database which is a very complex database which is in the nested format so in flask it will be difficult to display all the data from the one request you may have sent here many request to database it will make more complex your code.	To resolve that problem you have to make a custom method or send all the data to the jinja and write the loops in the frontend part so it will make it easy to manipulate the data.

Future Scope

At present in our application, Customers has to self-pickup their orders from Cook. We can have delivery option available for them, where delivery person will pick up their order and deliver it to them.

Bibliography

Website:-

React Native: React Native Docs

Expo: Expo Docs

Firebase: <u>Docs</u>, <u>YouTube</u>
Node js: <u>Node js Docs</u>
Python: <u>Python Docs</u>
Flask: <u>Flask Docs</u>