UC Name	*User Login*
Summary	*Allows users to log into the system*
Dependency	*None*
Actors	*Primary Actor: User*
Preconditions	*The user must be registered in the system.*
Description of the Main Sequence	1. *User navigates to the login page.* 2. *User enters a valid username and password.* 3. *System verifies the credentials.* 4. *System grants access and redirects to the dashboard.*
Description of the Alternative Sequence	1a. If credentials are invalid, the system displays an error message and prompts the user to retry.
Non functional requirements	*- Security – Secure password storage and authentication* *- Performance– System must authenticate users within 2 seconds* *- Availability – Always accessible for registered users* *- Interface– Simple and efficient login page*
Postconditions	*User is logged into the system and can access authorized functionalities.*

UC Name	*Table Reservation*
Summary	*Allows customers to reserve a table online.*
Dependency	*None*
Actors	*Primary Actor: Customer*
Preconditions	*The system must be operational.*
Description of the Main Sequence	1. *Customer navigates to the "Reserve Table" page.* 2. *Customer selects date, time, and number of guests.* 3. *System checks table availability.* 4. *Customer confirms the reservation.* 5. *System saves the reservation and sends confirmation.*

Description of the Alternative Sequence	*3a. If no table is available, the system suggests alternative time slots.*
Non functional requirements	*- Performance – Reservation should be processed within 2 seconds* *- Scalability – Supports multiple simultaneous reservations* *- Notifications – Sends confirmation and reminders* *- Interface – User-friendly reservation process*
Postconditions	*Table is successfully reserved and confirmation is sent.*

UC Name	*Bill Generation & Payment Processing*
Summary	*Allows the system to generate a bill and process payments.*
Dependency	*An order must be completed.*
Actors	*Primary Actor: Customer, Cashier*
Preconditions	*The customer must have completed an order.*
Description of the Main Sequence	1. *System generates a bill based on the items ordered.* 2. *Customer reviews the bill.* 3. *Customer selects a payment method (Cash, Credit, Digital Payment).* 4. *System processes the payment.* 5. *System confirms the transaction and generates a receipt.*
Description of the Alternative Sequence	*4a. If payment fails, the system prompts the customer to retry or select a different method.*
Non functional requirements	*- Performance – Payment should process within 3 seconds* *- Security– Ensures safe transactions and encrypted data* *- Scalability– Handles multiple transactions simultaneously* *- Interface– Clear and easy payment flow*
Postconditions	*Payment is completed, and a receipt is issued.*

UC Name	*Ingredient Stock Management*
Summary	*Allows the system to track ingredient stock levels in real time.*
Dependency	*None*
Actors	*Primary Actor: Inventory Manager, Admin*
Preconditions	*The system must be operational.*
Description of the Main Sequence	1. *System continuously monitors stock levels.* 2. *Inventory manager views current stock levels.*
	3. *System updates stock levels when new inventory is received or used.* 4. *If stock is low, system generates an alert.* 5. *Inventory manager places a restock order if necessary.*
Description of the Alternative Sequence	*4a. If stock level tracking fails, the system alerts the admin for manual verification.*
Non functional requirements	*- Real-Time Updates– Stock levels must update instantly* *- Alerts– System must trigger low-stock notifications within 2 seconds* *- Scalability – Supports inventory tracking across multiple branches* *- Interface – Simple dashboard for inventory management*
Postconditions	*Stock levels remain accurate, and low-stock alerts are issued when necessary.*

UC Name	*Place Order*
Summary	*Allows customers to place orders, categorize as dine-in, takeout, or delivery, with real time kitchen notifications and order tracking.*
Dependency	*The system must have a functional menu management system and a real-time kitchen notification system.*

Actors	*Customer, Chef, Waiter*
Preconditions	*Customer is logged into the system; menu is available; kitchen is online and receiving notifications.*
Description of the Main Sequence	1. *Customer browses the menu.* 2. *Customer selects items and places the order.* 3. *The system categorizes the order (dine-in, takeout, or delivery).* 4. *The kitchen receives the order in real-time.* 5. *Chef updates the order status (e.g., preparing, ready).* 6. *Customer tracks the status of the order.*
Description of the Alternative Sequence	1. *If the menu is unavailable, the customer cannot place an order.* 2. *If the kitchen system fails, the chef cannot update the order status.*
Non functional requirements	*- Responsiveness – Real-time order updates* *- Availability – System must function smoothly during peak hours* *- Scalability – Must handle high order volume efficiently* *- Interface – Simple UI for customers, waiters, and kitchen staff*
Postconditions	*The order is placed, categorized, and notified to the kitchen. The customer can track the order status.*
UC Name	*Menu Management*
Summary	*Allows admins to add, update, or remove menu items and upload multimedia content, with scheduled updates.*
Dependency	*Admin must have access to the system; menu items and images should be uploaded properly.*
Actors	*Administrator*
Preconditions	*Admin is logged into the system; menu data is available for updates.*
Description of the Main Sequence	1. *Admin logs into the system.* 2. *Admin selects the option to add, update, or remove menu items.* 3. *Admin uploads images or videos for the items (if applicable).* 4. *Admin saves changes and the system updates the menu.* 5. *Menu is updated in real-time for customers.*

Description of the Alternative Sequence	1. If an image fails to upload, the system will notify the admin with an error message. 2. If no changes are made, the admin can exit without saving.
Non functional requirements	*- Navigation– Intuitive for admins to update menus* *- Multimedia Support– Supports images/videos for menu items* *- Scalability – Handles large menus without performance issues* *- Scheduled Updates – Allows updates without disrupting service*
Postconditions	*The menu is updated in the system and is available for customers to view.*

UC Name	*User Access & Security*
Summary	*The system ensures role-based access and protects sensitive data through secure login and multi-factor authentication for admins.*
Dependency	*The system must have secure authentication mechanisms and role based access control.*
Actors	*Administrator, Restaurant Manager, Waiter/Server, Inventory Manager*
Preconditions	*User is attempting to access the system.*
Description of the Main Sequence	*1. User attempts to log into the system.* *2. The system verifies user credentials (username/password).* *3. For admins, the system prompts for multi-factor authentication.*
	4. The system checks the user's role (Admin, Restaurant Manager, Waiter/Server, Inventory Manager). *5. The system grants access based on user role.*
Description of the Alternative Sequence	1. *If credentials are incorrect, the system denies access and prompts for re-entry.* 2. *If multi-factor authentication fails, the system denies access and notifies the user.*

Non functional requirements	*- Security – Encrypted credentials, role-based access control* *- Multi-Factor Authentication – Required for admins* *- Availability – Always accessible for authorized users* *- Interface – Simple and secure login process*
Postconditions	*The user is granted access to the system based on their role.*

UC Name	*Sales & Reports*
Summary	*The system generates daily sales reports and provides insights on customer preferences.*
Dependency	*The system must have a functioning sales tracking mechanism.*
Actors	*Administrator, Restaurant Manager*
Preconditions	*Sales data is available; the system is operational.*
Description of the Main Sequence	1. *Admin or restaurant manager logs into the system.* 2. *They navigate to the reports section.* 3. *The system generates a daily sales report.* 4. *The system provides insights on customer preferences based on sales data.*
Description of the Alternative Sequence	1. If there is an issue generating the report (e.g., system failure), the system notifies the user. 2. If no sales data is available for the day, the system displays a "No data" message.
Non functional requirements	*- Performance – Reports should generate within seconds* *- Scalability – Supports large datasets as business grows* *- Data Insights – Provides meaningful analytics* *- Interface – Clear dashboard for restaurant managers*
Postconditions	*A daily sales report is generated, and insights on customer preferences are provided.*