GROUP H- Restaurant Management System

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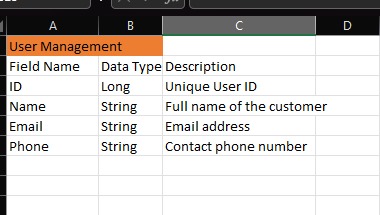
server-side wed programming

LECTURE 3- HOMEWORK

1. **Define All the aspects of your application**

|  |  |
| --- | --- |
| **1. User Management** | |
| **Feature** | **Details** |
| **Roles** | Admin (full system access), Manager (inventory/orders), Staff (take orders), Customer (place orders) |
| **Authentication** | Email/username login, password reset, session timeout (30 mins inactivity) |
| **Profile Control** | Edit personal info, profile photos, notification preferences (SMS/email) |
| **Permissions** | Admin: Add/delete users; Manager: Update menu; Staff: Process orders |
|  |  |
| **2. Menu Management** | |
| **Feature** | **Details** |
| **Categories** | Main Course, Appetizers, Deserts, Drinks |
| **Menu Items** | Name, description, price, prep time, calorie count, allergens (nuts/dairy), drink(cold/hot) |
| **Dynamic Pricing** | Happy hour discounts, seasonal specials, combo deals, Kids meal |
| **Availability** | Real-time stock sync (disables item if ingredients run out) |
|  |  |
| **3. Order Management** | |
| **Feature** | **Details** |
| **Order Types** | Dine-in (table assignment), Takeaway (pickup time selection), Delivery (live GPS tracking) |
| **Workflow** | Status: Received → Preparing → Ready → Completed/Cancelled |
| **Modifications** | Custom requests (e.g., "no ketchup"), ingredient substitutions |
| **Payment** | Split bills, tips (10%/15%/20%), digital receipts |
|  |  |
| **4. Inventory Management** | |
| **Feature** | **Details** |
| **Stock Tracking** | Quantity, unit (kg/liters/pieces), expiry dates, minimum threshold alerts |
| **Suppliers** | Contact info, order history, delivery schedules |
| **Waste Control** | Track spoiled items, generate waste reports |
| **Auto-Reorder** | Trigger purchase orders when stock ≤ minimum threshold |
|  |  |
| **5. Reporting & Analytics** | |
| **Feature** | **Details** |
| **Sales Reports** | Daily/weekly/monthly sales, top-selling items, peak hours |
| **Staff Performance** | Orders handled per employee, average preparation time |
| **Customer Insights** | Favorite items, average spend, visit frequency |
|  |  |
| **6. Customer Relationship** | |
| **Feature** | **Details** |
| **Reservations** | Table booking via app/website, waitlist management |
| **Loyalty Program** | Points system (1 point per $10 spent), redeemable discounts |
| **Feedback** | Rating (1-5 stars), comments, complaint resolution tracking |
|  |  |
| **7. Billing Management** | |
| **Feature** | **Details** |
| **Payment Methods** | Accepts cash, credit/debit cards (Visa, Mastercard, etc.), mobile wallets and bank transfers. |
| **Grand total** | Sum of all ordered items. |
| **Taxes** | Auto-applied based on location (e.g., GST, VAT). |

2. DTOs:



Stores data about the employees of the restaurant e.g name and NIC of employee

A screenshot of a computer

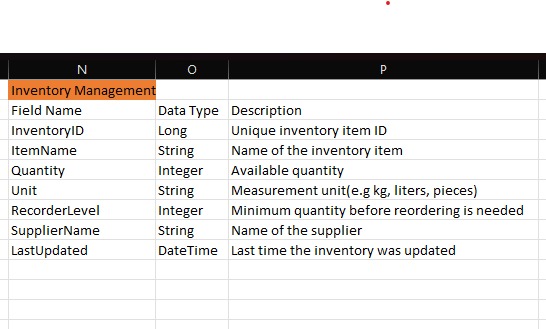
AI-generated content may be incorrect.

Stores data about the menu of the restaurant e.g what the restaurant is producing on a specific day

A screenshot of a computer

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Stores data about the orders of the restaurant e.g the number of orders on a specific item(popularity)

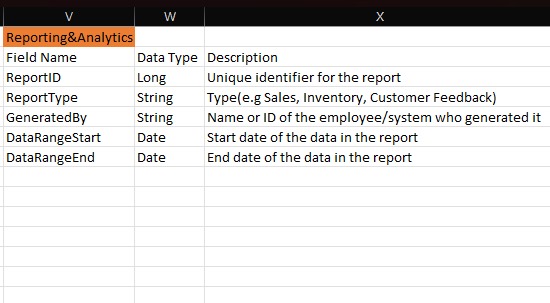


Stores data about the inventory of the restaurant e.g the amount of bread in store

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Stores data about the transactions of the restaurant e.g electricity bills



Stores records of the growth of the restaurant e.g profits, popularity

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Stores data about the customers of the restaurant e.g the loyal customers and new ones which can be used to add to an analysis

3. Pages

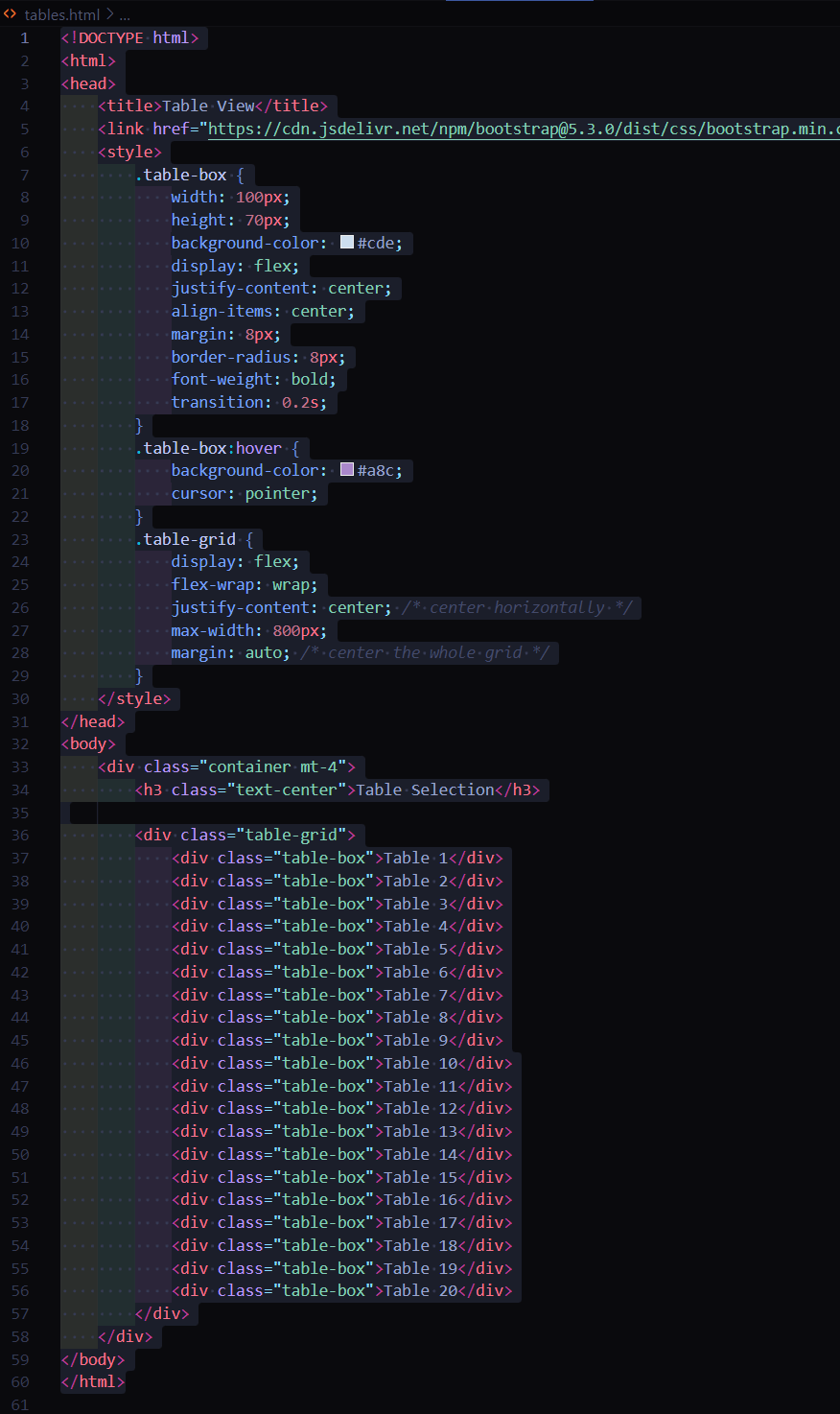
Login Page :

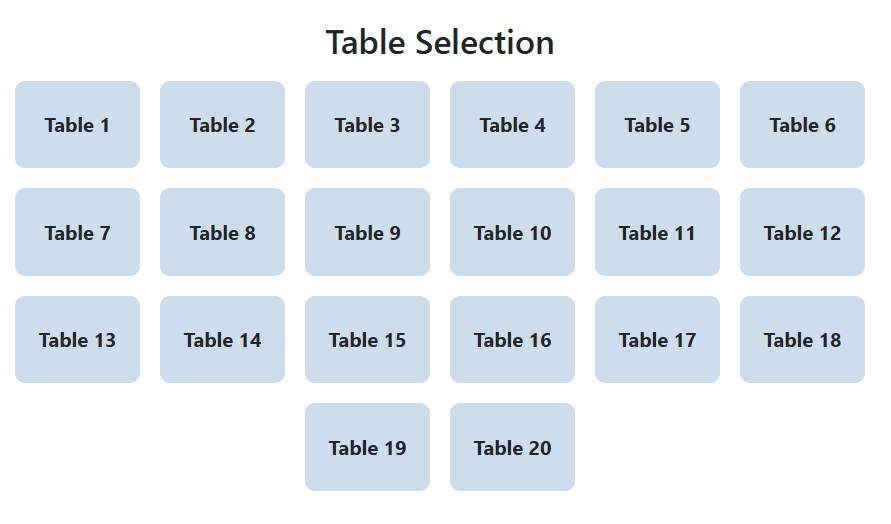


A screenshot of a login box

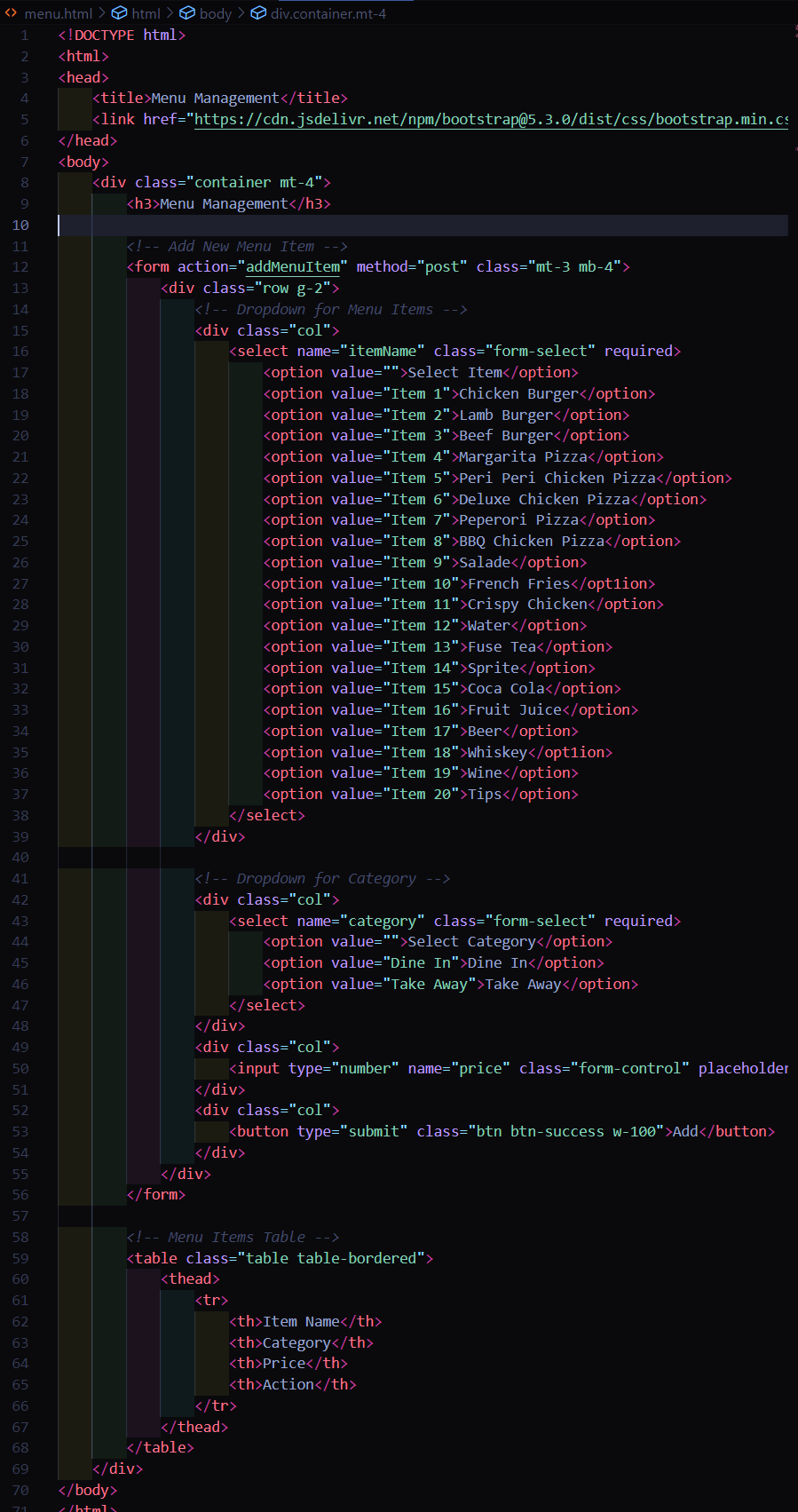
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Table page :





Menu :



A screenshot of a computer

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A screenshot of a computer

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Billing :

A screen shot of a computer program

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4. github address for the project

<https://github.com/Ar1ley/restaurent-management-system.git>