Mess-Eats

By

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Mess-Eats

Report

Submitted in partial fulfillment of the requirements

For the degree of

Bachelor of Technology in Computer Science & Engineering

By

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20BCE506 – Dhruti Thakrar

Guided By
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CERTIFICATE

This is to certify that the Minor Project entitled "Mess-Eats" submitted by Jaimik Chauhan - 20BCE503, Dhruti Thakrar - 20BCE506 towards the partial fulfillment of the requirements for the degree of Bachelor of Technology in Computer Science and Engineering of Nirma University is the record of work carried out by him/her under my supervision and guidance. In my opinion, the submitted work has reached a level required for being accepted for examination.

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ACKNOWLEDGEMENT

We want to show our deepest thanks to everyone who has assisted us in finishing this project. Due to our inexperience and lack of understanding, we had numerous challenges during the project, but these individuals assisted us in overcoming them and transforming our original vision into a finished work.

We would like to thank Prof. Ajaykumar Patel sir for his guidance and direction, which allowed us to understand the intricate details of project execution. For his ongoing assistance and supervision throughout the project's progress, too.

We appreciate your help, Mr. Jaynik Patel for his Continuos Backend support.

Thank you all.

ABSTRACT

Mess-eat gives us access to a platform that includes a selection of Mess from which we are able to choose and can place our food orders. User will find the interface to be very straightforward, which will make it easier for them to choose the food they like best from the mess. This is an all-in-one application that includes all of the functionality, including the ability to order food, choose from range of mess. In the end, the primary purpose of this application is to deliver food that is similar to the food that is served in their homes right to their customers front doors, where they can enjoy food while maintaining their concentration on their work or studies. User can buy subscription of atleast 30 days from any mess.

Mess can add, update and delete the dishes and subscription services. They can also manage the orders and subscription details. Admin can manage all the details.

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1. Introduction

1.1. General:

We have analyzed the difficulties that bachelor's facing while having good quality and home like food. Based on the problems they are facing we have developed an web app which can access from anywhere. In Which bachelors can order food and buy subscription from specific mess.

Mess can update subscription/ dish details and also can rearrange the menu as per wish. This Project has been fantastic learning experience for us because we discovered the majority of the tools and techniques that we used during the internship. These includes Node JS, React JS Libraries and how to use them, NoSQL database operations and code splitting.

1.2. Problem Statement:

As a bachelor how many times you crave for home food near your PG/hostel. There is no such solution of choosing your own PG/Hostel from where you can order and have food. Because of this, we decided to make an application that can help the students order home like food from your favorite Mess.

2. Literature Review

2.1. Using a mobile phone for Food ordering [1]

This project was created as a mobile and computerized meal ordering system that can be used to revolutionize the conventional ordering system now employed by the bulk of the food and beverage industry. The majority of the food and beverage business now uses the old manual ordering method, which entails that all tasks and processes are documented through labor-intensive manual work and include a significant quantity of ineffective paper work. Because of the enormous quantity of physical labour involved in every business procedure, this causes problems for the company that are related to human error. Thus, this computerized and mobilized food ordering system is designed to assist the business routine in term of having better management as well as easier to handle daily business operation.

2.2. Comparison Table

Apps	Provides Food From Hostel Mess / PG	Delivers Food	Accepts Online Payment	Subscription based food service from range of options
Mess Eat	Yes	YES	YES	YES
Zomato	No	Yes	Yes	No
Swiggy	No	Yes	Yes	No

Table -1 Comparison Table

3. Functional Requirements

3.1. User

- Can Add/ Update profile
- Can Add/Update/Remove Addresses
- Can Add/Update/Remove Dishes from Cart
- Can Place/ Manage an Order
- Can Buy subscription from list of mess
- Can view mess and dishes related to selected mess

3.2. Mess User

- Can Add/Update/Remove dish
- Can view subscribed user details
- Can download dishes as pdf / csv file
- Can update order details

3.3. Admin

- Can Add / Update / Remove User, Mess
- Can Add / Update Profile
- Can manage orders
- Can view user Addresses
- Can View All the dishes added by mess

4. Implementation Details

Developed Using MERN Stack.

1. MongoDB

A document database that is open-source and provides high performance, high availability, and intelligent scalability is called MongoDB. The database is document-oriented. It is a product with an open source. It is free under the GNU General Public License, and it is also available from the maker under a commercial licence. It is intended to function with common servers..

2. ExpressJS

ExpressJS is a flexible online application framework for Node.JS that is simple to use and offers a rich range of functionality for creating both web and mobile applications. It enables the quick building of Web applications with a Node framework.

3. ReactJS

The primary goal of ReactJS is to develop User Interface (UI) that increases Web-appl speed. It takes advantage of Virtual DOM, which enhances the app's performance. Use of Component and data flow in the app makes it easy to handle larger apps. And helpful in maintanance and more readable codes. This is a front end library that is make changes in web-application’s view layer. It is also open source and managed by Facebook.

4. NodeJS

It is Developed on Google Chrome's JS V8 Engine. Node.JS is an extremely powerful Javascript platform. I/O-intensive app development is done with it. Developers can create server-side scripts and command-line tools outside of a browser using this. This is an open source and cross-platform JS(JavaScript) run-time environment.

To Provide Better Security, Used some of the production level tools.
Listed below:

- Dot-env (Front & Back end) [4]
- Crypto (Back end) [2]
- Uuid V1 (Back End) [3]
- Jsonwebtoken [5]
- Salt [12]
- Mongoose [13]

To Provide Better Interface to the User, Included following libraries along with React JS :

- MaterialTable [6]
- React-bootstrap [7]
- React-toastify [8]
- React-password-mask [9]
- React-loader-spinner [10]
- React-password-strength-bar [14]
- react-fullpage-custom-loader [15]
- react-datepicker [16]
- react-icons [11]

Database Design

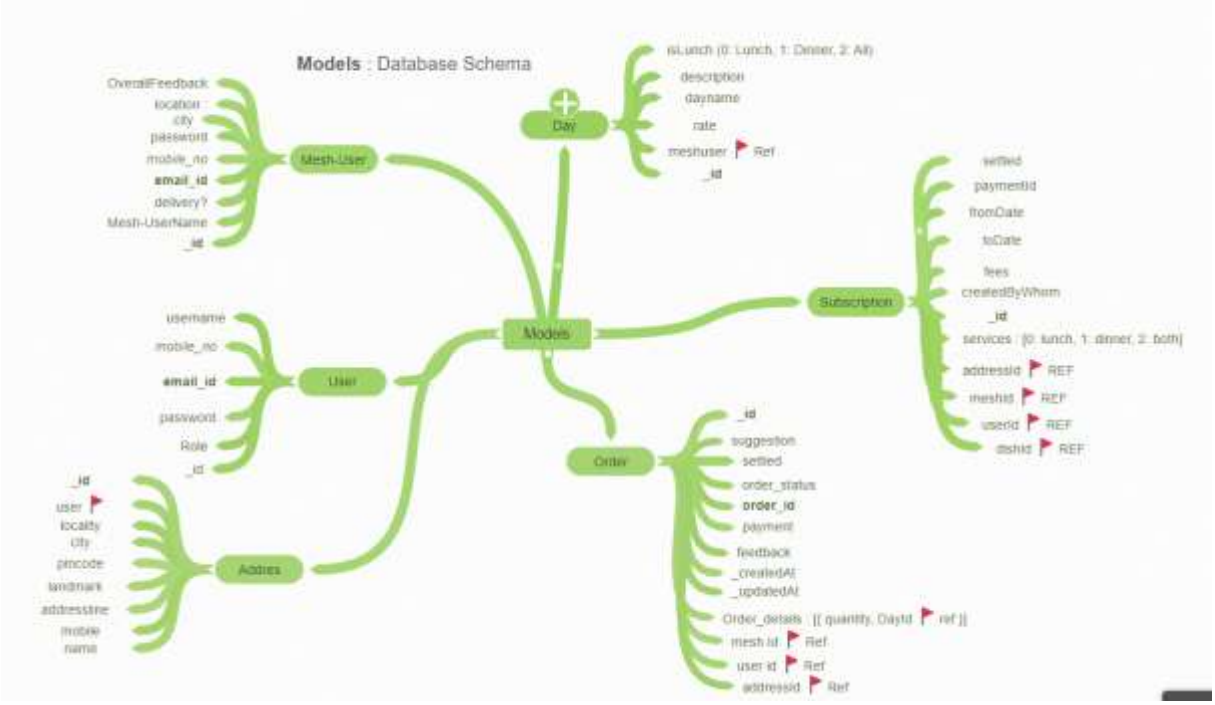

Figure 1 Database Design

Table Name (Collection)	Attributes (fields)
User	**_id**, Username, mobile_no, email_id, password, role
Address	**_id**, locality, city, pincode, landmark, addressline, mobile, name, User
Mess User	**_id**, username, mobile_no, email_id, delivery, password, city, location
Day	**_id**, is_lunch, dayname, description, rate, Mess
Order	**_id**, payment_id, order_status, feedback, _createdAt, _updatedAt, address, user, mess, OrderDetails[{ **_id**, quantity, dayId}], settled
Subscription	**_id**, fromDate, toDate, fees, userId, messId, createdByWhom, settled

Table **2.** Schema Table

5. User Manual

5.1. Admin Module

5.1.1. Home Page

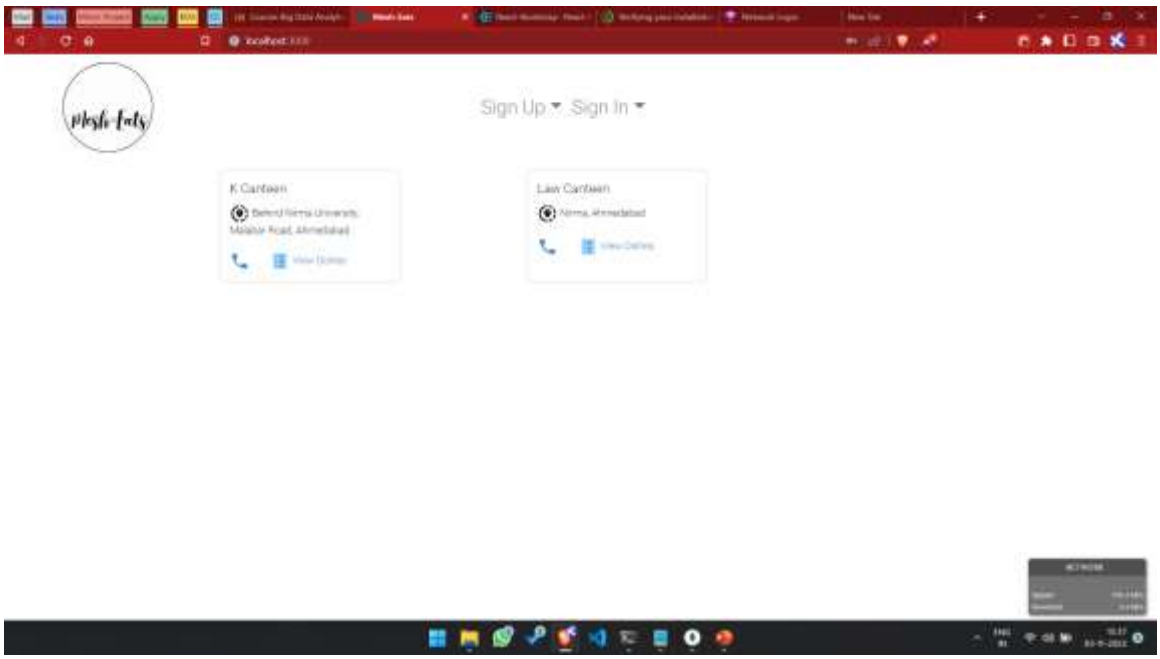

Figure 5.1. 1 Home Page

- Home Page for the admin. Here, We're Displaying all the registered mess details in the system. If user want to see dishes user must be logged in.

5.1.2. Sign In Page

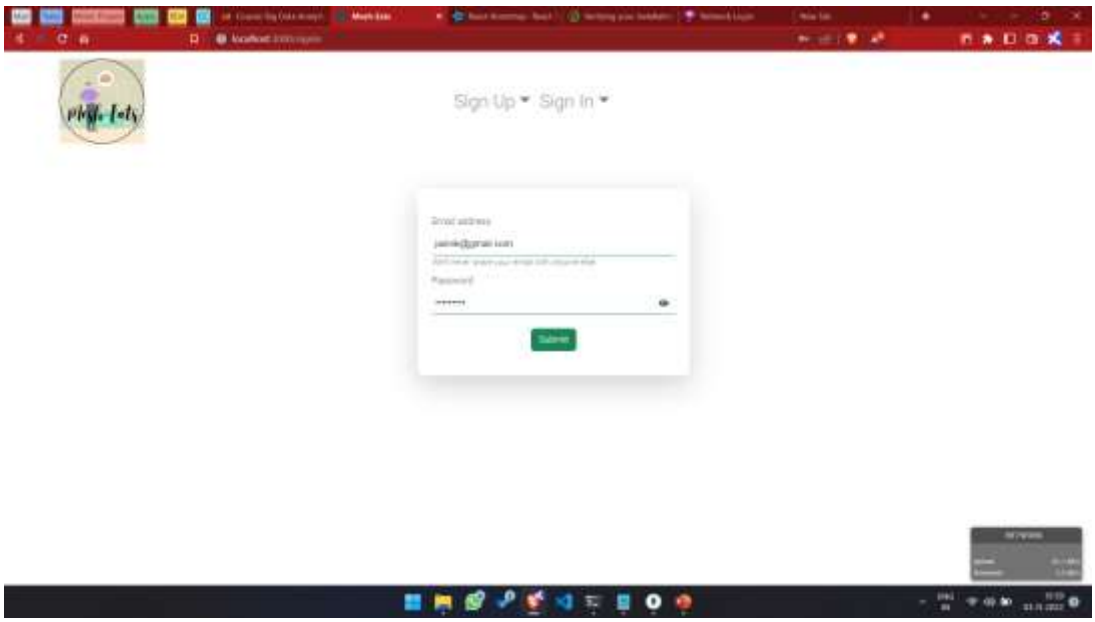

Figure 5.1. 2 Sign-In Page

- Signin Page, where user have to enter email id and password. Submitted details will be verified and redirect to dashboard if verified else error will be displayed.

5.1.3. Dashboard

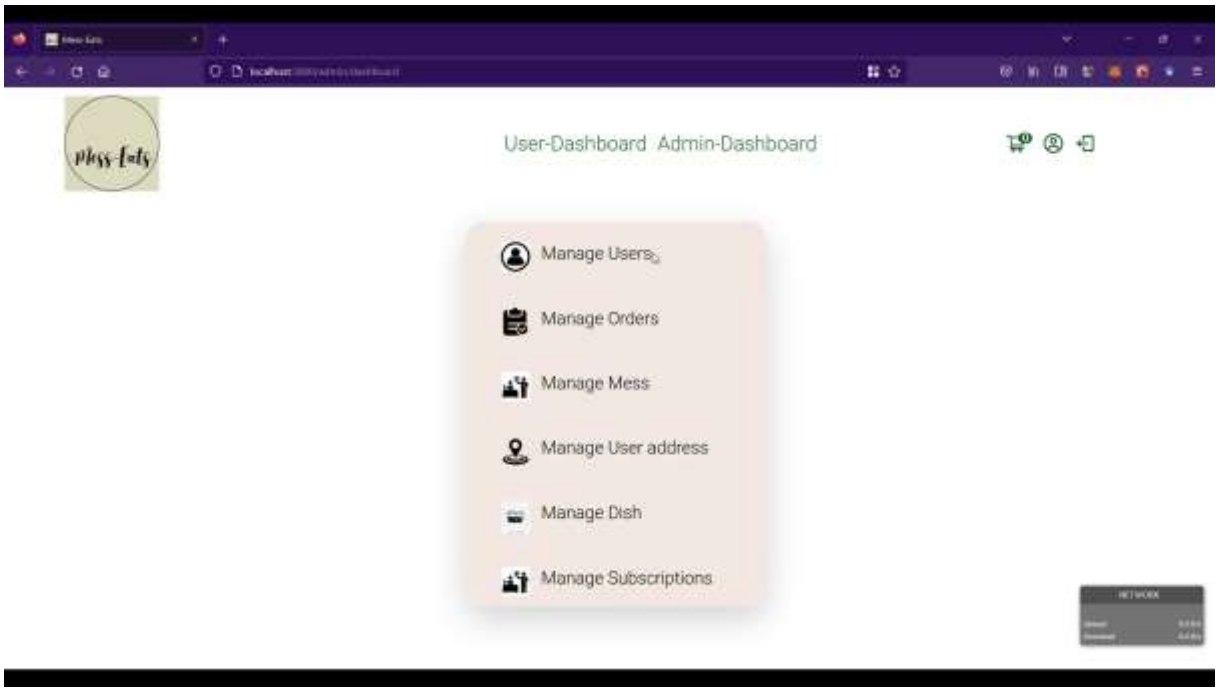

Figure 5.1. 3 Dashboard

- Dashboard where Admin can all the details about system.

5.1.4. Manage Users

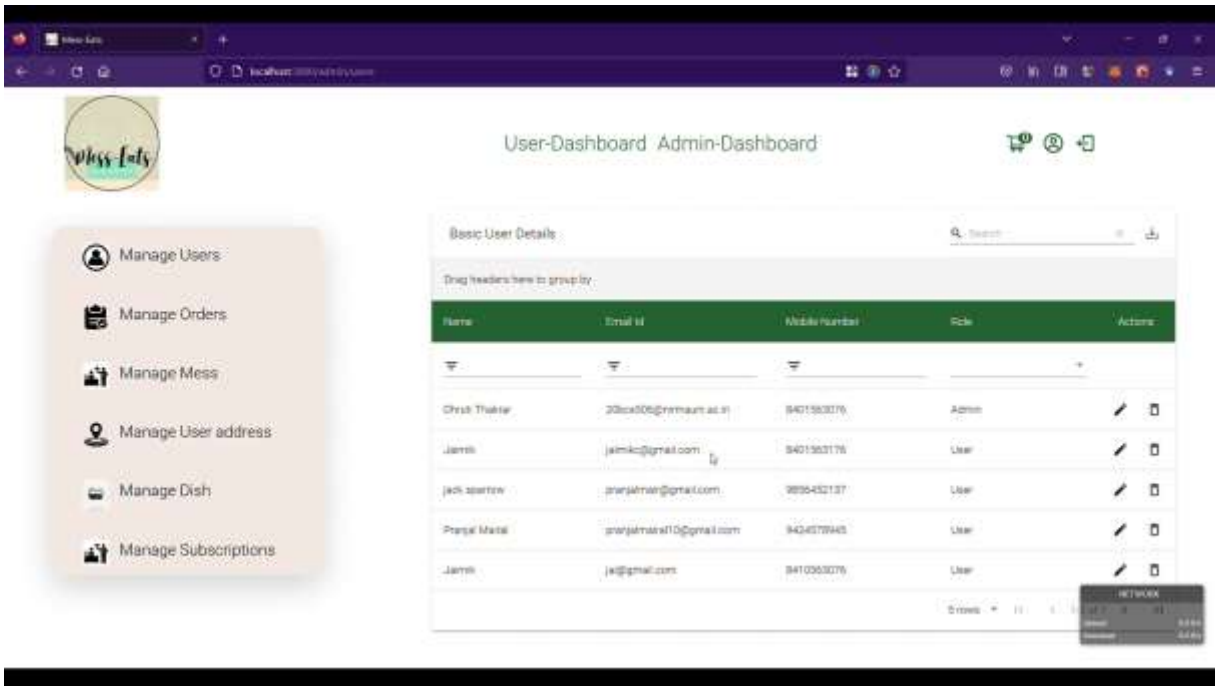

Figure 5.1. 4 Manage Users

- All the Registered Users will be displayed here. Admin Can Update the User to Admin and vice versa. Admin can also remove user. Admin can not update his/her own role.
- This Details can be downloaded in form of PDF / CSV.

5.1.5. Manage Orders

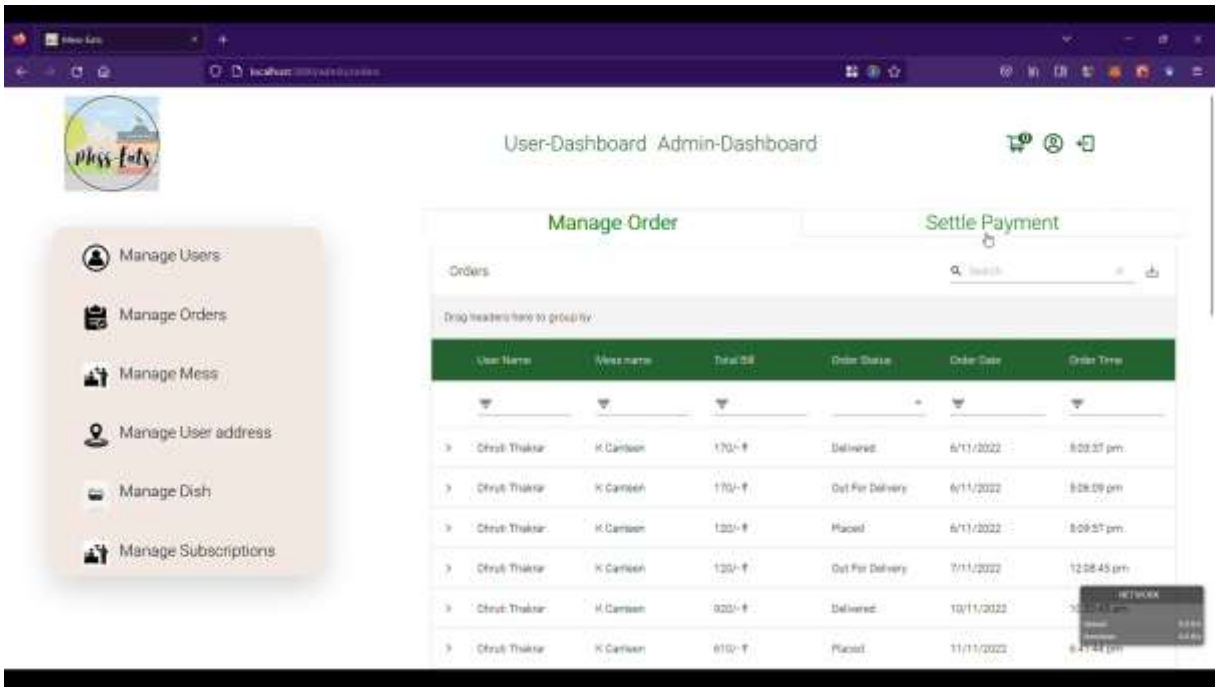

Figure 5.1. 5 Manage Orders

- Admin can view all the orders. On clicking the order row there will be additional details related to dishes, mess and user.

5.1.6. Order Settlement

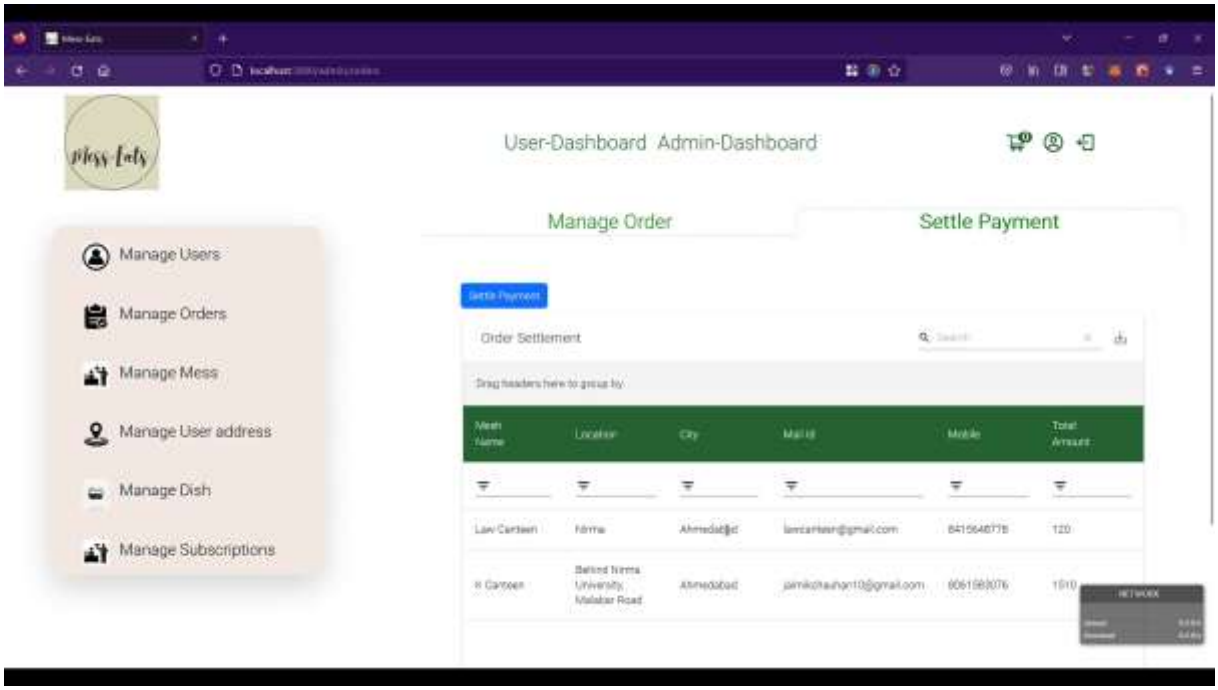

Figure 5.1. 6 Order Settlement

- Here, Admin can settle all the amount related to orders from particular mess. This is total of all the orders that has been unsettled.

5.1.7.Manage Mess

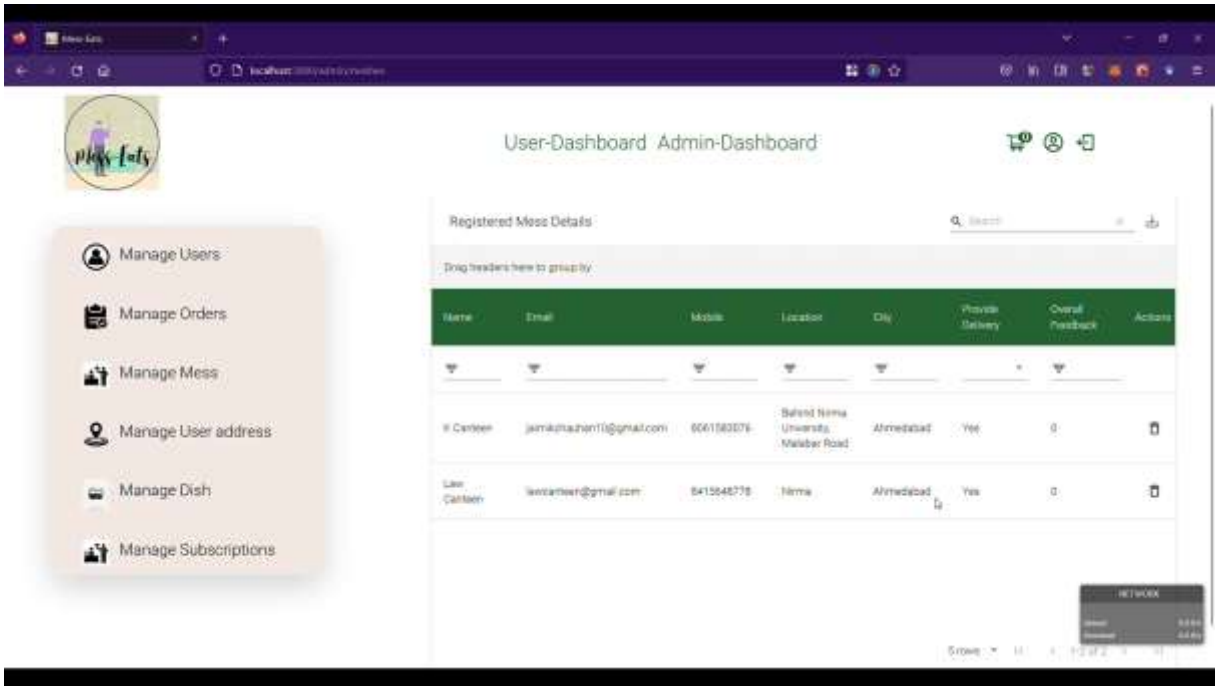

Figure 5.1. 7 Manage Mess

- All the Registered Mess Details will be displayed here. Admin can Remove the Mess By clicking on Trash icon.

5.1.8. Manage Address

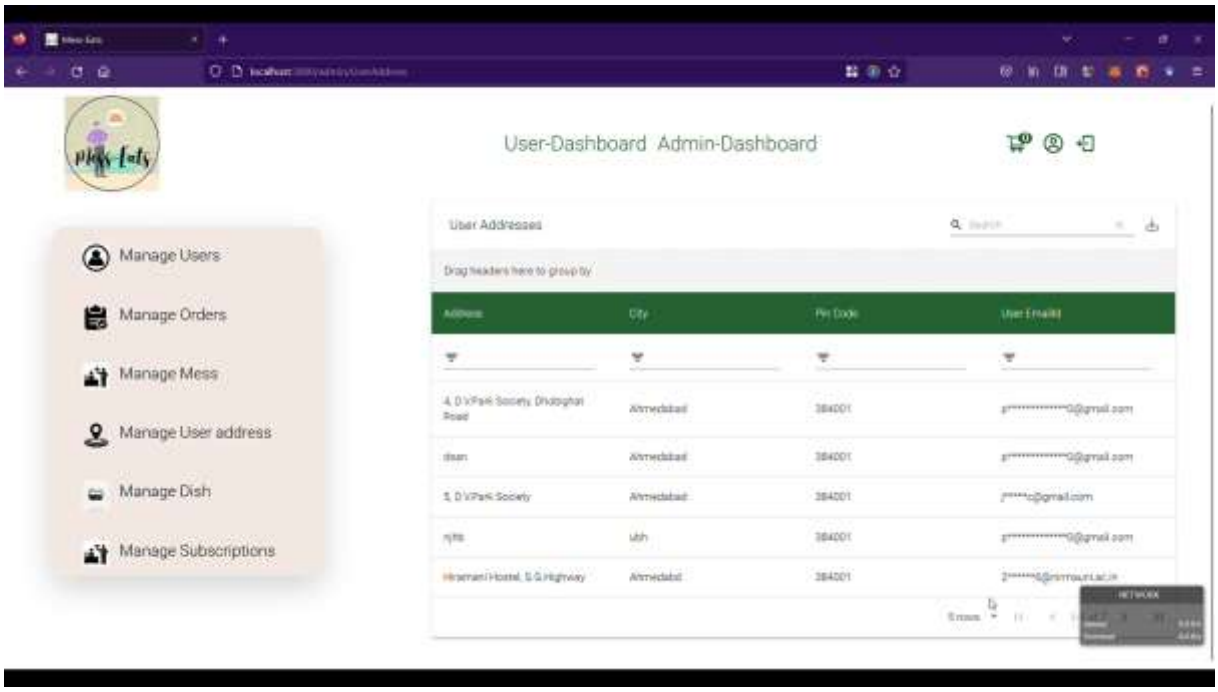

Figure 5.1. 8 Manage Address

- All the user address will be displayed here. User email id will be masked

5.1.9. Manage Dish

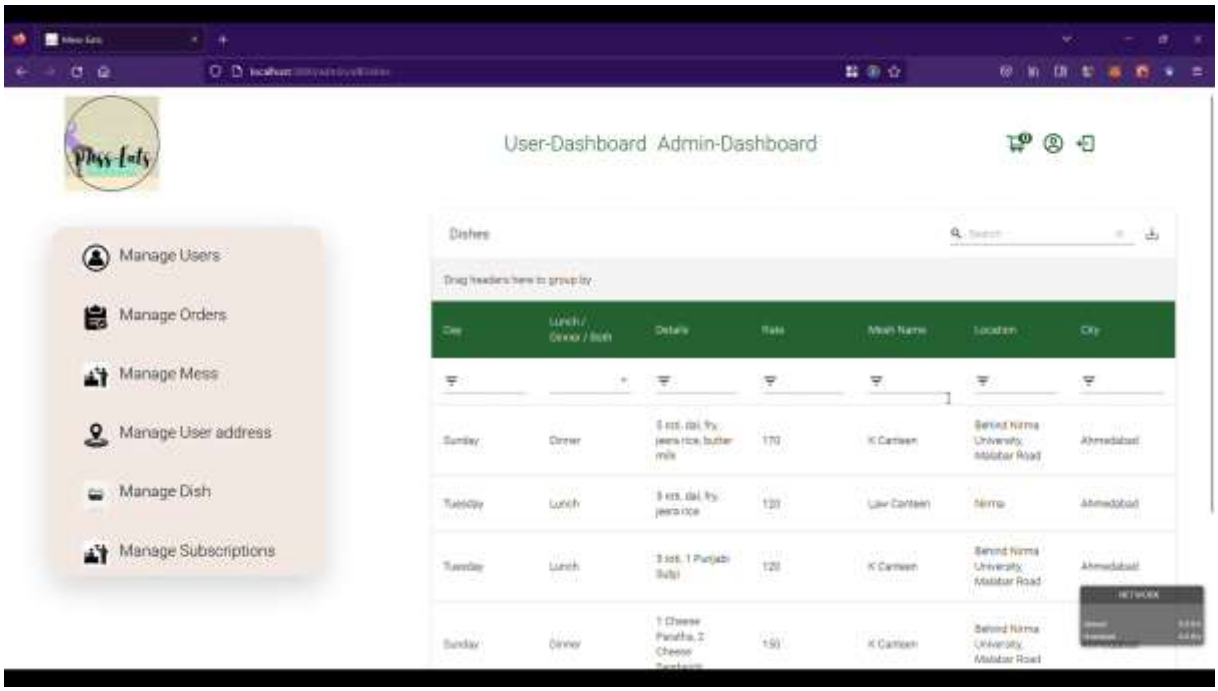

Figure 5.1. 9 Manage Dish

- Here, Admin can view all the available dishes. Along with which mess providing, mess location and mess city.

5.1.10. Manage Subscriptions

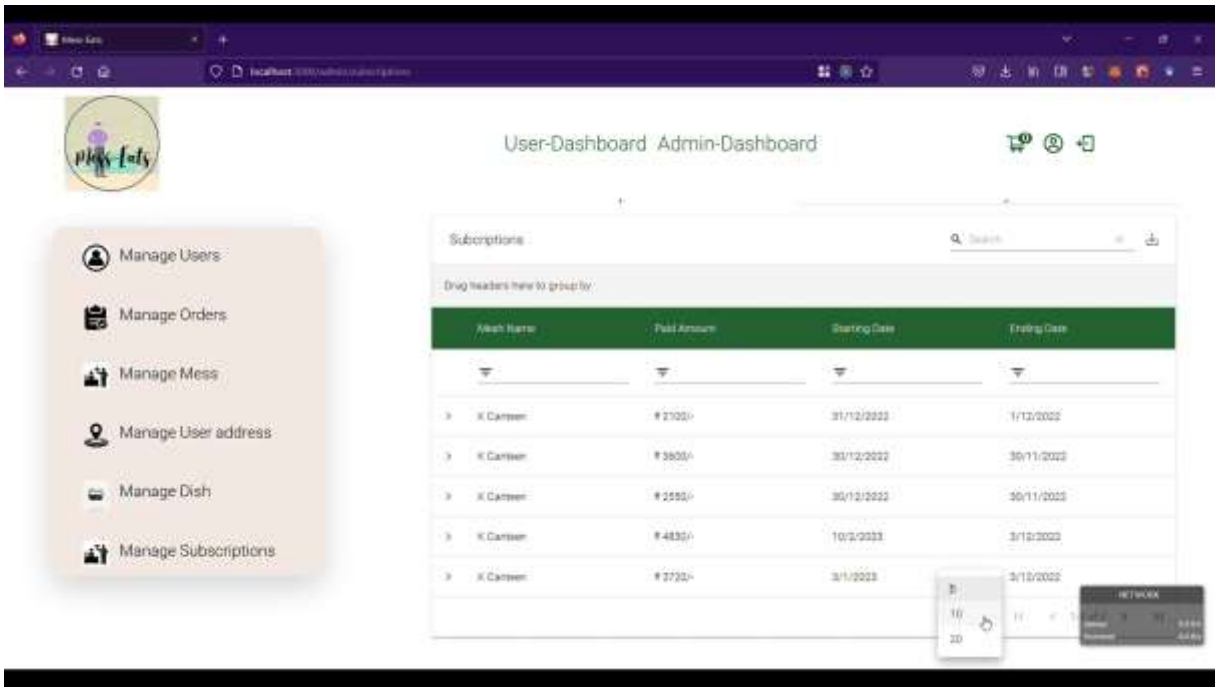

Figure 5.1. 10 Manage Subscription

- Just like Manage Orders, here admin can manage subscription and by clicking on particular subscription, it will give additional details.

5.1.11. Subscription Settlement

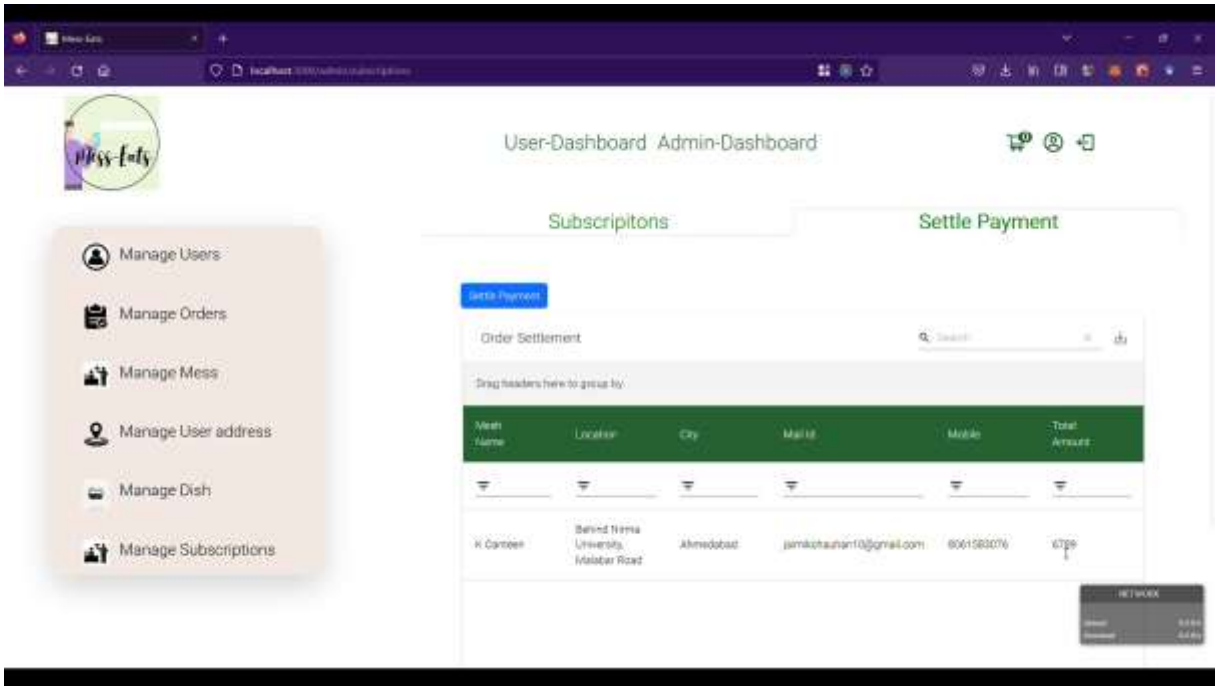

Figure 5.1. 11 Subscription Settlement

- Here, Admin can settle all the amount related to subscription from particular mess. This is total of all the subscriptions that has been unsettled

5.2. User Module

5.2.1.Home Page

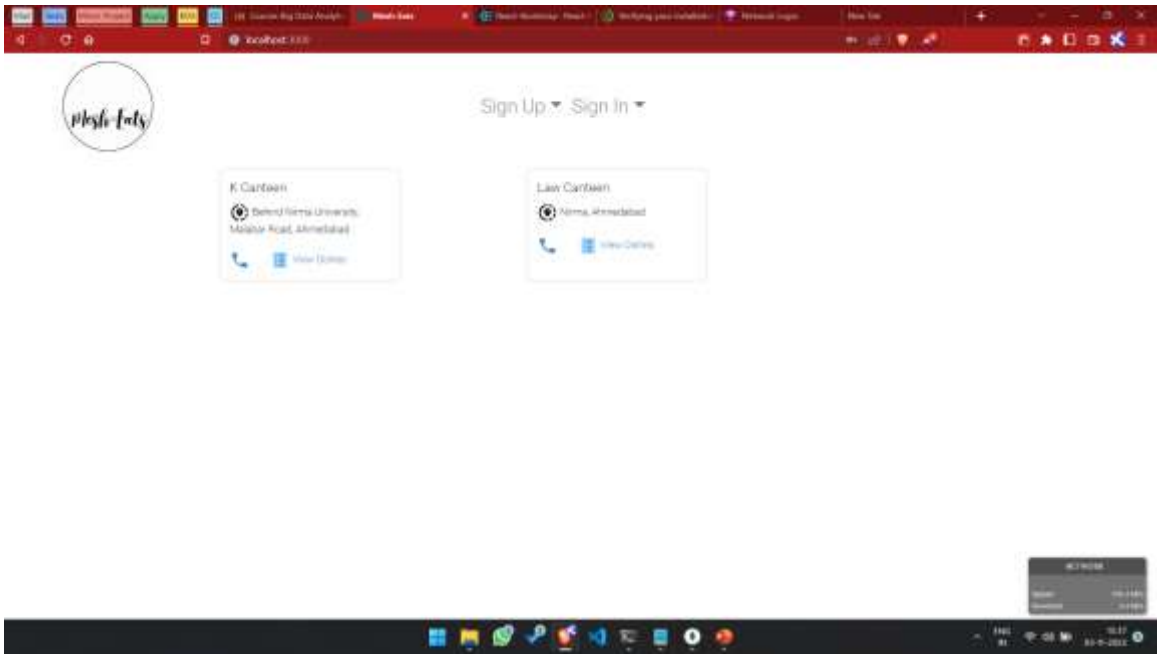

Figure 5.2. 1 Home Page (User)

- Home Page for the admin. Here, We're Displaying all the registered mess details in the system. If user want to see dishes user must be logged in.

5.2.2.Sign Up Page

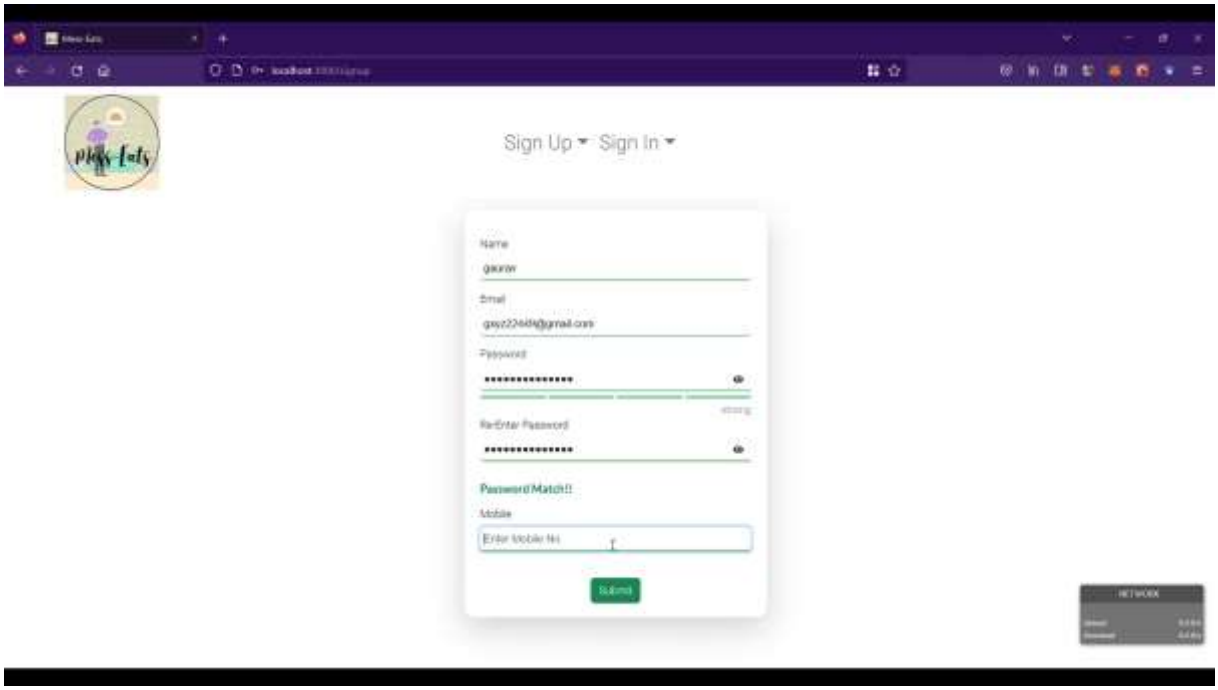

Figure 5.2. 2 Sign Up Page (User/Admin)

- User SignUp Page, Where user have to enter personal details and once submit it will perform some checks and create user account.

5.2.3.Sign In Page

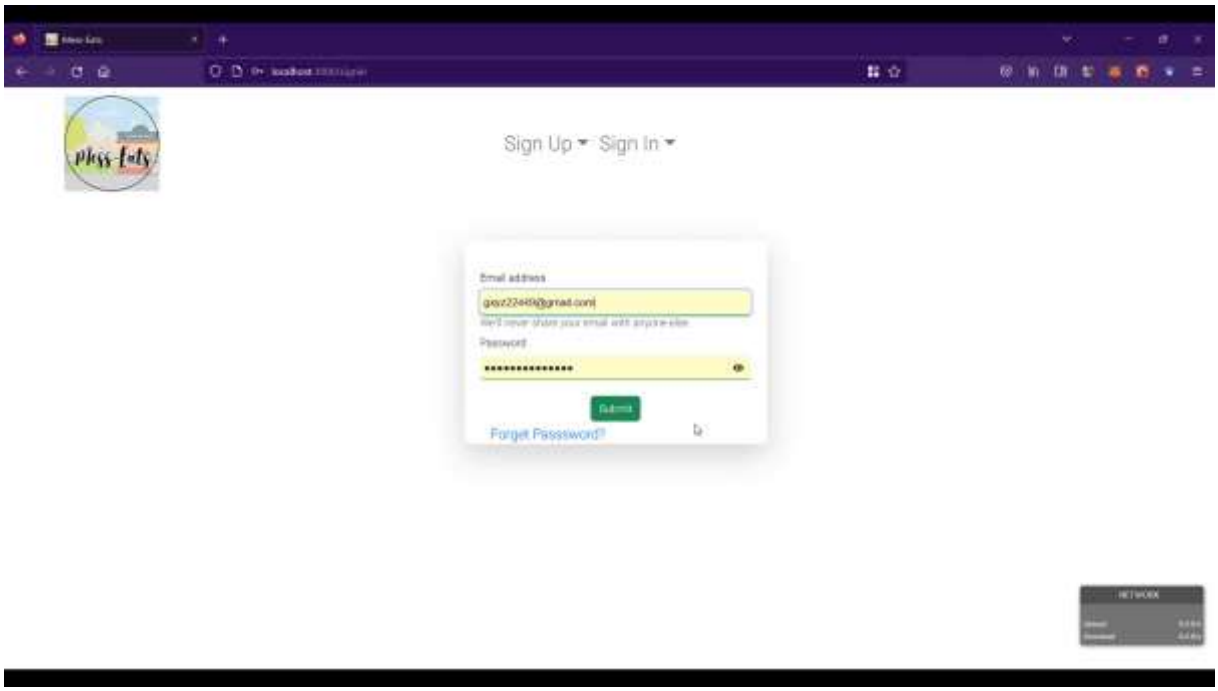

Figure 5.2. 3 Sign In Page

- User Sign In Page.

5.2.4.Dashboard

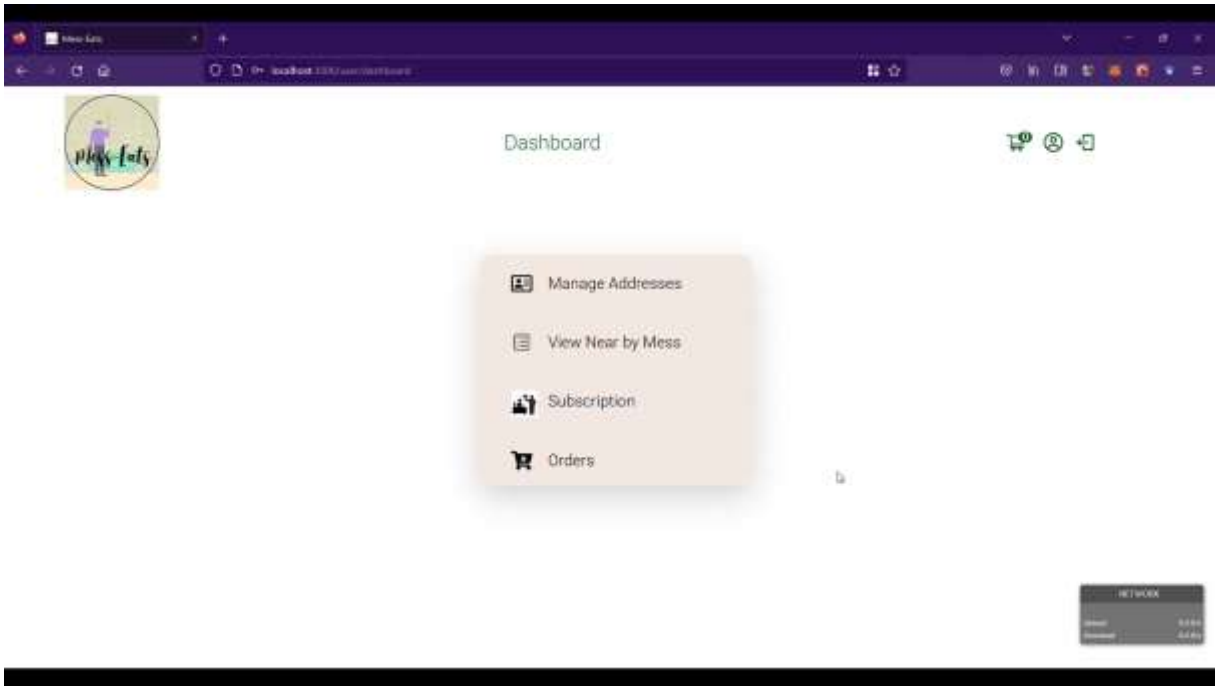

Figure 5.2. 4 Dashboard (User)

- User Dashboard. From here, user can manage addresses, orders and subscriptions.

5.2.5.Manage Addresses

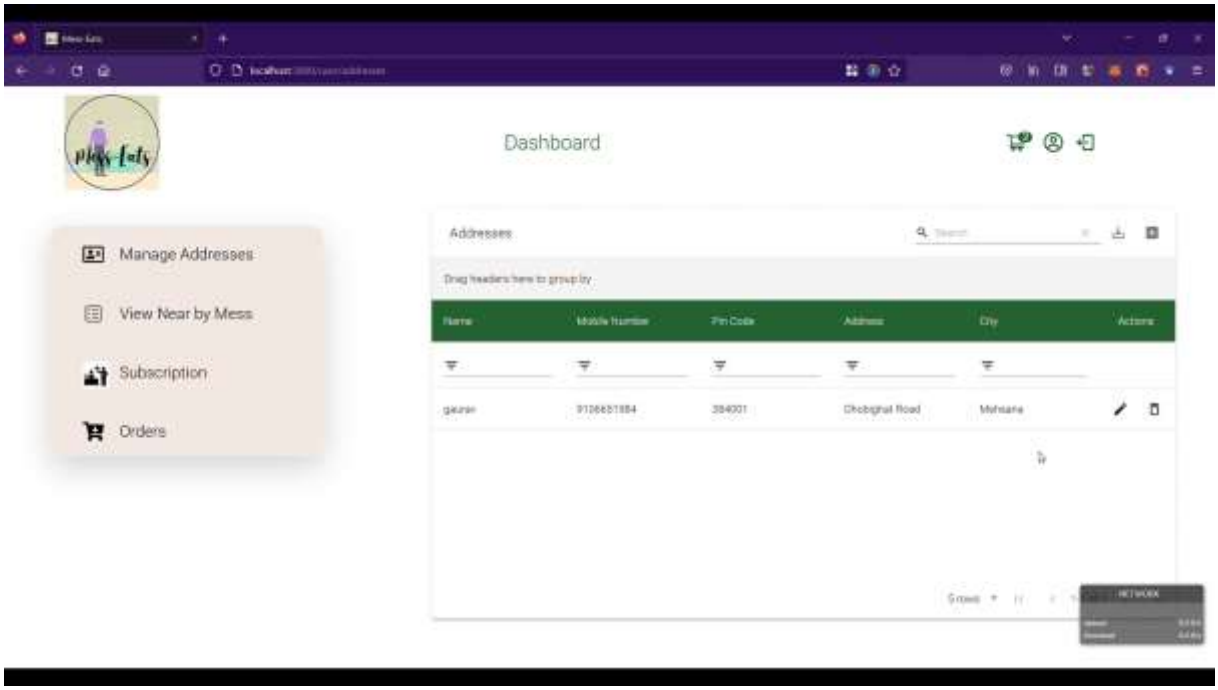

Figure 5.2. 5 Manage Address

- User can add Multiple addresses with different name or mobile. Can edit by clicking on ‘pen’ icon. Remove address by clicking on trash icon. Add by clicking on ‘plus’ icon at the top.
- User can download all the addresses in PDF/CSV.

5.2.6. View Nearby Mess

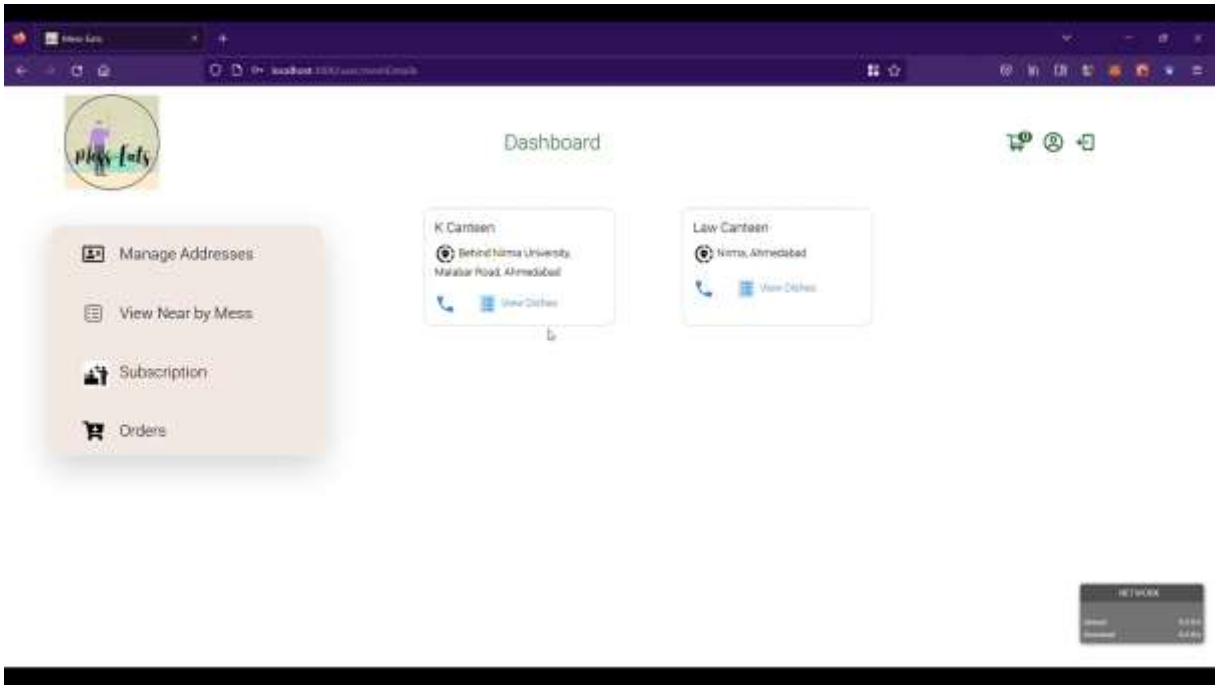

Figure 5.2. 6 Near By Mess

- Here, all the registered mess details will be displayed. User have to select one of the mess to view detailed dishes.

5.2.7.Dishes

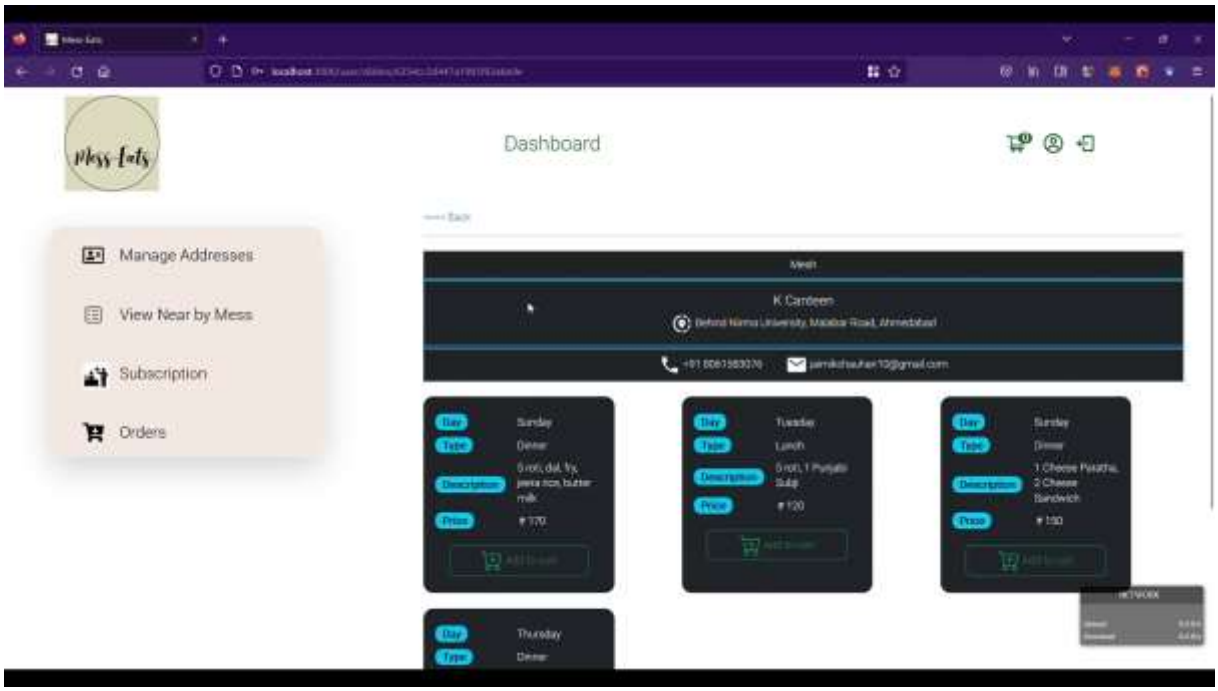

Figure 5.2. 7 Displaying Mess Dishes

- Here, User Selected ‘K Canteen’ So all the dishes from ‘K canteen’ will be displayed here. By clicking on add to cart dish can be added to cart.

5.2.8.Cart

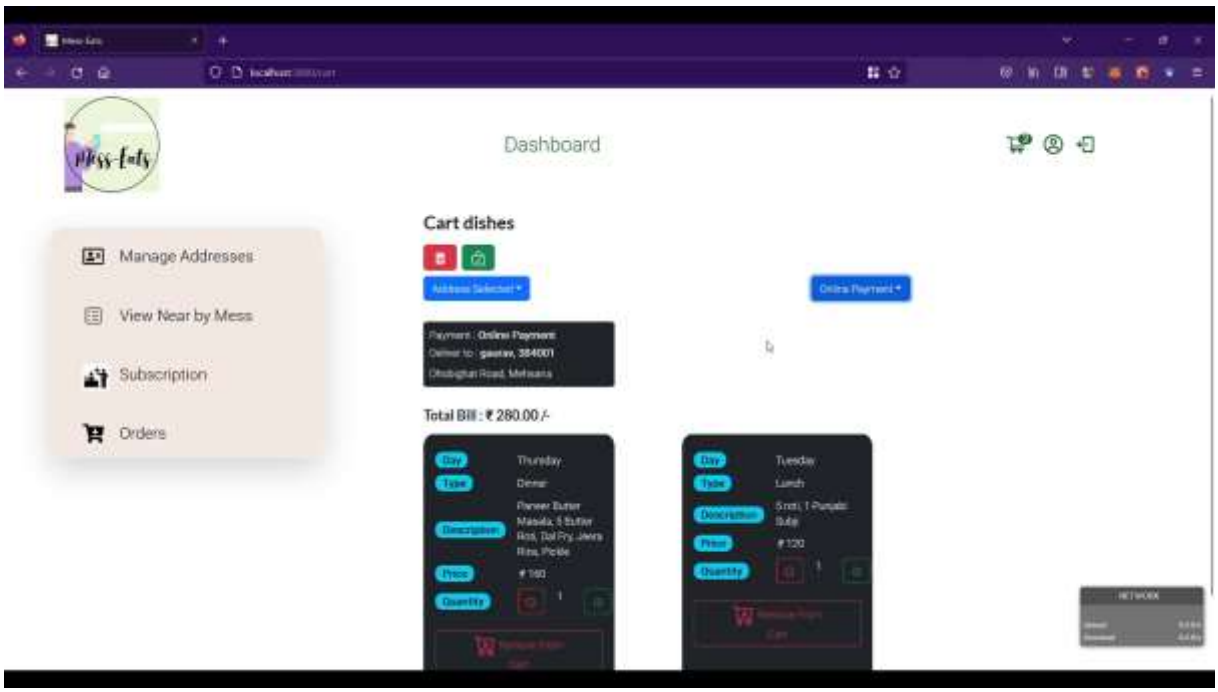

Figure 5.2. 8 Cart

- Here, All the added dish will be displayed. User can also change quantity from here. User have to select address from added addresses and mode of payment. In Payment if

online then razorpay checkout window will be pop up and in cash on delivery user have to pay amount while receiving order.

5.2.9.Online Payment

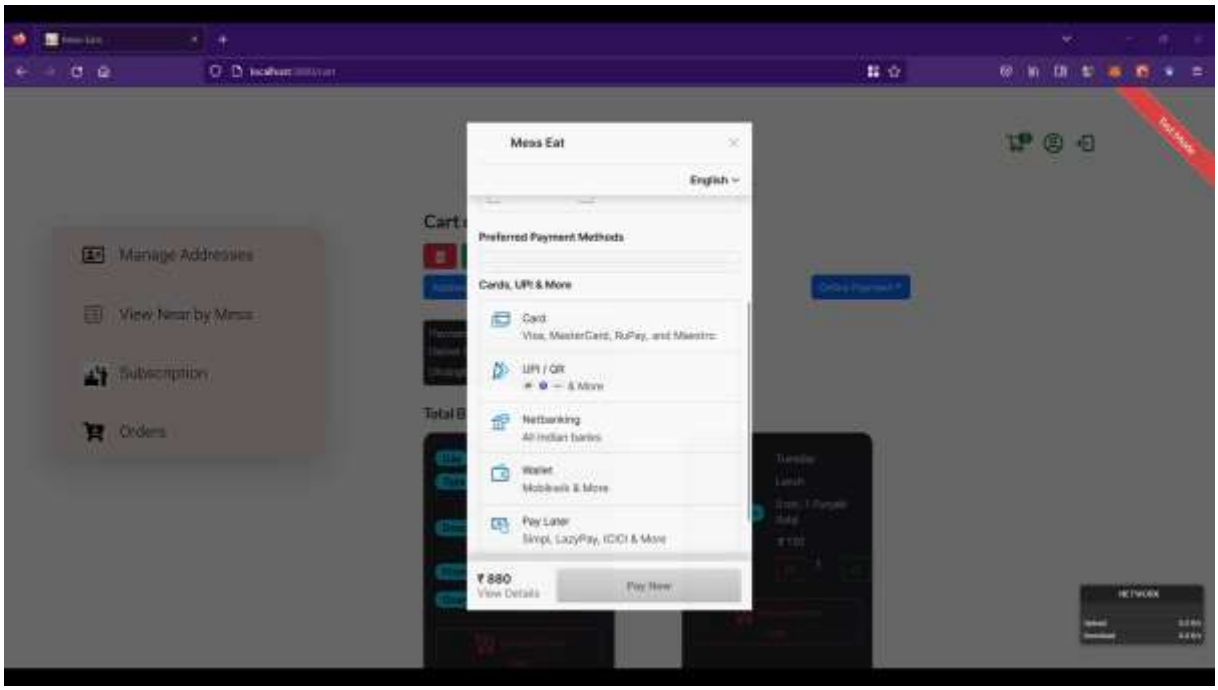

Figure 5.2. 9 Razorpay Payment Page

- User will be displayed multiple options along with total order amount.

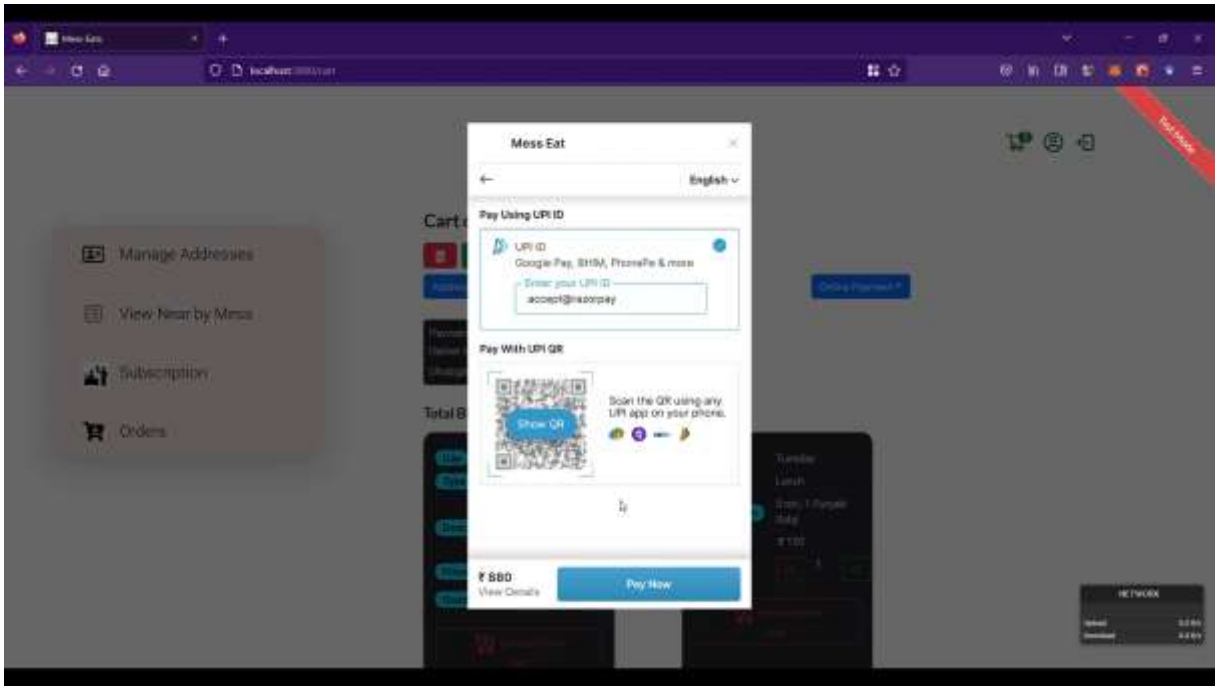

Figure 5.2. 10 Razorpay checkout page

- UPI id is used for this order. Once payment will be successful. Cart remove all the dishes and redirected to dashboard page.

5.2.10. **Orders**

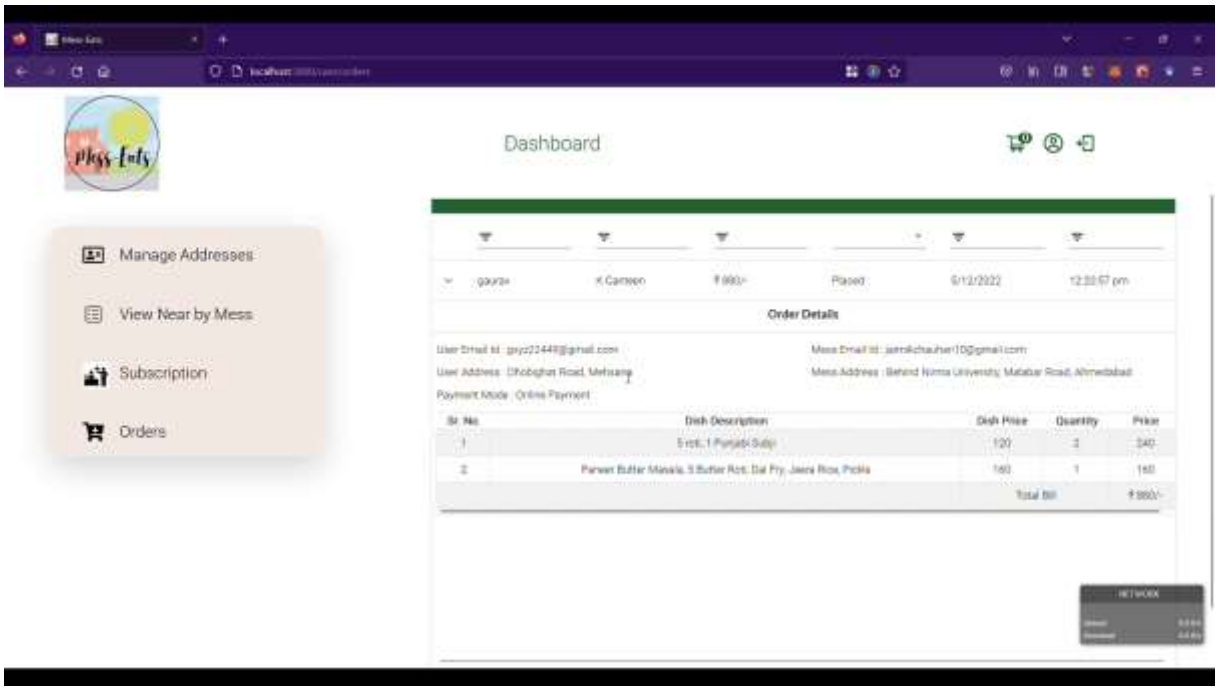

Figure 5.2. 11 Orders Page

- Here, User can view all the order details along with dish details.

5.2.11.Subscription

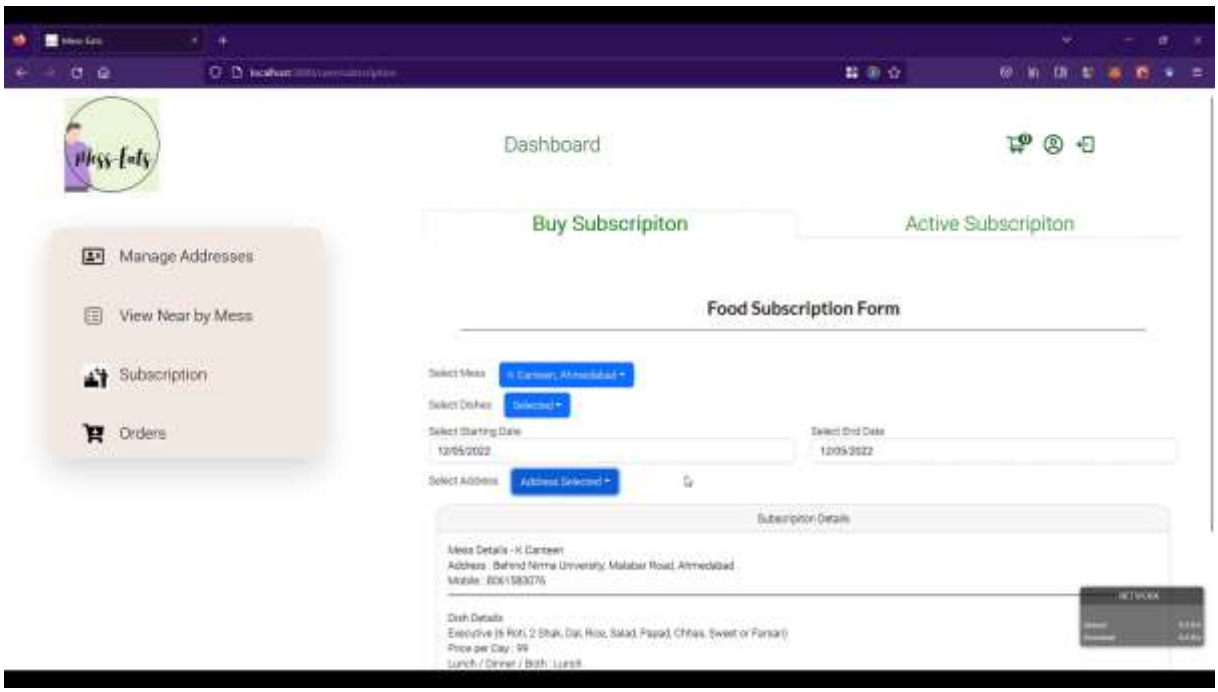

Figure 5.2. 12 Buy Subscription

- Here, User have select the mess. Once mess is selected all the subscription service provided by that mess will be displayed and user have to select from that.
- User have to select start date, end date and address.

- User have to select dates with atleast 30 days gap.
- Once All the details are correct, online razorpay payment will be initiated.
- Once online payment completes user will be redirected to dashboard.

5.2.12.Active Subscription

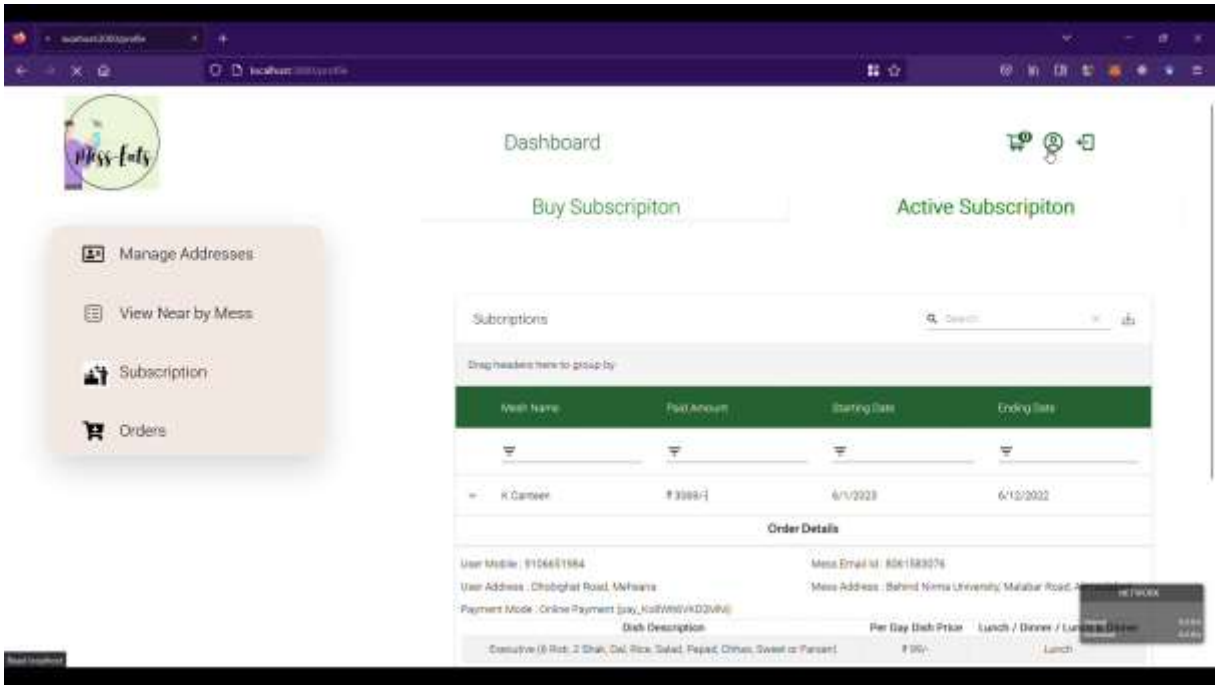

Figure 5.2. 13 Active Subscription

- Here, User can view all the active subscriptions.

5.2.13.Update Profile

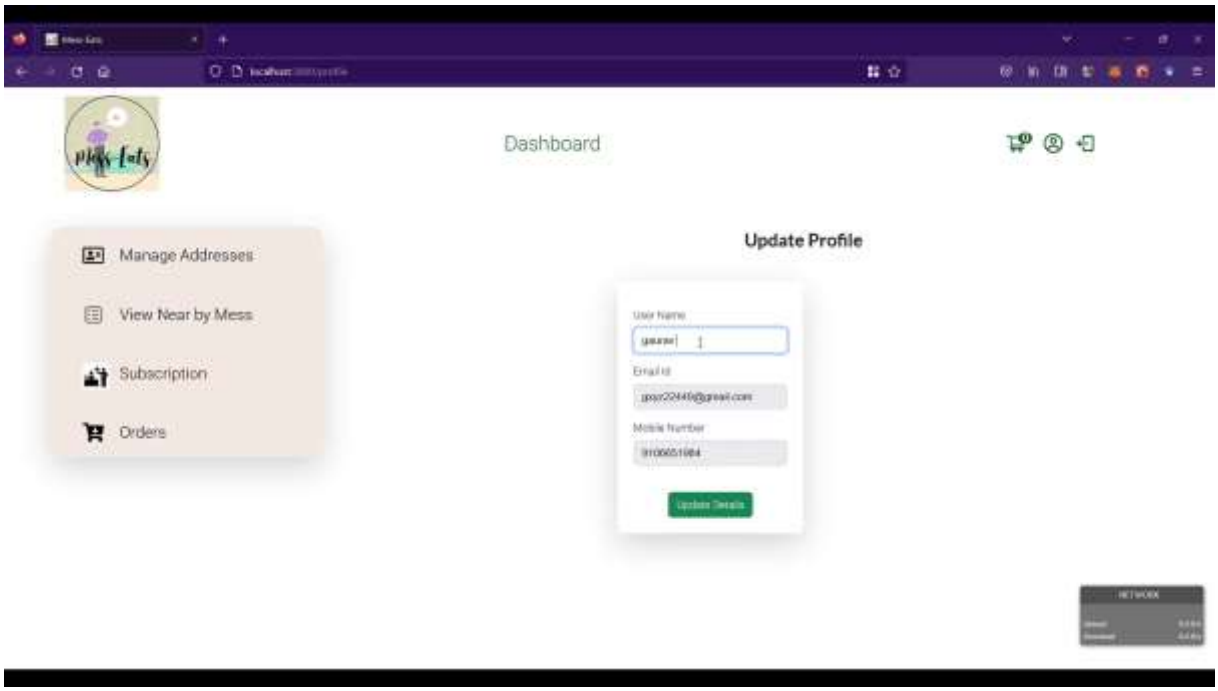

Figure 5.2. 14 Update Profile

- User can only update name. Other details can not be modified.

5.3. Mess Module

5.3.1.Mess Sign In Page

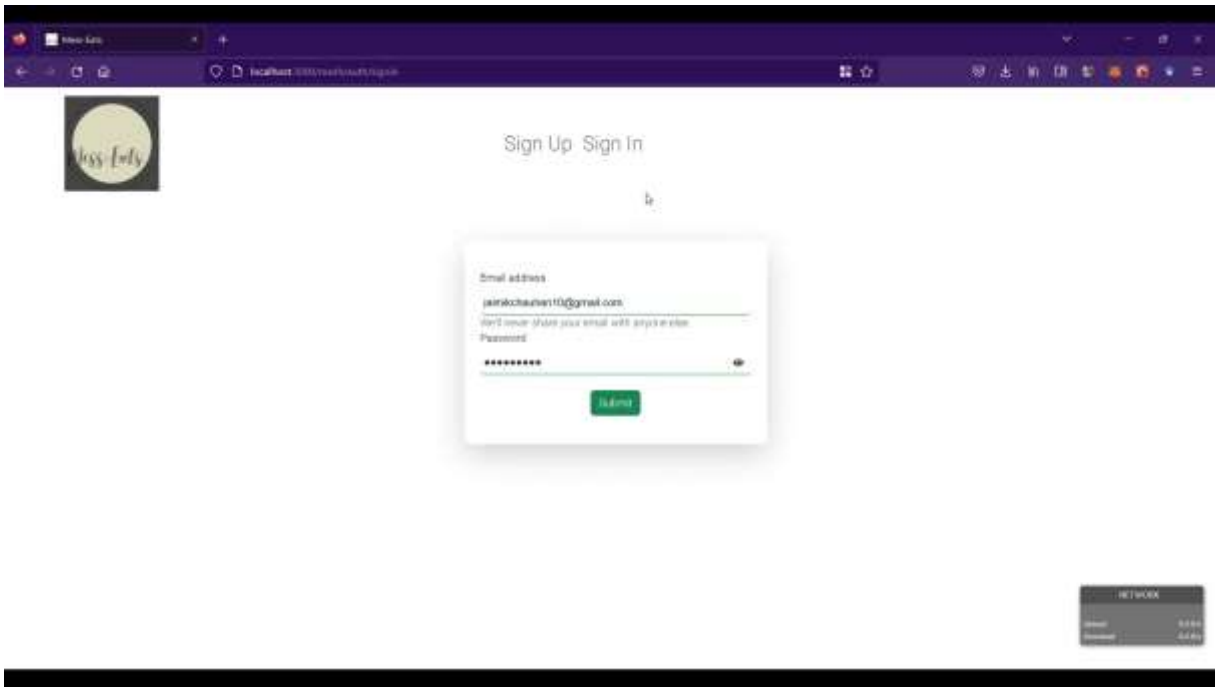

Figure 5.3. 1 Sign In Page (Mess)

5.3.2.Dashboard

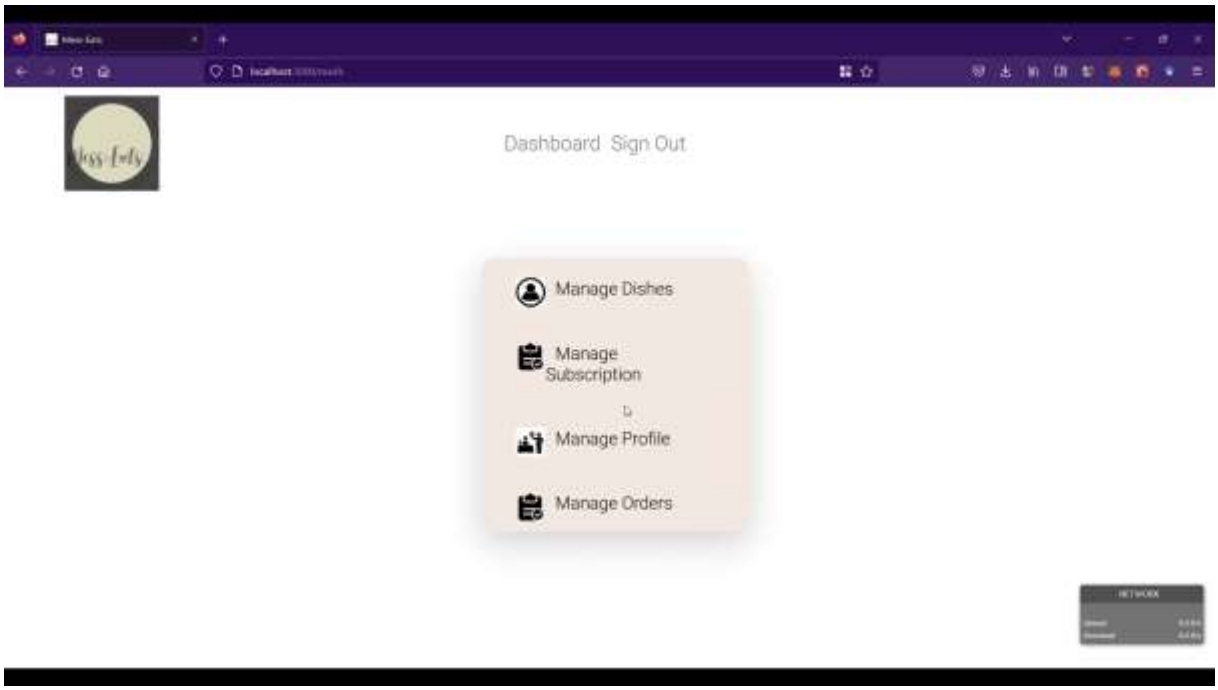

Figure 5.3. 2 Dashboard

5.3.3.Manage Dishes

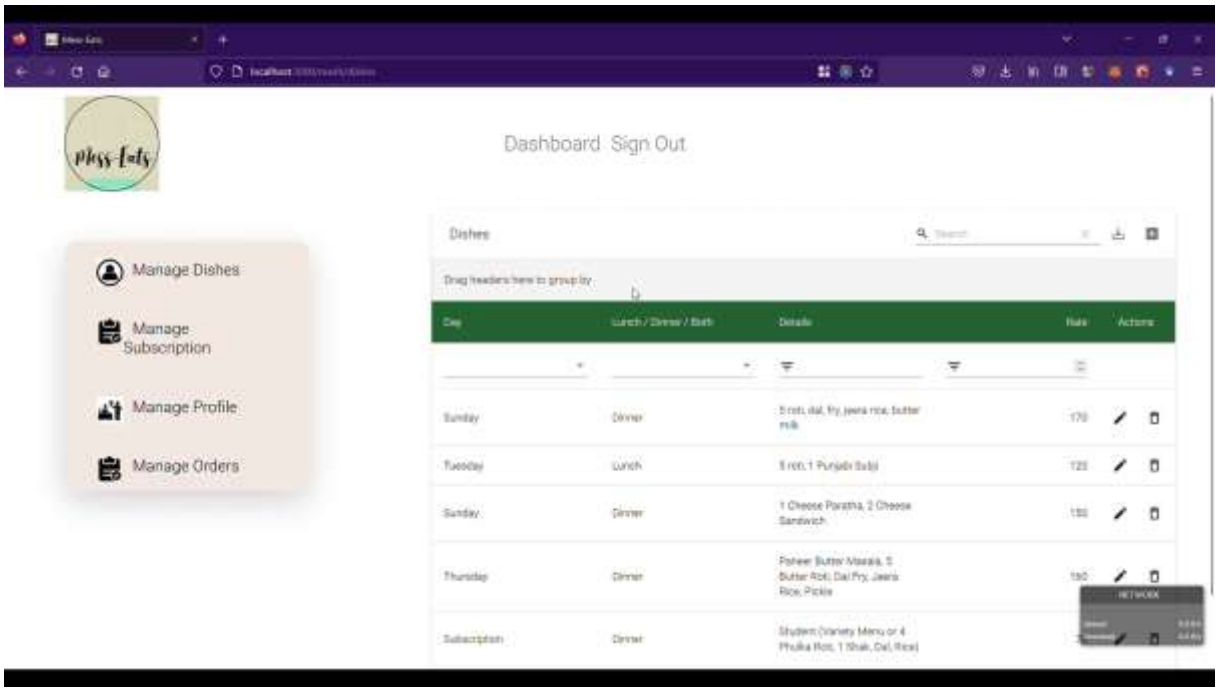

Figure 5.3. 3 Manage Dishes

- Mess can Add / Update / Remove Dishes.

5.3.4.Manage Subscription

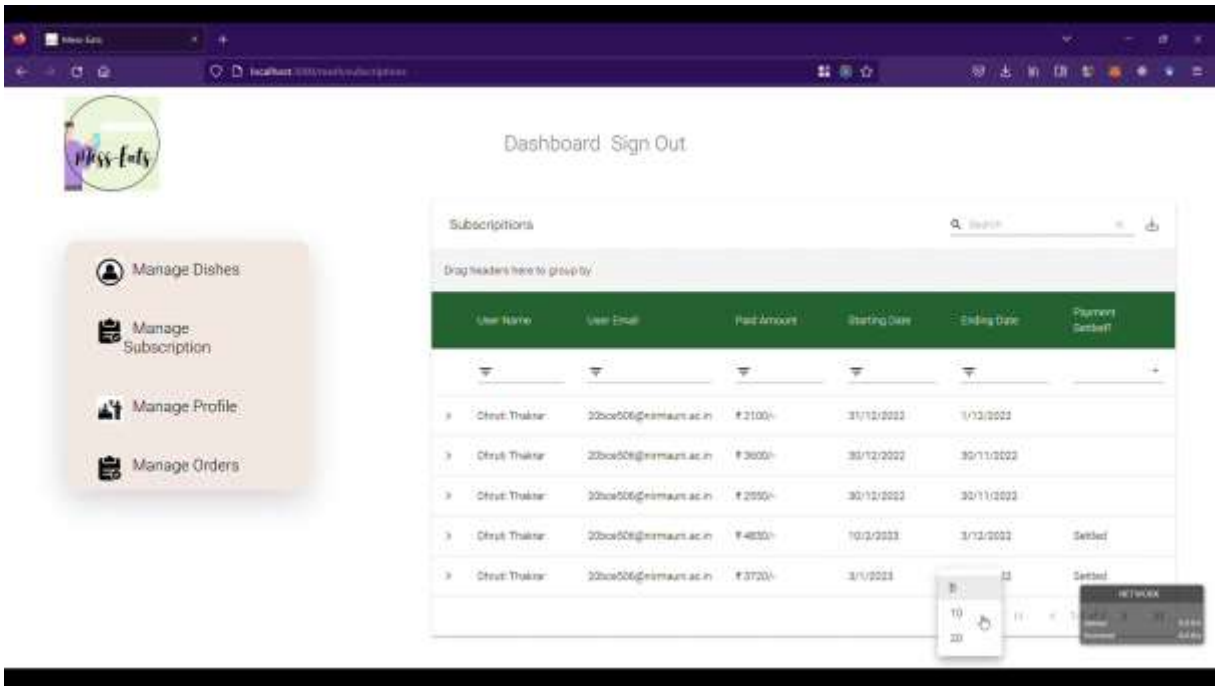

Figure 5.3. 4 Manage Subscription

- Mess can view all the subscription and subscribed users. It will also display that payment is settled or not.

5.3.5.Manage Profile

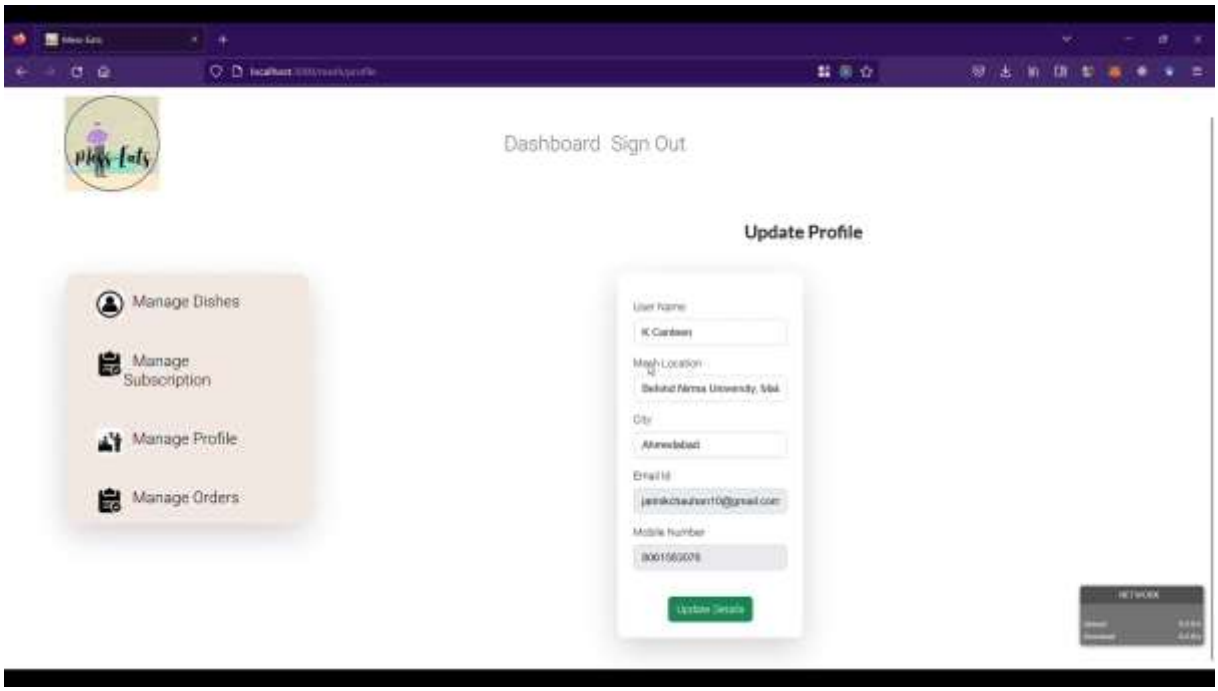

Figure 5.3. 5 Manage Profile

- Mess can Manage Profile. Update Address and Mess name.

5.3.6.Manage Orders

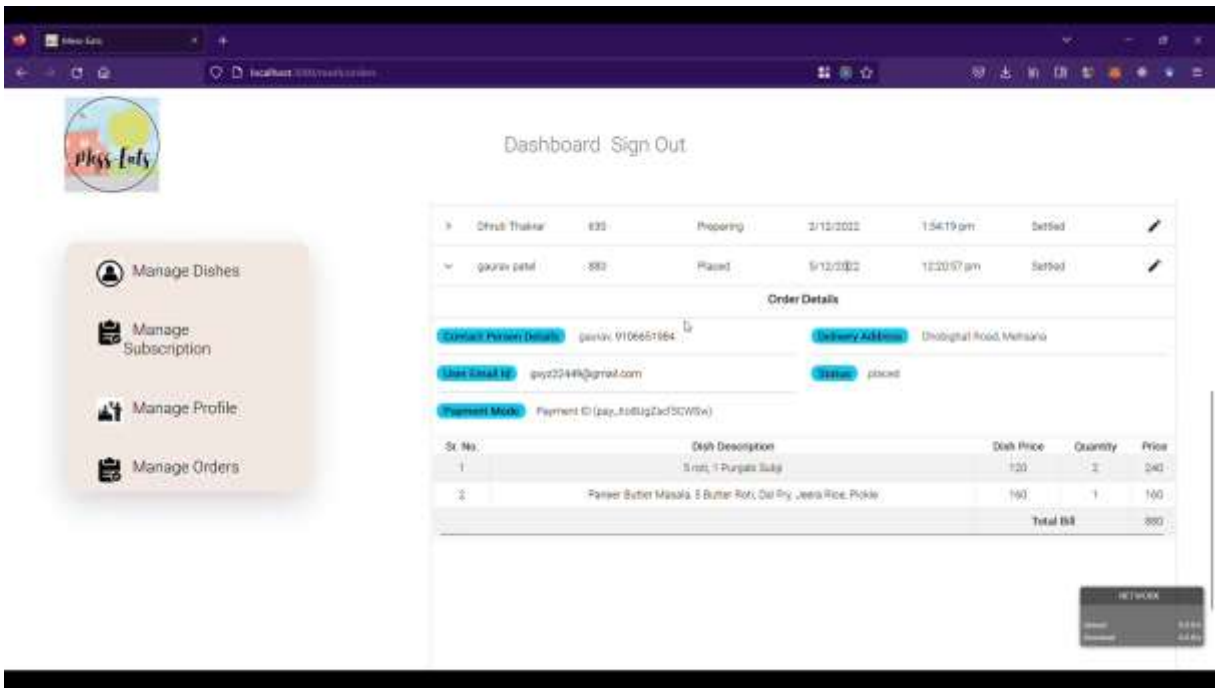

Figure 5.3. 6 Manage Orders

- Mess can Update Order details. Can View subscribed service and user details.

6. Summary and Future work

Summary

Through hands on experience, We gained a better understanding of web development and research. We learned CRUD operation Using MongoDB (NoSQL), way to provide NoSQL database Schema using Mongoose, frontend designing, how to improve user experience using better styling, different types of loader while data is processing and much more while implementing this project. While Researching and Designing Schema for this project we came across very interesting points and got to know about current industry standards and how industry implementing this project using MERN technology. There is no such web app like this. We feel proud to be developed under Mr. Ajaykumar Patel Sir.

Future Work

1. Transfer of Payment
   i) Current Flow : Order/Subscription's Online payment transferred to admin account. Once Order has been completed then admin can transfer money to mess's account by clicking "Settle Payments". But this will not transfer payment to mess account it just change the settled status to True.
   ii) Future Flow : By Using Gateway's Paid service we can directly settle payment to mess's bank account.

2. Near By Mess
   Currently, this system only works near by Nirma University's Location. But we can enable the user's location and fetch near by mess.

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MP12

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