



MANIPAL
ACADEMY of HIGHER EDUCATION
(Institution of Eminence Deemed to be University)

MINI-PROJECT REPORT - WEB TECHNOLOGIES LAB

DEPARTMENT OF DATA SCIENCE & COMPUTER APPLICATIONS

MANIPAL MINCE

B. TECH IN DATA SCIENCE ENGINEERING

Compiled by

ANKIT RAJ	200968220
J. VENKAT VARDHAN	200968158
K. SAINATH REDDY	200968240
RAHUL PANDOVE	200968252
G. VAMSI KRISHNA	200968172
JAITHRA VARMA	200968254

Mentored By:

Tojo Thomas

Assistant Professor-Senior Scale
DSCA, MIT

Akshay Bhat

Assistant Professor-Senior Scale
DSCA, MIT

CERTIFICATE

This is to certify that Ankit Raj (200968220), Rahul Pandove (200968252), J. Venkat Vardhan (200968158), K. Sainath Reddy (200968240), Vamsi Krishna (200968172) and Jaithra Varma (200968254), have successfully compiled a mini project titled “Food-Ordering Portal” rightly bringing forth the competencies and skill sets they gained during the course - Web Tech Lab (DSE 3163) and thereby resulting in the culmination of this project.



Tojo Thomas

Assistant Professor-Senior Scale

DSCA, MIT

Akshay Bhat

Assistant Professor-Senior Scale

DSCA, MIT

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INTRODUCTION

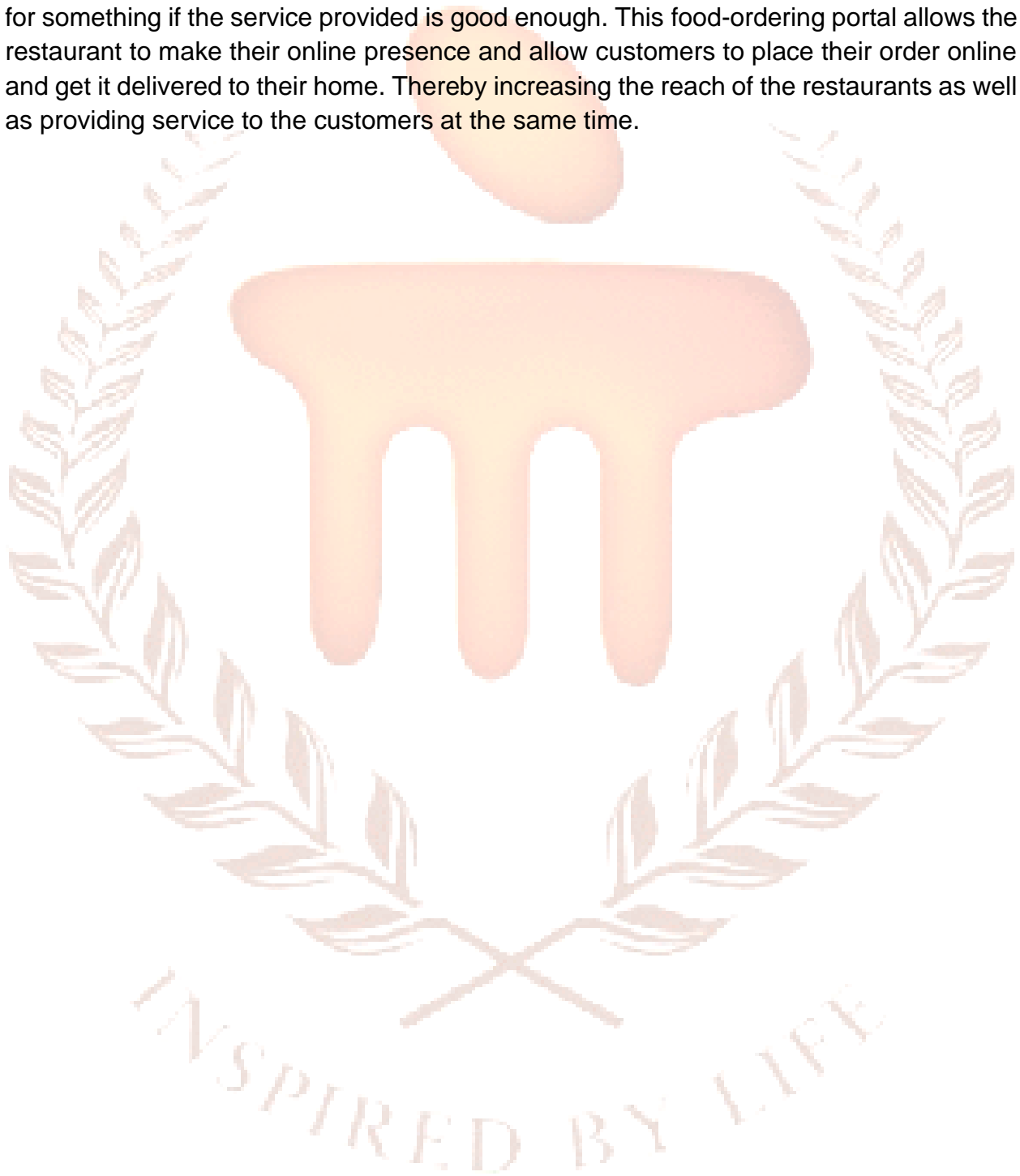
The aim of this project is to build an online food-ordering portal for a Mexican restaurant. The users can visit and sign up to create a user account for themselves. The user can then use the credentials to log in to the portal and place the food order. The portal is restricted for ordering from a single restaurant but can be scaled to connect multiple restaurants and act as a single food ordering platform through which people can place orders from different restaurants nearby them.

The website is interactive and provides users with various recommendations about the type of food they should order and various offers that are being given on different food items.

The website also contains an admin module which helps the restaurants to manage their menu and food item. The database is updated manually by the admins if they make any changes.

MOTIVATION

In this digital era, customers value convenience the most and they are willing to pay extra for something if the service provided is good enough. This food-ordering portal allows the restaurant to make their online presence and allow customers to place their order online and get it delivered to their home. Thereby increasing the reach of the restaurants as well as providing service to the customers at the same time.



OBJECTIVES

- Build an interactive food ordering portal pertaining to a single restaurant which then can be scaled to include multiple restaurants as required.
- Provide the customers with various lucrative offers and combos which provides convenience and generates revenue for the restaurant owners at the same time.
- Provide a seamless and glitch free experience to the customers by using latest web technologies and frame-works like Vue.Js, NodeJs, MySQL, Express, axios etc.
- Integrating an admin module to the website so that the food menu, prices, offer combos can be updated and deleted as per the availability regularly.

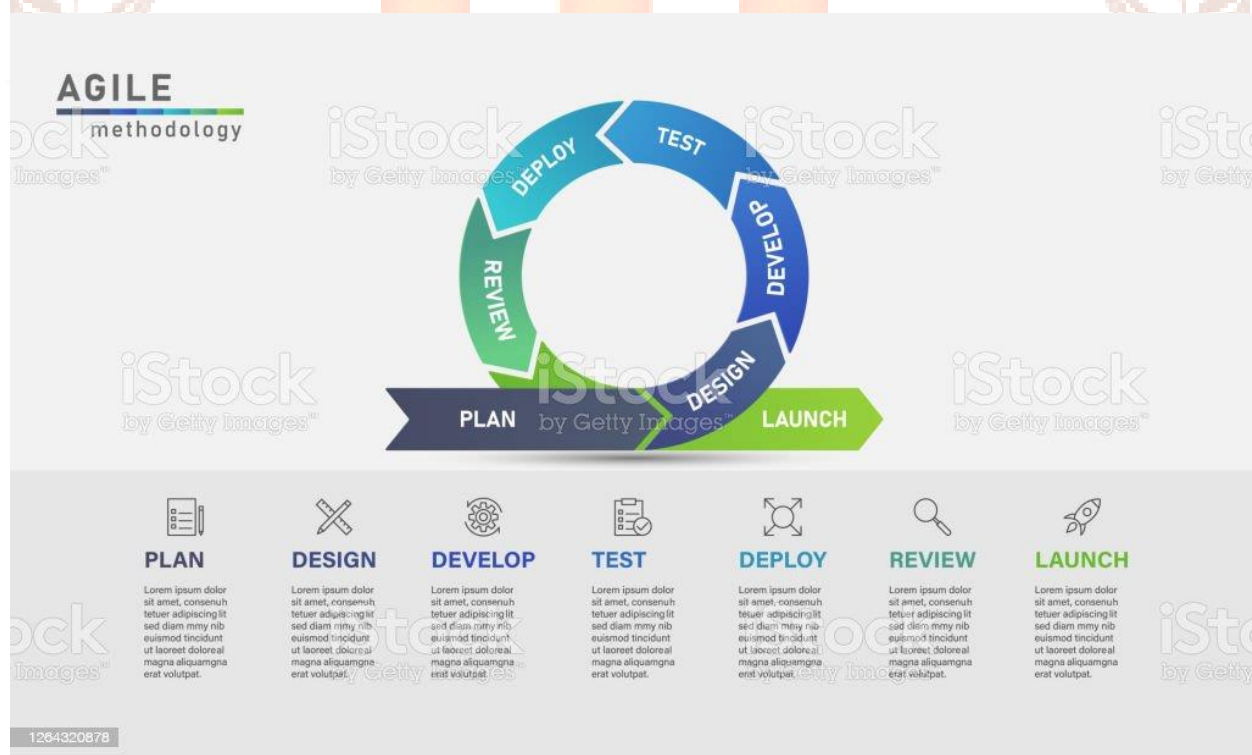
METHODOLOGY

AGILE

Agile is a structured and iterative approach to project management and product development.

It is an alternative to waterfall or traditional sequential development. It is a time-focused philosophy that allows creating a project incrementally, dividing it into small pieces. One of the main benefits is the ability to adapt and change at any step of the project.

When we use an agile approach, we work on **sprints**. They are a set amount of time within which a task should be completed. After the completion of each sprint, we analyze and assess the changes that are needed and we can introduce new ideas ahead of the next sprint. We can introduce new ideas ahead of the next sprint.



ROLE DESCRIPTION

Names	Roles
Ankit Raj	Front End
J. Venkat Vardhan	UI/UX
K. Sainath Reddy	Front End
Rahul Pandove	Back End and Database
Jaithra Varma	Research and Documentation
G. Vamsi Krishna	Front End

SOFTWARE REQUIREMENTS

- **VS Code**

VS Code is an open-source, source code editor particularly in web development. It's fast, extensible, customizable and has tons of features. This editor is used to write, run and debug the HTML, CSS and JavaScript codes required for building a project.

- **Figma**

Figma is a free web-based designing tool that consists of powerful and eye-catching features for creating UI/UX design in web development. It is used to create a user interface for a project.

- **Bootstrap**

Bootstrap is a free, open-source front-end development framework for the creation of websites and web apps. Designed to enable responsiveness of mobile-first websites, Bootstrap provides a collection of syntax for template designs that are customizable and easy to use.

- **MySQL**

MySQL is an [open-source relational database management system](#) (RDBMS), which organizes data into one or more data tables in which data may be related to each other. MySQL has stand-alone clients that allow users to interact directly with a MySQL database using SQL, but more often, MySQL is used with other programs to implement applications that need relational database capability.

- **NodeJS**

Node.js is a JavaScript runtime environment that allows JS to run outside a web browser. It is one of the most efficient cross-platform JavaScript environments that can help you build robust and effective REST APIs, mobile applications, and web applications. Express is a flexible backend framework of Node.js that supports the development of API by creating POST and GET requests to fetch the data from the database or an external server.

- **VueJS**

VueJS is an [open-source model–view–viewmodel front end JavaScript framework](#) for building [user interfaces](#) and [single-page applications](#). Vuex is a state management pattern + library for Vue.js applications. It serves as a centralized store for all the components in an application, with rules ensuring that the state can only be mutated in a predictable fashion.

- **Git & GitHub**

GitHub is a cloud-based platform used for storing, tracking, and collaborating on software projects. It enables developers to upload their own code files and to collaborate with fellow developers on open-source projects. While Git is a version control system that helps in managing files on the local system and cloud-based platforms like GitHub and GitLab in project development and management.

FRONTEND

The entire front-end part of the website was built using HTML, CSS and JavaScript. We also used a library Vue.js, which is an [open-source model–view–view model front end JavaScript framework](#) for building [user interfaces](#) and [single-page applications](#). It is used in the creation of websites and web-apps, designed to enable responsiveness and provides a collection of usable syntax for template designs that are customizable and easy to use. Files are pre-compiled which the users can just run directly in their website.



BACKEND

The backend consists of files written in node.js for combining all the backend entities.

All the routes in this project are designed using Express framework.

We have used APIs based on the POST, GET and DELETE methods in our project.

There are 5 routes for the Food collection:

- Get information about all foods
- Get information about food by ID
- Post a new food
- Put an update on food
- Delete food

There are 2 routes for the User Information:

- Get User information
- Post a new Account

There are 6 routes for the Cart information:

- Post an added item to cart
- Get an item in cart
- Put update on quantity of item
- Delete item in cart
- Delete all items in cart

There are 8 routes for Bill Status:

- Get bill status
- Post a new bill status
- Get all bills filtered by user
- Get all bills filtered by bill
- Get all bills
- Put update on bill status
- Put update on bill paid
- Put update on cancel Bill Status



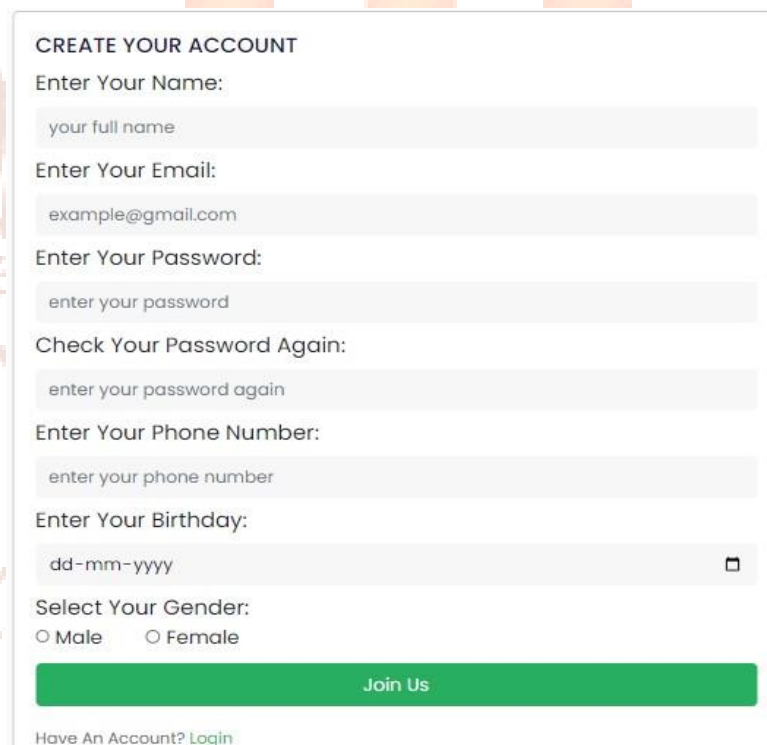
DATABASE

The database used in this project is MySQL. MySQL, accessed with XAMPP

Control Panel, is an open-source relational database which organizes data with the relations between tables which help structure the data. SQL(Structured Query Language) is a language used to create, modify and extract data from relational databases and also control user access to the database. MySQL works with an operating system to implement a relational database in a computer's storage system, manages users, allows access to the network, facilitates database integrity and allows creation of backups.

We mainly used MySQL for creating the required tables for storing the user details, food details, cart, bill details, bill status. When a random user creates his/her profile in the website, the details entered will get stored in the user table in the database. Same goes for the detail of food items available, the order cart and bill summary.

Register Page



CREATE YOUR ACCOUNT

Enter Your Name:
your full name

Enter Your Email:
example@gmail.com

Enter Your Password:
enter your password

Check Your Password Again:
enter your password again

Enter Your Phone Number:
enter your phone number

Enter Your Birthday:
dd-mm-yyyy

Select Your Gender:
☐ Male ☐ Female

[Join Us](#)

Have An Account? [Login](#)

FOOD TABLE

Field Name	Primary Key	Data Type	Field Size
Food Id	Primary Key	Int	11
Food_name	-	Varchar	255
Food_star	-	Varchar	255
Food_vote	-	Varchar	255
Food_price	-	Varchar	255
Food_discount	-	Varchar	255
Food_desc	-	Varchar	255
Food_status	-	Varchar	255
Food_type	-	Varchar	255
Food_category	-	Varchar	255
Food_src	-	Varchar	255

USER TABLE

User_id	Primary Key	Int	11
User_name	-	Varchar	255
User_email	-	Varchar	255
User_phone	-	Varchar	255
User_password	-	Varchar	255
User_birth	-	Varchar	255
User_gender	-	Varchar	255

CART TABLE

User_id	Primary Key	Int	11
Food_id	Primary Key	Int	11
Item_qty	-	Int	25

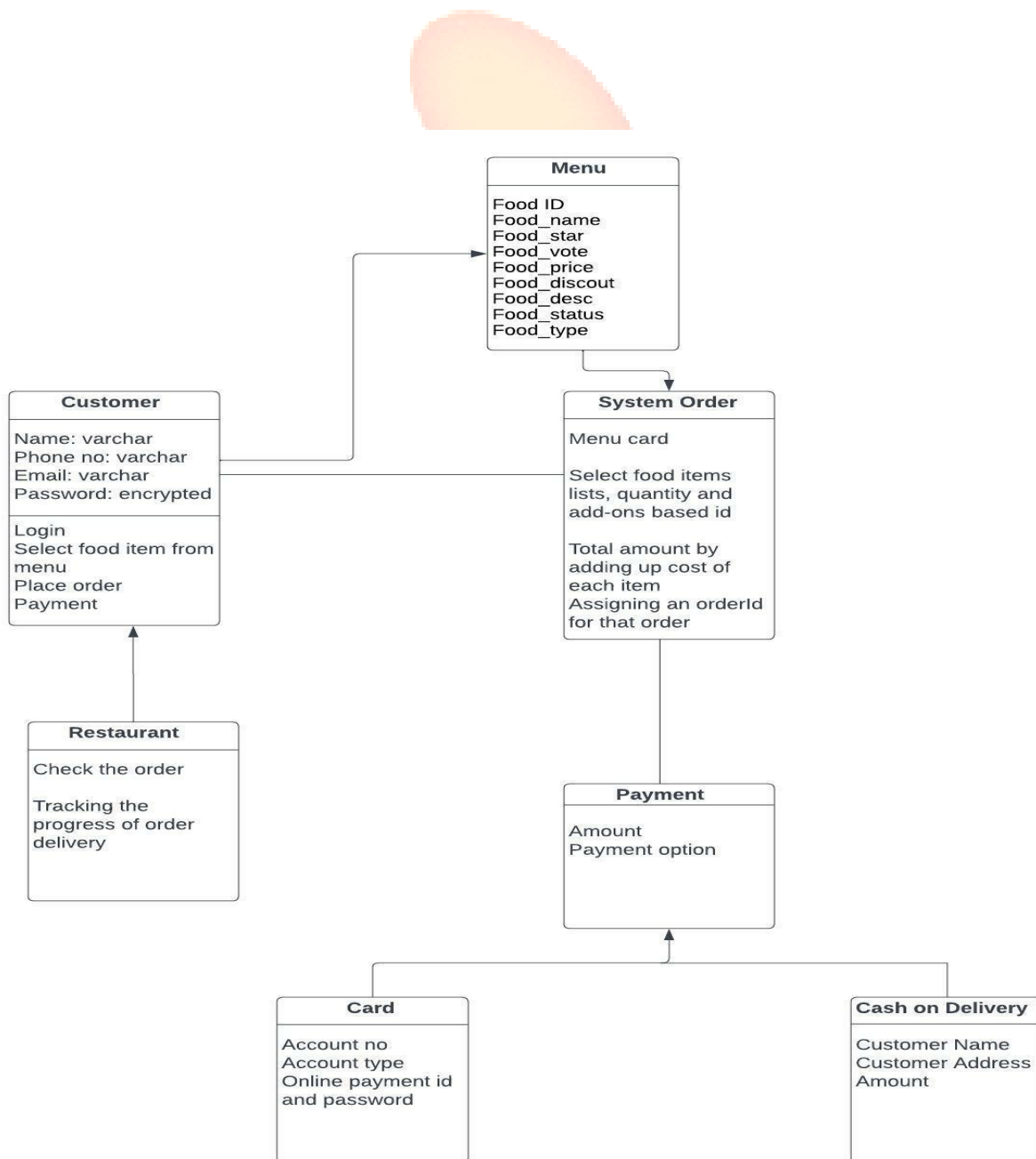
BILL DETAILS TABLE

Bill_id	Primary Key	Int	11
Food_id	Primary Key	Int	11
Item_qty	-	Int	25

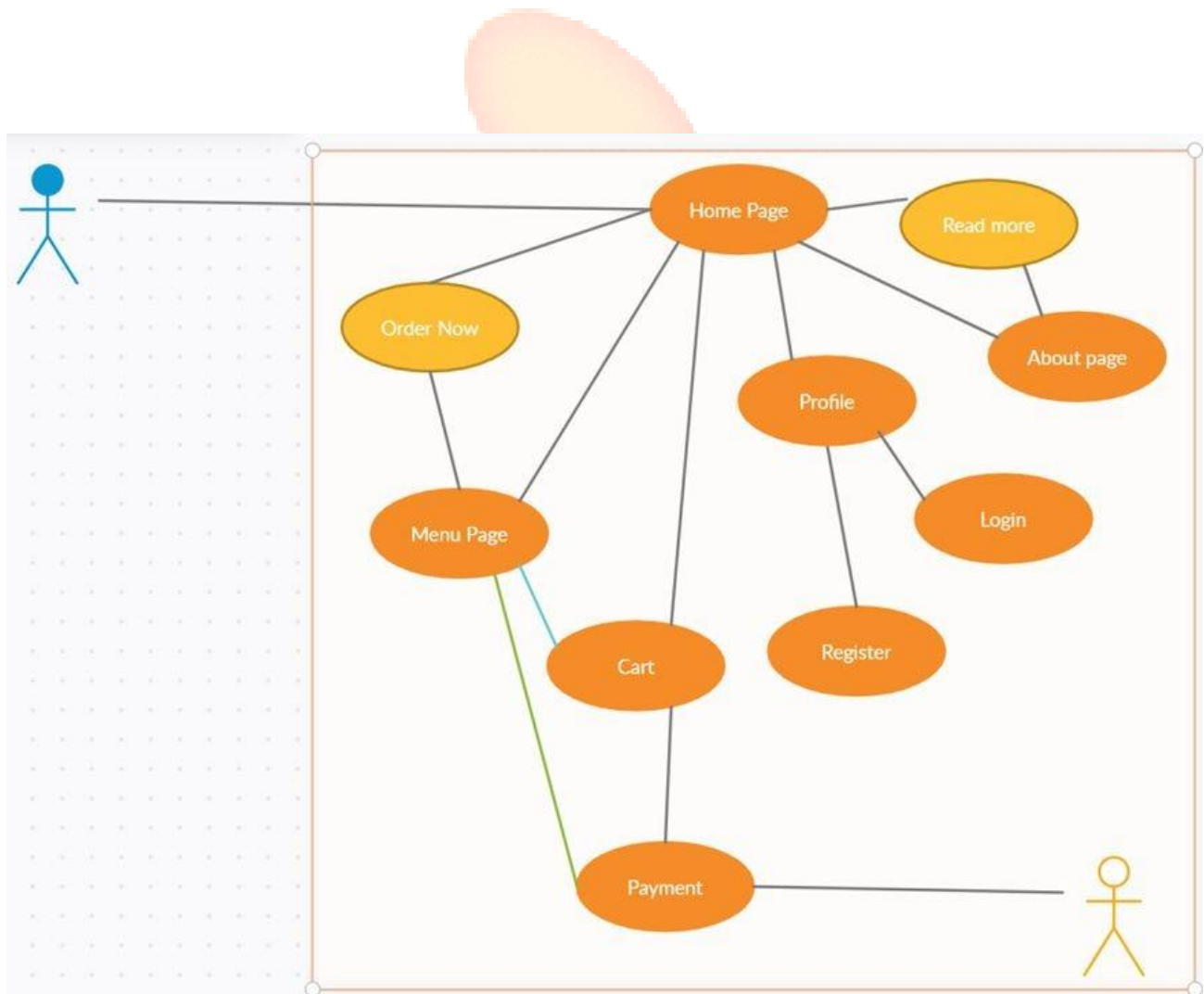
BILL STATUS TABLE

Bill_id	Primary Key	Int	
User_id	-	Int	
Bill_phone	-	Varchar	255
Bill_address	-	Varchar	255
Bill_when	-	Varchar	255
Bill_method	-	Varchar	255
Bill_discount	-	Int	
Bill_delivery	-	Int	
Bill_total	-	Int	
Bill_paid	-	Varchar	255
Bill_status	-	Int	

SCHEMA DIAGRAM



UML USE-CASE DIAGRAM



MODULES

Home: This is the first webpage that opens on visiting the website. It contains various running offers on dishes and has links to visit the menu section, about section through a navbar component which contains link to other sections of the web site.

Dashboard: This module is only accessible by the admin and it contains the details about each order. Various details about the order such as bill Id, User Id, Phone, Address of the customer, timestamp of the order placed, Payment status, Order status and the actions which need to be taken next.

Register: The users which are visiting the website for the first time need to create an account which will then be used by them to login and place orders.

Login: The registered users can then login to the website using the e-mail Id and password that they have set for their account.

My Order: This module shows the details of each order placed by the user. The details include bill amount, payment status, time of order placement, address and phone number of the user.

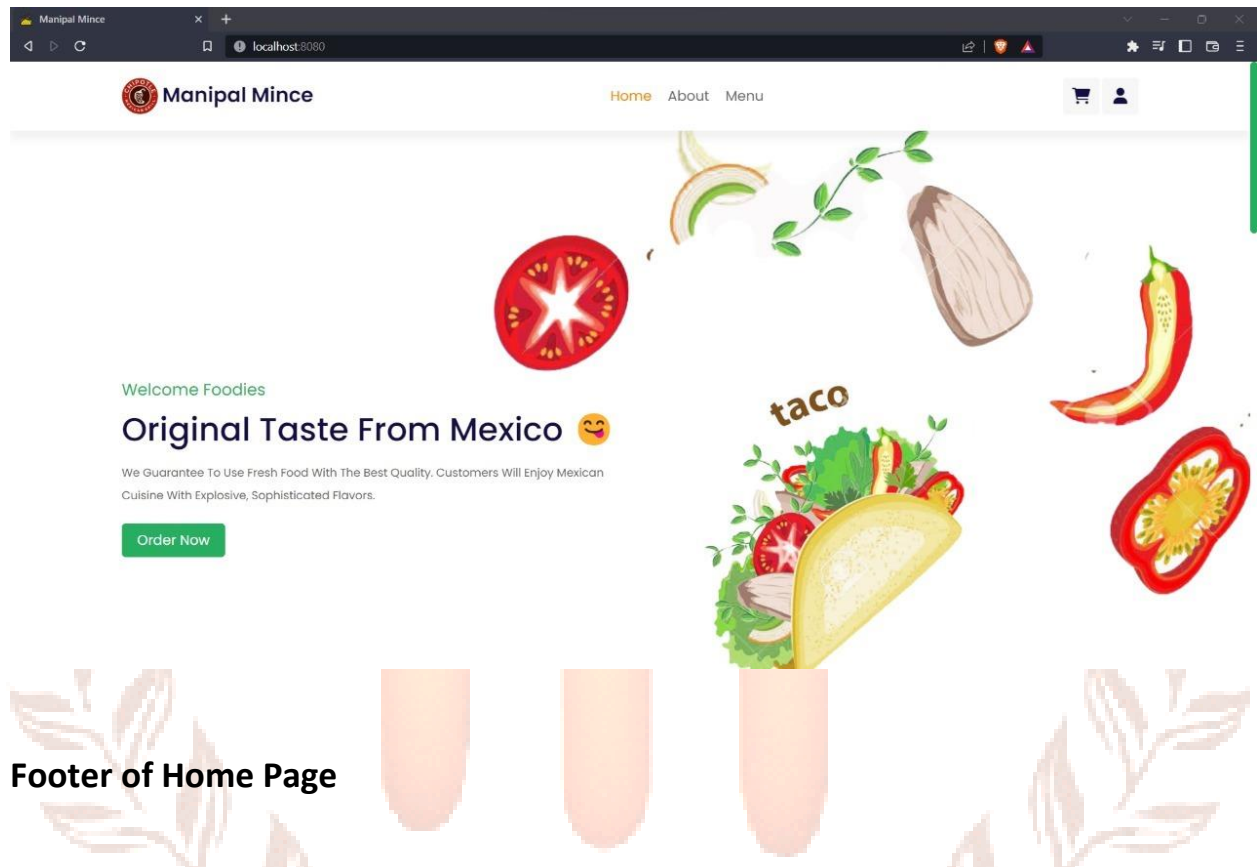
Cart: This module takes care of the summary of all the food items that are added to be ordered, it contains discounts if applicable, the delivery fee, the total amount and a checkout as well as a cancel button to serve the users.

Checkout: The checkout module prompts the user to fill in the shipping details, payment mode and details and then finally the order is placed.

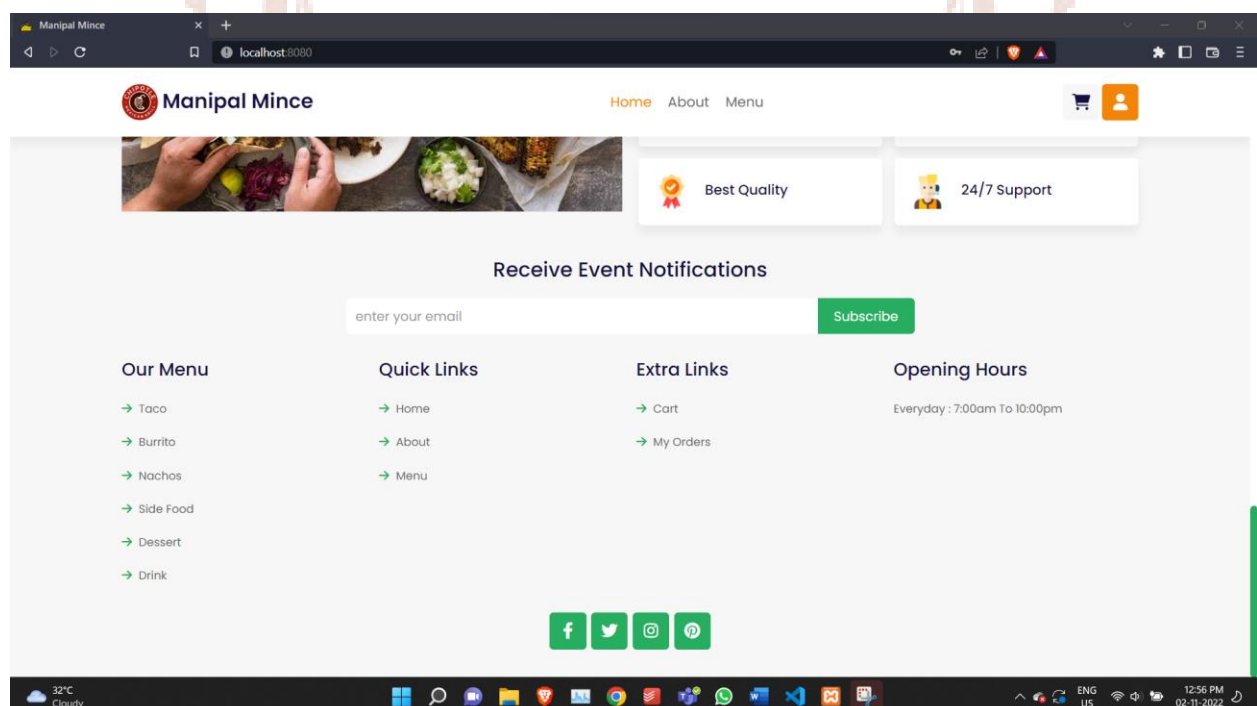
DESIGN

- The design of the UI and UX is prepared using figma. The color scheme consists of a shade of green, which greatly resembles the color of food in most parts of the world, and is aesthetically pleasing so it was chosen as the color of choice.
- The navbar component is placed at the top and is integrated into each page of the website. It contains links to all the pages present in the website.
- The cart and the profile icon present in the navbar allows the users to access the cart and their profile respectively.
- The Footer component consists of links to various social media handles of the particular restaurant. The operating time of the restaurant and extra links to the login and registration module.

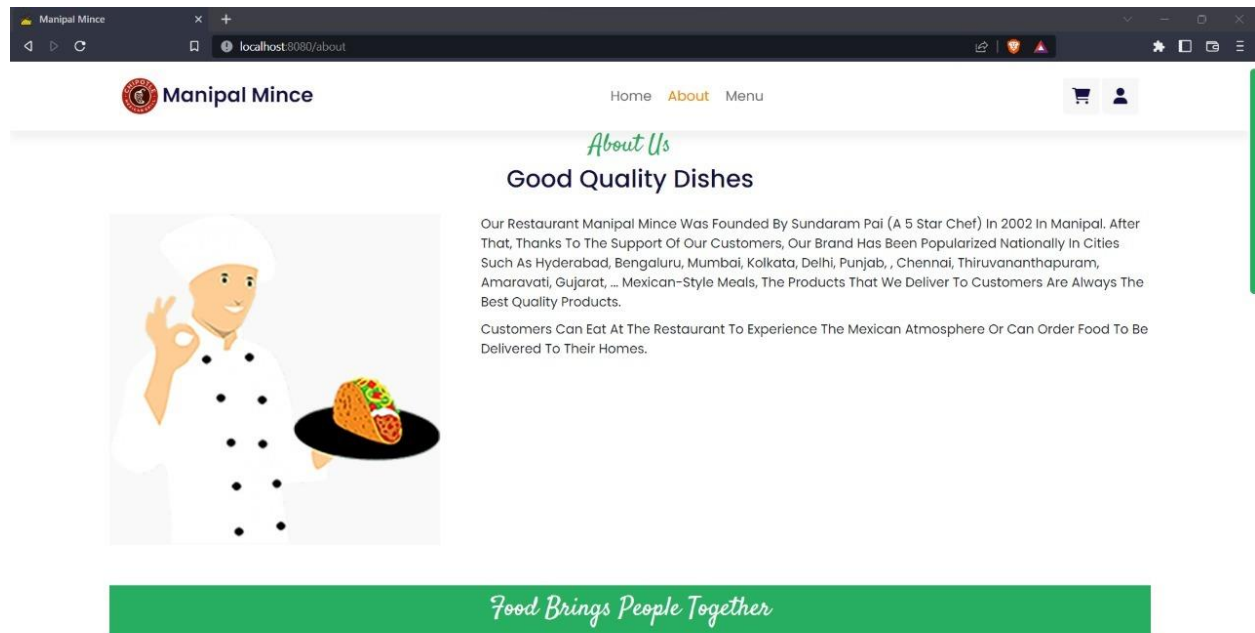
The landing page



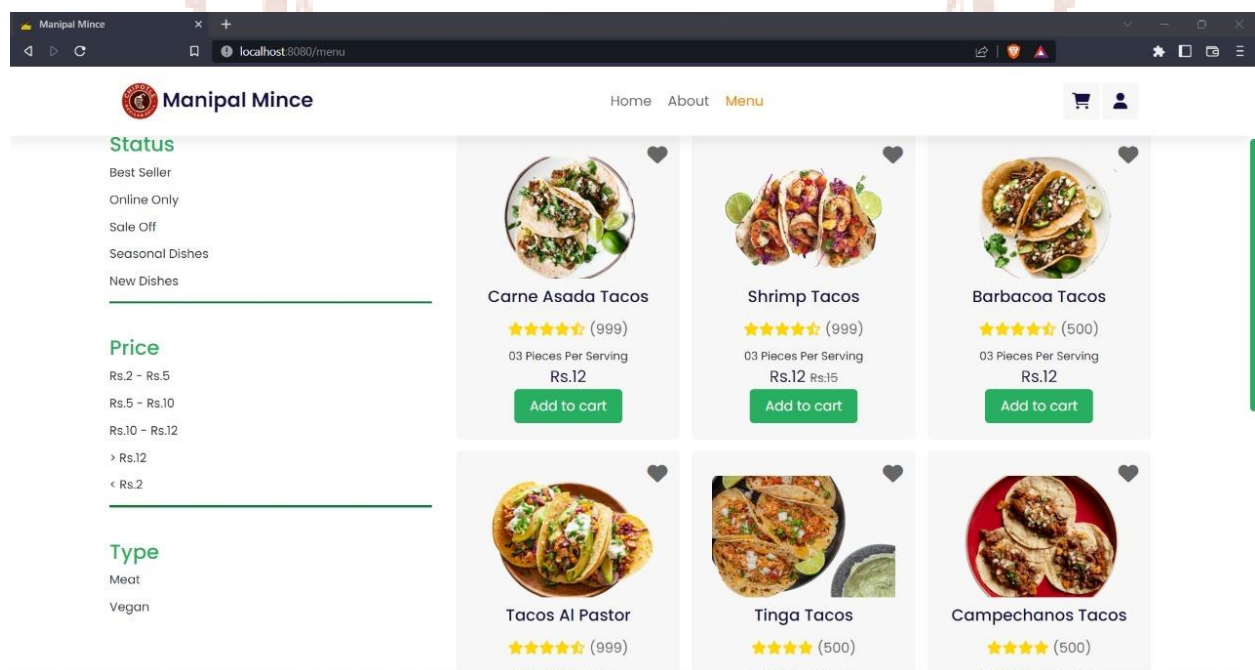
Footer of Home Page



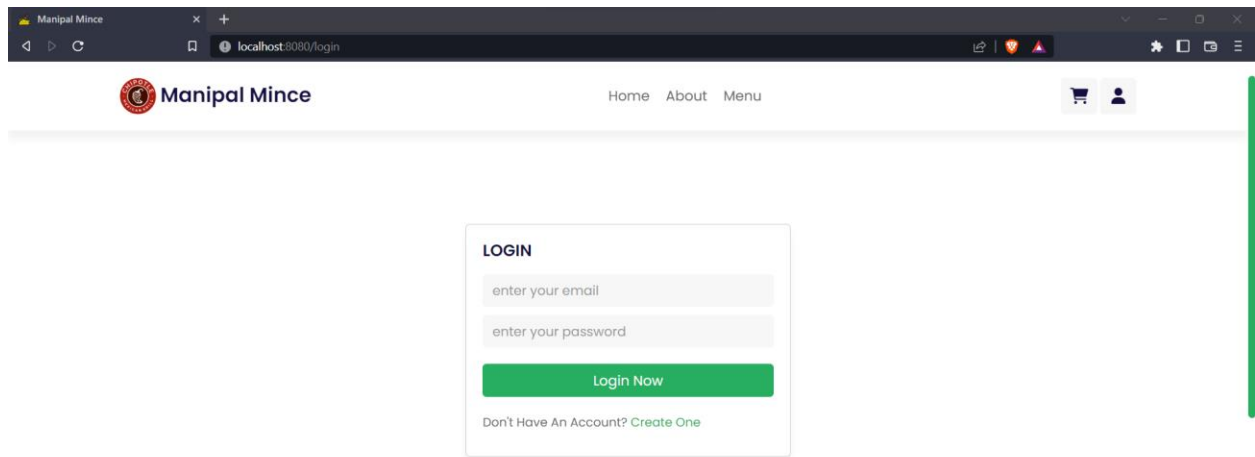
About Page



Menu Page



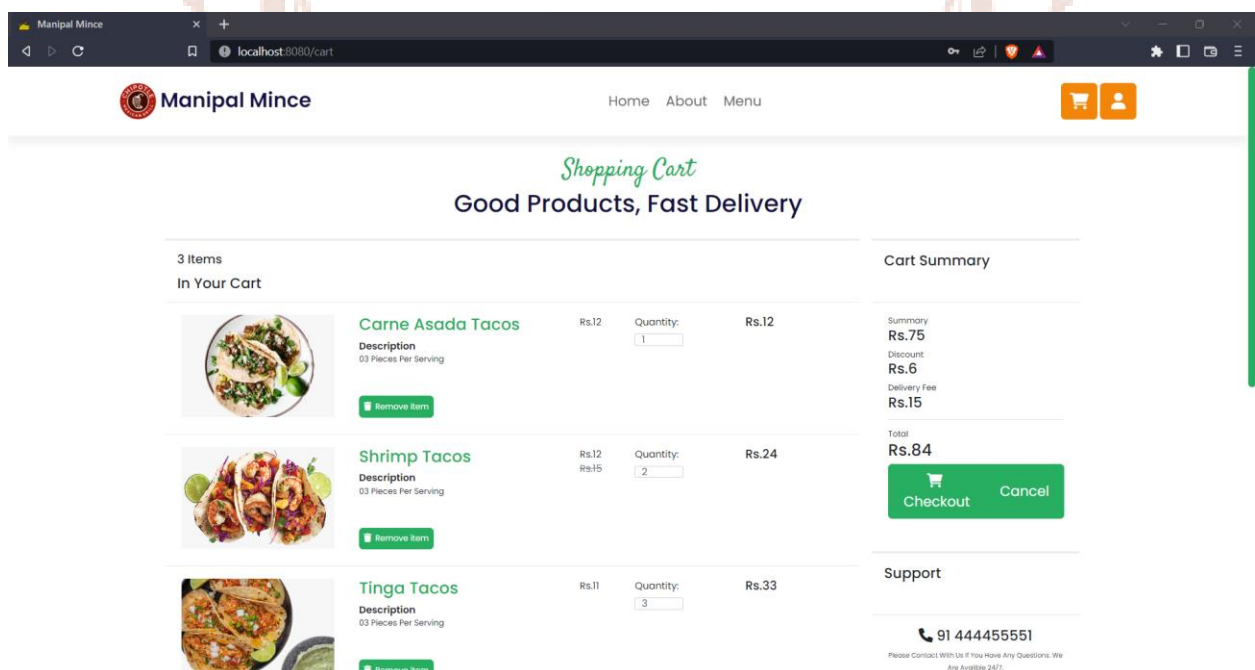
Login Page



The screenshot shows a web browser window with the URL `localhost:3080/login`. The page features the Manipal Mince logo and navigation links (Home, About, Menu) at the top. A central login form is displayed with the following elements:




- LOGIN** header
- Input field: `enter your email`
- Input field: `enter your password`
- Green button: `Login Now`
- Link: `Don't Have An Account? Create One`

Cart Page



The screenshot shows the Manipal Mince Shopping Cart page. The header includes the logo, navigation links, and icons for the shopping cart and user profile. The main heading is *Shopping Cart* with the tagline **Good Products, Fast Delivery**.

3 Items In Your Cart

Image	Item Name	Unit Price	Quantity	Total Price	Action
	Carne Asada Tacos Description 03 Pieces Per Serving	Rs.12	1	Rs.12	Remove Item
	Shrimp Tacos Description 03 Pieces Per Serving	Rs.12 Rs.15	2	Rs.24	Remove Item
	Tinga Tacos Description 03 Pieces Per Serving	Rs.11	3	Rs.33	Remove Item

Cart Summary

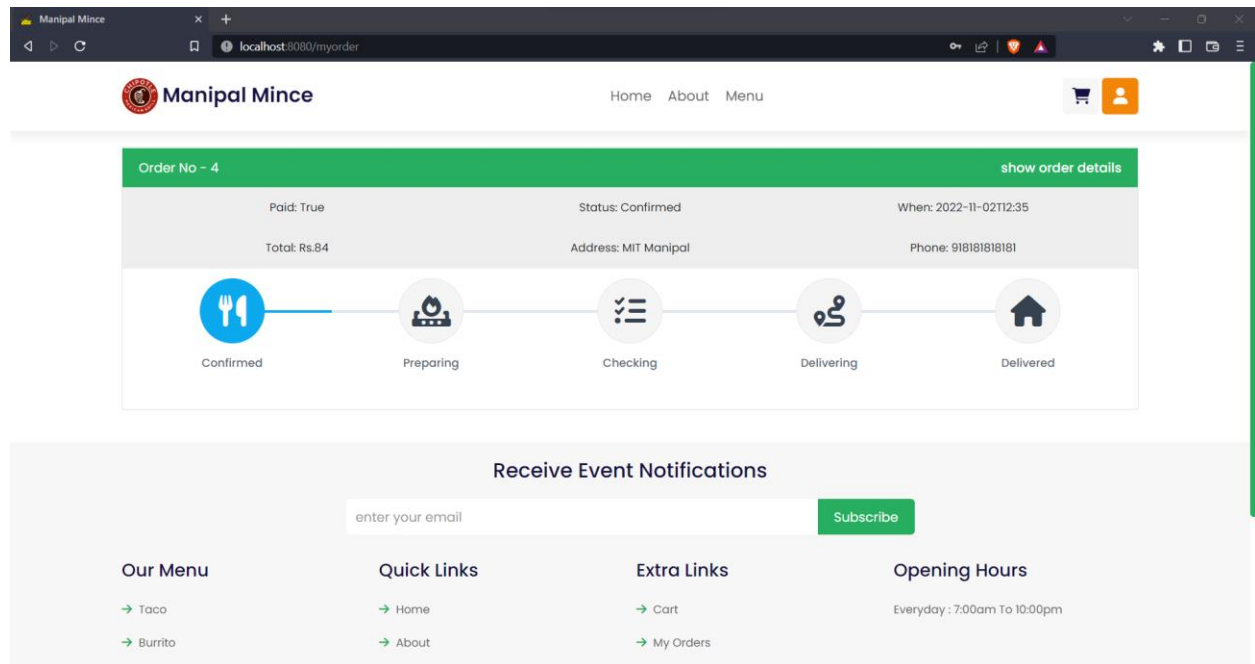
Summary
Rs.75
Discount
Rs.6
Delivery Fee
Rs.15
Total
Rs.84
Checkout Cancel

Support

91 444455551

Please Contact With Us If You Have Any Questions, We Are Available 24/7.

MyOrder Page



Manipal Mince

Home About Menu

Order No - 4 [show order details](#)

Paid: True Status: Confirmed When: 2022-11-02T12:35

Total: Rs.84 Address: MIT Manipal Phone: 9181818181

Confirmed Preparing Checking Delivering Delivered

Receive Event Notifications

enter your email [Subscribe](#)

Our Menu

- Taco
- Burrito

Quick Links

- Home
- About

Extra Links

- Cart
- My Orders

Opening Hours

Everyday : 7:00am To 10:00pm

LEARNING CURVE

We have come a long way since we started this project. Initially we had little to no knowledge of web development but with the motivation given by Tojo sir and Akshay sir, we started learning new skills and implementing them in our project. Despite many hurdles we faced, our team was strong and we have great team members who are achievers in different fields. Our members previous experience and passion towards tech has greatly boosted the progress of the project. We learned about how to build an end to end working website. We hope that we continue learning new technologies and excel in this techworld.



CONCLUSION

Manipal Mince is a one stop destination for people to taste some of the most famous delicacies in the world at your home with just a click away. Our site's marvelous user interface makes it very comfortable for users to order food. Through this project our knowledge and skill set was expanded and also learned a lot about teamwork and also improved our communication skills.

Project Outcomes :

- Came across many new tools and technologies as part of this project and learnt to work collaboratively as a team and communicate with each other trying to achieve the final output.
- Implemented the login authentication successfully.
- Successfully established a connection with MySQL
- Menu been displayed by extracting the data from the database
- Added additional features such as special discounts on eataries

FUTURE SCOPE

- Can try to enhance the user experience by including the option of selecting a city rather than confining to a single location.
- Can include a feature to book a table in a particular restaurant.
- Can carry out the authentication process using your Google, Instagram account etc.
- Recommend eateries to customers based on ratings and feedbacks.
- Integrating with payment gateways and UPI.
- Making it available as an Android or iOS app.

REFERENCES

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- ❖ <https://expressjs.com/>
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- ❖ <https://www.lucidchart.com>