RESTAURANT BILLING MANAGEMENT SYSTEM

Scope: This project mainly deals with generating the bill including the taxes and to extend the user convenience this could be achieved via online menu system where a user or customer can login and order the food in the application itself, based on which a bill will be generated.

Problem Statement: In traditional methods maintaining transparency and having optimal analysis of the business is quite difficult. And ordering the food via a physical menu card is a little difficult when compared to online ordering.

Additional Features: By moving the entire process of ordering online we can get access to some additional features like
  - ➔ Easy to order
  - ➔ Generate bill instantly
  - ➔ Easy to analyze the best dish or most ordered dish
  - ➔ Total Business of particular day could be evaluated
  - ➔ Necessary steps could be taken based on the data
  - ➔ Transparency to both customers and business owners

Modules:

The whole system has mainly 2 modules:

1. Admin side

   Admin or the restaurant manager can login with their credentials and get access to the orders placed by the user and deliver it as soon as possible. Once all the orders are successfully served a bill will be generated and admin can keep track of payment status Admin have the ability to:

     - ➔ Add new items to the menu
     - ➔ Delete items from the menu
     - ➔ Change the price of any particular dish or item
     - ➔ Check and maintain the payment status of each customer

➔ Fulfill the orders by customers

➔ Add convenience fee or taxes

➔ Analyze feedbacks of each dish

2. Customer side

This part mainly deals with ordering the food. A customer can order or select the dishes from the menu and once they are done automatically a bill will be generated based on the dishes ordered and any extra charges as per the requirements.
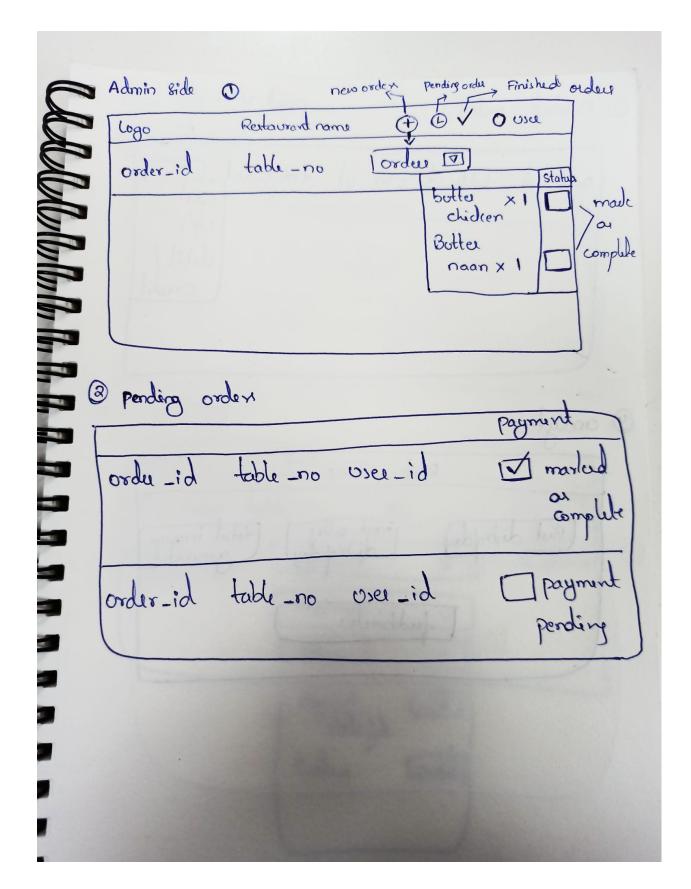Customers can:

➔ Add dishes to the cart

➔ Place the order

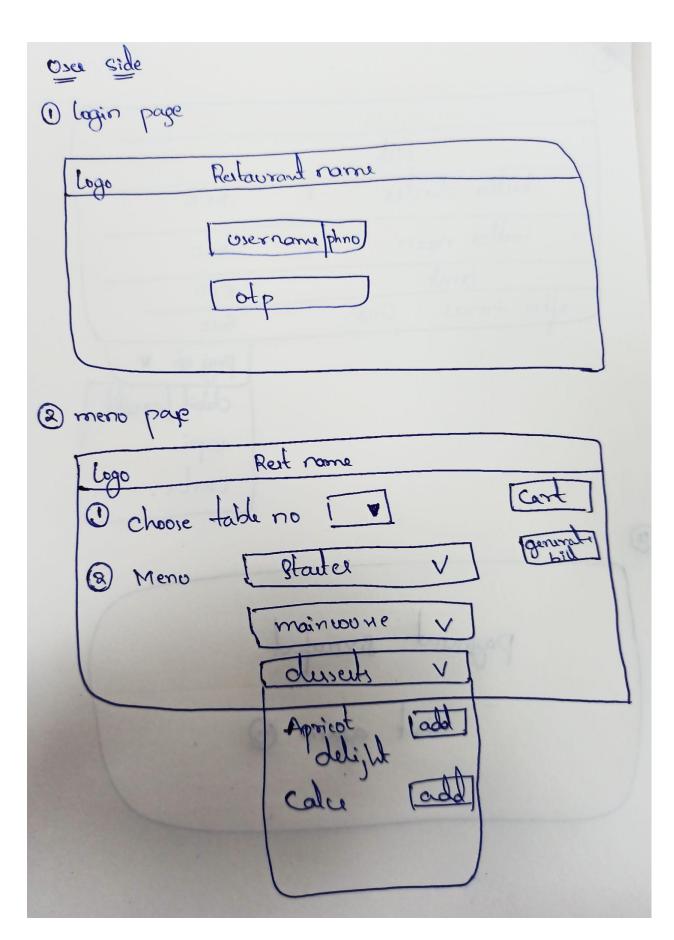➔ Get detailed bill

➔ Make payments

➔ Give feedback to each dish

Requirements
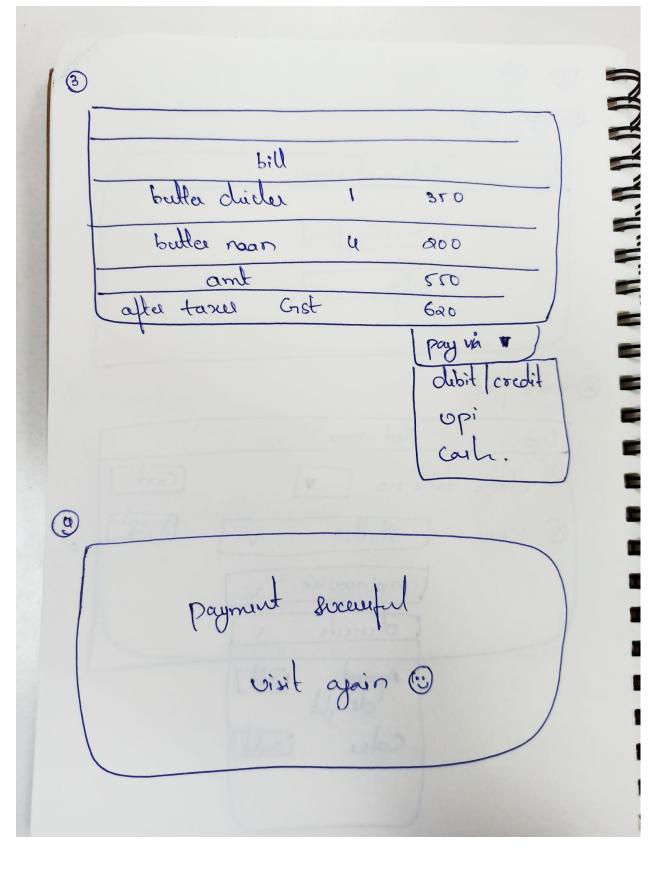
➔ HTML, CSS, Bootstrap for designing purpose

➔ JS for user interaction

➔ MySQL for storing, retrieving menu, customer details

➔ JDBC to interact with Database

➔ Servlets, Filters to separate the Sessions of customer and admin side

Wire Frames

Admin Side ① new orders   Pending order → Finished orders

Logo	Restaurant name	⊕	ⓛ ✓	○ User

order_id   table_no | Order ▽ |

                                                    Status

                                         butter   × 1   ☐ ⎫ made
                                         chicken   ⎬ or
                                         Butter   ☐ ⎭ complete
                                         naan × 1

② pending orders

                                                          Payment

order_id	table_no	User_id	☑ marked as complete

order_id	table_no	User_id	☐ payment pending

③ Finished orders   paid via

order_id	table_id	user_id	total_amt	▽

- Cash
- Upi
- debit /
- credit

④ analytics

Rest_name

- [Best dish of day]
- | most selling dish of day
- | total income generated |

[feedback]

User side

1. login page

Logo | Restaurant name

username | phno

otp

2. menu page

Logo | Rest name

1. choose table no [▼]

Cart

generate bill

2. Menu

Starter ∨

main course ∨

duserts ∨

Apricot delight [add]

Cake [add]

③

bill		
butter chicken	1	350
butter naan	4	200
amt		550
after taxes	Gst	620

pay via ▼

debit | credit

upi

cash.

②

payment successful

visit again ☺

Flowchart

FLOWCHART

orders food from the menu and confirms it

Order Food

after completion of order the bill is generated and sent to both customer and admin

Bill generated

01.   02.   03.   04.   05.

Scans QR and login

Customer scans QR, Log's in

Admin

admin checks for the orders in his portal and processes it

Feedback

admin marks as complete indicating the payment has completed and has an option to give feedback