Food Delivery Requirements Specification

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1. Executive Summary

1.1 Project Overview

Food delivery services have become increasingly popular in recent years, especially with the rise of online ordering and delivery apps. People are now able to order food from their favorite restaurants and have it delivered straight to their doorstep, making it more convenient than ever before. The website will offer a wide range of cuisines and restaurants, allowing customers to order food from their favorite places with ease. Our mission is to provide our customers with convenient, and enjoyable food delivery experience. In addition, the website will have its own delivery service, ensuring that orders are delivered on time and in excellent condition.

Our food delivery service is backed by advanced technology that enables us to manage orders, track delivery personnel, and ensure timely delivery of orders. Our user-friendly website makes it easy for customers to order their favorite food from their preferred restaurants. In addition to providing customers with a convenient and reliable food delivery service, the project also aims to benefit restaurants by offering them a new channel for sales and increased profitability. By partnering with the food delivery platform, restaurants can expand their reach and customer base beyond their physical locations. The food delivery platform will provide restaurants with a user-friendly interface for managing their menus, orders, and delivery information.

The goal of this project is to create a web-based food delivery platform that satisfies the needs of customers who are looking for a convenient and reliable food delivery service. The project seeks to address the difficulties that customers face in finding a food delivery service that offers a wide selection of restaurants and cuisines, as well as reliable and efficient delivery. With the rise of busy lifestyles, people often don't have the time to cook or eat at home, and therefore require a service that can provide them with their favorite meals in a convenient and timely manner.

1.2 Purpose and Scope of this Specification

The purpose of this project is to define the requirements and functionality of a food delivery website that aims to provide a convenient and reliable service to customers, while also benefiting restaurants by offering them a new channel for sales and increased profitability. Customers will have the possibility to search for their desired food items from multiple restaurants as well as track their orders in real time. From the restaurant's point of view, the system will allow them to manage their menus, receive and process orders. The system will also provide analytics and insights to the restaurants to help them make data-driven decisions about their menus and operations.

In Scope
• Providing customers with a user-friendly interface to search for and order food items from multiple restaurants.
• Allowing restaurants to manage their menus, and receive and process orders.
• Providing real-time updates on the status of the order, such as when it's being prepared, picked up by the deliverer, and on its way to the customer
• Allowing customers to rate the food, restaurants, and deliverers and leave reviews.
• Offering a customer support system to address any questions or issues that may arise during the ordering and delivery process.
• Providing an option for customers to save their favorite restaurants and menu items for easy reordering in the future.

Out of Scope
• The quality of the food and service provided by the restaurants.
• The pricing and promotions offered by the restaurants.
• The website is able to handle complaints, however it does not provide refunds.

2. Product/Service Description

With our online food delivery system, you will have access to a variety of features and functions that will make your life as a foodie simpler and more convenient. You'll be able to order food from a wide range of restaurants, choose from different cuisines, and customize your order as per your preferences. Our system will provide a hassle-free experience of ordering food and tracking your order.

Our product is designed to be user-friendly and easy to navigate, making it simple for you to access all of its features and operations. You can easily browse through different restaurants, view their menu, and place your order with just a few clicks.

2.1 Product Context

Our suggested platform aims to simplify the interaction between customers and food delivery services, making it easier for customers to discover and order the food they want from a variety of different delivery services.

The food delivery industry is highly competitive, and it can be difficult for delivery services to attract customers without investing heavily in advertising. Our platform seeks to provide a solution to this problem by providing a targeted user base for these services to advertise to.

Our platform enables food delivery services to manage their operations on a broader scale and to interact with customers in a more effective manner. All information pertaining to orders, menus, and customer preferences will be created, stored, and used exclusively within our platform, without any connection to external systems.

By providing a comprehensive food delivery management system, our platform aims to streamline the operations of delivery services and improve the overall customer experience. Our platform offers a user-friendly interface that is intuitive and easy to use, allowing delivery services to efficiently manage their operations and interact with their customers.

2.2 User Characteristics

The system will be accessed and used by a total of five users:

Customer:
• Can log in or register to a new account
• Can browse through a list of restaurants and their menus
• Can search for a specific restaurant or cuisine
• Can add items to the cart and proceed to checkout
• Can create an account and save delivery and payment information
• Can view past orders and reorder from history
• Can track the status of their current order
• Can rate and leave feedback on the restaurant and the delivery experience
• Can contact customer support for assistance
• Can access promotions and deals
• Can change account password
• Can log out

Admin:
• Can log in with a username and password
• Can manage customers, restaurants, menus, and items
• Can manage customer accounts and orders
• Can view and analyze sales reports and order trends
• Can create and manage promotions and deals
• Can manage delivery zones and fees
• Can manage payment and delivery options
• Can manage customer support requests
• Can change account password
• Can log out

Dietitian:
• Can log in or register to a new account
• Can access a list of customers and their dietary preferences and restrictions
• Can create personalized meal plans for customers based on their needs and goals
• Can view nutritional information of food items and ingredients
• Can provide educational resources and advice on nutrition-related topics
• Can change account password
• Can log out

Restaurant:
• Can log in or register to a new account
• Can manage their menu items and prices
• Can manage their availability and delivery zones
• Can view and manage orders and delivery requests
• Can track the status of their current orders and delivery fleet
• Can view sales reports and order trends
• Can manage promotions and deals
• Can contact customer support for assistance
• Can change account password
• Can log out

Deliverer:
• Can log in or register to a new account
• Can view and accept delivery requests
• Can view the order details and customer information
• Can track the location of the customer and the restaurant
• Can communicate with the customer and the restaurant
• Can mark the order as delivered
• Can view delivery history and earnings
• Can change account password
• Can log out

2.3 Assumptions

Customers:

- Customers will have the option to choose from a variety of restaurants and cuisines available for delivery.
- Customers will have the option to filter restaurants by their location, cuisine, price range, and ratings.
- Customers will be able to view menus and nutritional information for each restaurant and dish.
- Customers will be able to customize their orders according to their dietary needs, preferences, and restrictions.
- The food delivery service will ensure timely delivery and customer satisfaction.
- Customers will be able to track their orders in real-time and receive notifications regarding the status of their delivery.
- Customers will have access to customer support services in case of any issues with their orders.
- Customers will have the option to rate and leave feedback on their experience with the food delivery service and the restaurants.
- Customers will be willing to pay a delivery fee or meet the minimum order requirement for the delivery service.
- Customers will have access to a reliable internet connection and a device capable of placing orders through the food delivery service platform.

Restaurants:

- Restaurants will have the necessary equipment and resources to prepare and package food for delivery.
- Restaurants will have a range of dishes and menu options that can be adapted for delivery.
- Restaurants will prioritize food quality and safety, ensuring that dishes are prepared and handled in a hygienic and safe manner.
- Restaurants will have the capacity to manage and fulfill a high volume of delivery orders during peak times.
- Restaurants will have an efficient and reliable delivery service or partner to handle food delivery orders.
- Restaurants will provide accurate and up-to-date menu information, including prices and ingredients, for their online menu.
- Restaurants will be responsive to customer feedback and address any issues or complaints in a timely and professional manner.
- Restaurants will have a strong online presence, including an up-to-date website, social media accounts, and online reviews.
- Restaurants will be willing to pay a commission or fee to the food delivery service platform for orders placed through their service.

Administrator:

- The admin will be responsible for controlling and managing the system.
- The admin will have access to the data of the restaurants, the customers who place orders, the payments of the orders, the partners of the food delivery system and the courier.
- Each user performs his assigned tasks, while the admin monitors and performs system maintenance.

Dietitian:

- The dietitian will be responsible for creating personalized meal plans for clients based on their dietary needs, goals, and preferences.
- The dietitian will have access to a database of foods and their nutritional information to create meal plans.
- Clients will be able to:
    - Calculate their Body Mass Index (BMI)
    - Determine their BMI status based on the calculated BMI
    - Calculate their daily calorie requirements based on their BMI, gender, age, weight, height, and activity level
    - Access a variety of diet options based on their dietary needs, preferences, and restrictions
    - Browse through a comprehensive list of food options that are suitable for their selected diet plan.
- The dietitian will have knowledge and experience in a variety of dietary patterns, such as vegetarianism, veganism, paleo, and keto.
- The dietitian will be able to provide educational resources and advice to clients on nutrition-related topics.

- A blog section will be provided to the clients, where they can find informative articles and tips related to nutrition, fitness, and healthy lifestyle habits.
- A section will be provided to the customers, where they can leave reviews and feedback on their experience with the system and the dietitian services.

Deliverers:

- The deliverer will be responsible for delivering goods to customers based on their orders and locations.
- The deliverer will have access to a database of customer orders and delivery addresses to fulfill the orders.
- Customers will be able to:
    - Browse through a variety of goods available for purchase.
    - Select the goods they want to order and add them to their cart.
    - Input their delivery address and contact information.
    - Make payments for their orders online.
    - Track their orders and receive updates on delivery status.
- The deliverer will have knowledge of the delivery routes and best practices for efficient delivery.
- The deliverer will be able to provide customer service support for delivery-related issues.
- A feedback section will be provided to the customers, where they can leave reviews and feedback on their experience with the system and the deliverer services.

2.4 Constraints

Technical limitations: The available technology and infrastructure may constrain the design options, such as network bandwidth, device compatibility, or integration with third-party APIs or software.

Time constraints: The project timeline may constrain the design options, such as limited time to research and test new features or rushing to meet deadlines without proper testing or quality assurance.

Legal or regulatory constraints: The food delivery may need to comply with specific laws and regulations, such as data protection, food safety standards, or accessibility requirements, which could limit the design options.

Stakeholder requirements: The project stakeholders may have specific requirements that constrain the design options, such as branding guidelines, user interface standards, or specific features.

Compatibility constraints: The food delivery may need to integrate with existing systems or software, such as payment gateways or third-party delivery services, which could constrain the design options to ensure compatibility and interoperability.

Performance constraints: The food delivery may need to meet specific performance requirements, such as fast page load times, scalability, or reliability, which could limit the design options.

Security constraints: The food delivery website may need to meet specific security requirements, such as encryption, access controls, or data protection, which could limit the design options.

2.5 Dependencies

Third-party APIs: The website may depend on third-party APIs for features such as payment processing, or communication. The website should ensure that the APIs are properly integrated and tested, and that the API providers have adequate service level agreements.

Operating system and web server: The website may depend on a specific operating system and web server to run the software. The website should ensure that the software is compatible with the chosen operating system and web server.

Database management system: The website may depend on a specific database management system to store and manage data. The website should ensure that the software is compatible with the chosen database management system.

Hardware resources: The website may depend on specific hardware resources, such as CPU, memory, and disk space, to run efficiently. The website should ensure that the hardware resources are adequate, and that the software is optimized for efficient resource usage.

Internet connectivity: The website may depend on reliable and fast internet connectivity to provide a seamless experience to users. The website should ensure that the internet connectivity is suitable, and that the website is designed to handle intermittent connectivity issues.

User feedback and testing: The website may depend on user feedback and testing to identify and fix issues and to improve the user experience. The website should ensure that the users have access to testing environments and that their feedback is properly collected and analyzed.

3. Requirements

3.1 Functional Requirements

Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
FR_01	The customer must be able to search for restaurants and food items based on various criteria such as cuisine, location, price range, etc.	This is important for the customer to be able to easily find the food they are looking for based on their preferences. The system should provide an intuitive and efficient search function that allows users to filter their results based on different criteria.	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_02	The user must be able to view the menu of the selected restaurant, along with the prices and available options.	This requirement specifies that the system must provide a clear and detailed menu display for the selected restaurant that includes all available food items, prices, and any customizable options. The menu should also be regularly updated to reflect any changes made by the restaurant.	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_03	The user must be able to customize their food order by selecting options such as quantity, etc.	This allows users to personalize their food orders to meet their preferences by providing various options for customizing the order, such as specifying the quantity, or other preferences. This feature enhances the user experience by providing flexibility and control over their order.	1	24/04/23	Blerta Shabani/ Griselda Hysa

Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
FR_04	The user must be able to add multiple items to their cart and proceed to checkout for payment.	It implies that the system must be able to store multiple items and their corresponding quantities selected by the user and provide a clear and simple checkout process for payment. The checkout process should also provide an option for the user to review their order details before making the final payment.	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_05	The user must be able to choose from multiple payment options, such as credit card, PayPal, or cash on delivery.	This functional requirement provides flexibility to the user for choosing a preferred payment method for their order. It is important to have multiple payment options to cater to the diverse needs and preferences of the user.	2	24/04/23	Blerta Shabani/ Griselda Hysa
FR_06	The user must be able to create and save a profile with personal information, payment details, and order history.	This feature will make it easier for the user to place orders in the future, as they will not have to repeatedly enter their information. This requirement may include the ability for the user to edit their profile information and view their previous orders.	2	24/04/23	Blerta Shabani/ Griselda Hysa
FR_07	The user must receive confirmation of their order, including estimated delivery time and order total.	It helps to manage user expectations and provides transparency in the ordering process.	1	24/04/23	Blerta Shabani/ Griselda Hysa

Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
FR_08	The user must be able to track their order status and receive updates on any delays or changes.	This requirement ensures that the user can monitor the progress of their order and receive timely updates in case of any delays or changes to the estimated delivery time. This feature enhances user experience and provides transparency in the delivery process.	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_09	The user must be able to access customer support in case of any issues or questions regarding their order or the website.	This requirement ensures that the user has access to customer support when needed, which can improve their overall experience with the website and increase their trust in the service. The support system should be easily accessible and provide timely responses to user inquiries or issues.	2	24/04/23	Blerta Shabani/ Griselda Hysa
FR_10	The user must be able to rate and review the restaurant and their experience with the food delivery service.	This can help other users in their decision-making process. The ratings and reviews can also be used by the food delivery website to improve their services and partner with better restaurants.	2	24/04/23	Blerta Shabani/ Griselda Hysa

Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
FR_11	The user must be able to view and redeem any applicable promotions or discounts offered by the food delivery service.	This requirement ensures that the user can take advantage of any promotions or discounts offered by the food delivery service, which can help attract and retain customers. It also allows for a more competitive pricing strategy by the service. The ability to view and redeem promotions or discounts should be clear and easily accessible for the user.	3	24/04/23	Blerta Shabani/ Griselda Hysa
FR_12	The admin must be able to log in to the admin panel using a username and password.	The requirement specifies that the admin should be able to log in to the admin panel using a username and password, ensuring secure access to the system and its data.	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_13	The admin must be able to manage the menu of each restaurant, including adding, editing, and deleting items.	This can include features such as adding, editing, and deleting menu items, setting prices, managing availability, and categorizing menu items.	1	24/04/23	Blerta Shabani/ Griselda Hysa

Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
FR_14	The admin must be able to manage the restaurant partners, including adding, editing, and deleting their profiles and menus.	This can include features such as adding, editing, and deleting restaurant information, verifying, and approving restaurant registrations, and managing restaurant profiles, working hours, and menu items.	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_15	The admin must be able to view and manage customer profiles, including their personal information, payment details, and order history.	This can include features such as creating, modifying, and deleting user accounts, managing user profiles, handling user-related issues, and monitoring user activity.	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_16	The system shall allow clients to input their personal information, including gender, age, weight, and height.	This information is necessary to calculate the client's BMI and daily calorie requirements.	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_17	The system shall calculate the client's BMI based on the inputted information.	The BMI calculation will be used to determine the client's BMI status and their appropriate calorie intake.	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_18	The system shall display the client's BMI status (e.g., underweight, normal weight, overweight, or obese).	The BMI status will help the client understand their current health status and set achievable weight loss goals.	1	24/04/23	Blerta Shabani/ Griselda Hysa

Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
FR_19	The system shall calculate the client's daily calorie requirements based on their BMI, gender, age, weight, height, and activity level.	This information is necessary to provide clients with personalized meal plans that meet their daily calorie needs.	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_20	The system shall allow clients to select from a variety of diet options based on their dietary needs, preferences, and restrictions.	The diet options should include different types of diets (e.g., vegetarian, vegan, paleo, keto) and cater to various dietary needs (e.g., gluten-free, low-carb, low-fat).	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_21	The system shall display a comprehensive list of food options that are suitable for the selected diet plan.	The food options should include a variety of foods that meet the nutritional requirements of the selected diet plan.	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_22	The system shall allow clients to communicate with the dietitian to adjust their meal plans as needed.	This feature will ensure that clients receive personalized support and advice from the dietitian.	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_23	The system shall track clients' progress and provide feedback and support.	This feature will allow the dietitian to monitor clients' progress and provide feedback and support to help them achieve their health goals.	2	24/04/23	Blerta Shabani/ Griselda Hysa
FR_24	The system shall maintain confidentiality and protect clients' personal information.	This requirement is essential to protect clients' privacy and build trust in the system.	1	24/04/23	Blerta Shabani/ Griselda Hysa

Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
FR_25	The system shall include a blog section where clients can find informative articles and tips related to nutrition, fitness, and healthy lifestyle habits.	The blog section will provide clients with additional resources and education on nutrition-related topics.	3	24/04/23	Blerta Shabani/ Griselda Hysa
FR_26	The system shall include a section where customers can leave reviews and feedback on their experience with the system and the dietitian services.	The review section will provide valuable feedback to the system developers and help improve the overall customer experience.	2	24/04/23	Blerta Shabani/ Griselda Hysa
FR_27	The system shall be user-friendly and accessible on various devices, including desktops, tablets, and smartphones.	This requirement is essential to ensure that clients can access the system easily and conveniently from different devices.	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_28	The system shall allow customers to browse through a variety of goods available for purchase.	This requirement will allow customers to easily find the goods they want to order.	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_29	The system shall allow the deliverer to access a database of customer orders and delivery addresses to fulfill the orders.	This requirement will enable the deliverer to see the orders and the delivery addresses of the customers.		24/04/23	Blerta Shabani/ Griselda Hysa
FR_30	The system shall provide the deliverer with knowledge of the delivery routes and best practices for efficient delivery.	This information is necessary for the deliverer to plan and execute the delivery process efficiently.	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_31	The system shall provide customer service support for delivery-related issues.	This feature will enable the deliverer to address any delivery-related issues or questions that the customers may have.	1	24/04/23	Blerta Shabani/ Griselda Hysa

Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
FR_32	The system shall allow deliverers to create a profile with their personal information, including their name, contact information, and delivery address.	This information is essential to ensure that the deliverers can be contacted and located in case of any issues.	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_33	The system shall allow the deliverers to access the delivery requests and view details of the customer's location, name, and contact information.	This feature will enable deliverers to find the customer's location and deliver the food items efficiently.	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_34	The system shall allow the deliverers to accept or decline delivery requests based on their availability and location.	This feature will ensure that the deliverers can manage their schedules and avoid overburdening themselves.	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_35	The system shall provide the deliverers with a secure payment system for receiving their payment.	This feature will ensure that the deliverers can receive their payment securely and efficiently.	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_36	The system shall provide the deliverers with information about the food items they are delivering, including the name, quantity, and any special instructions.	This feature will enable the deliverers to deliver the correct food items to the customer and avoid any confusion.	2	24/04/23	Blerta Shabani/ Griselda Hysa
FR_37	The system shall provide the deliverers with a delivery history to keep track of their previous deliveries.	The system shall provide the deliverers with a delivery history to keep track of their previous deliveries.	2	24/04/23	Blerta Shabani/ Griselda Hysa

Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
FR_38	The restaurants must register to an account.	The restaurant should be able to create an account on the food delivery platform by providing basic details such as their name, email address, contact number, and location.	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_39	The restaurants must manage the menu.	The restaurant user should be able to manage their menu on the platform. They should be able to add, edit, and delete dishes from the menu. They should also be able to update the availability of a dish depending on the stock.	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_40	Restaurants have to manage orders.	The restaurant user should be able to manage the orders they receive on the platform. They should be able to view and accept or decline incoming orders. They should also be able to update the status of an order (e.g., preparing, ready for pickup, out for delivery, delivered).	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_41	The restaurants need to manage payments.	The restaurant user should be able to manage their payments on the platform. They should be able to view their earnings, request payouts, and update their payment details.	1	24/04/23	Blerta Shabani/ Griselda Hysa

Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
FR_42	The restaurants can view analytics.	The restaurant user should be able to view analytics related to their sales, orders, and customer feedback. They should be able to see data such as the number of orders received, the total revenue generated, and the average rating of their dishes.	2	24/04/23	Blerta Shabani/ Griselda Hysa
FR_43	The restaurants must manage their account.	The restaurant user should be able to manage their account information such as their contact details, password etc. They should also be able to log out of the platform.	1	24/04/23	Blerta Shabani/ Griselda Hysa
FR_44	The restaurants can communicate with customers.	The restaurant user should be able to communicate with their customers via the platform. They should be able to view messages and respond to them in a timely manner.	1	24/04/23	Blerta Shabani/ Griselda Hysa

3.2 Non-Functional Requirements

3.2.1 Product Requirements

3.2.1.1 User Interface Requirements

- ***Customer Interface***
  - The customer interface of the online food delivery system consists of a header bar that displays the platform's logo, the customer's name, and a menu icon that provides access to all available options.

- The "My Profile" menu enables customers to view their personal information, including order history, delivery addresses, and payment details.
- The "My Orders" menu displays all previous orders made by the customer.
- The "Change Password" menu presents a simple form containing fields for the current password, the new password, and a confirm password field. After filling out the form, the system verifies whether the current password matches and whether the new password is in the correct format. If the new password is valid, the system displays a message saying, "Password changed successfully!" Otherwise, it shows an error message.
- The "Leave Feedback" menu lets customers rate the service provided by the platform on a scale of 1 to 5, with 1 being the worst and 5 being the best. There is also a comment section where customers can provide additional feedback. If the customer has previously left feedback, the new feedback will replace the old one in the system's database. If they have not left feedback before, a new record will be added.
- The "Contact Support" menu allows customers to communicate with the support team via a simple form containing their name, email address, and a text field for the message. The support team can address customer complaints, help, and answer any questions that customers may have.
- Finally, the "Log out" option allows customers to end their current session and return to the main page.

- ***Restaurant Interface***

  - The restaurant interface of the online food delivery system consists of a header bar that displays the platform's logo, the name of the restaurant, and a menu icon that provides access to all available options.
  - The "My Profile" menu enables the restaurant to view their personal information, including their restaurant information, menu, and order history.
  - The "Menu" menu displays all the available items that the restaurant offers. The restaurant can add new items, edit existing ones, and remove items that are no longer available.
  - The "Orders" menu displays all the incoming orders, including the details of each order, such as the customer's name, delivery address, and order items. The restaurant can confirm or reject orders and update the order status, such as "preparing," "cooking," "ready for pickup/delivery," or "delivered."
  - The "Analytics" menu presents a set of statistical data related to the restaurant's performance, such as the total number of orders, the most popular items, the average rating, and the revenue. The restaurant can use this information to make informed business decisions and optimize their menu and pricing strategy.
  - The "Settings" menu lets the restaurant manage their account information, such as the restaurant name, address, phone number, and business hours. They can also update their payment details and change their password.
  - Finally, the "Log out" option allows the restaurant to end their current session and return to the main page.

- ***Admin Interface***

    - The admin interface of the online food delivery system consists of a header bar that displays the platform's logo, the admin's name, and a menu icon that provides access to all available options.
    - The "Dashboard" menu provides an overview of the platform's status, including the number of active customers, restaurants, and orders. There are also graphs displaying revenue and order trends.
    - The "Customers" menu displays a list of all registered customers, along with their personal information, order history, and feedback. The admin can search, add, edit, or delete customer accounts.
    - The "Restaurants" menu displays a list of all registered restaurants, along with their contact information, menu items, and ratings. The admin can search, add, edit, or delete restaurant accounts.
    - The "Orders" menu displays a list of all current and past orders, along with the customer and restaurant information, order details, and payment status. The admin can search, view, or cancel orders if necessary.
    - The "Reports" menu provides various reports, such as revenue reports, order reports, customer reports, and restaurant reports. The admin can view and download these reports in different formats, such as PDF or CSV.
    - The "Settings" menu allows the admin to configure various settings, such as payment methods, delivery options, or promotional campaigns. The admin can also change their own account password or log out of the system.

- ***Dietitian Interface***

    - The dietitian interface of the online food delivery system consists of a header bar that displays the platform's logo, the dietitian's name, and a menu icon that provides access to all available options.
    - The "My Profile" menu enables dietitians to view their personal information, including their specialization, contact information, and schedule.
    - The "My Clients" menu displays a list of all clients assigned to the dietitian. The dietitian can view the client's information, including dietary requirements, health conditions, and current progress.
    - The "Add Client" menu allows dietitians to add a new client to their list. The form contains fields for the client's name, age, gender, weight, height, dietary preferences, and any health conditions.
    - The "Update Client" menu lets dietitians update their client's information. The form contains fields for the client's name, age, gender, weight, height, dietary preferences, and any health conditions.
    - The "Client Progress" menu shows the progress of each client assigned to the dietitian. The dietitian can view the client's current weight, target weight, and progress towards the target weight.
    - The "Generate Meal Plan" menu allows dietitians to generate a meal plan for their clients based on their dietary requirements and health conditions. The dietitian can specify the number of meals per day, the calorie intake, and any other dietary restrictions.

- The "Contact Support" menu enables dietitians to communicate with the support team via a simple form containing their name, email address, and a text field for the message. The support team can address any complaints, provide assistance, and answer any questions that dietitians may have.
- Finally, the "Log out" option allows dietitians to end their current session and return to the main page.

- ***Deliverers Interface***

  - The deliverer interface of the food delivery system consists of a header bar that displays the platform's logo, the deliverer's name, and a menu icon that provides access to all available options.
  - The "My Profile" menu enables deliverers to view their personal information, including their name, contact details, delivery history, and feedback from customers.
  - The "Delivery History" menu displays all previous delivery orders made by the deliverer, including details such as order date, order number, customer details, and delivery status.
  - The "Delivery Status" menu allows deliverers to update the delivery status of an order, including whether the order has been picked up, is in transit, or has been delivered. They can also view the details of the order, including the customer's name, address, and contact details.
  - The "Change Password" menu presents a simple form containing fields for the current password, the new password, and a confirm password field. After filling out the form, the system verifies whether the current password matches and whether the new password is in the correct format. If the new password is valid, the system displays a message saying, "Password changed successfully!" Otherwise, it shows an error message.

  - The "Contact Support" menu allows deliverers to communicate with the support team via a simple form containing their name, email address, and a text field for the message. The support team can address deliverer complaints, help, and answer any questions that deliverers may have.
  - Finally, the "Log out" option allows deliverers to end their current session and return to the main page.

3.2.1.2 Usability

- The system should be easy to learn and use, with minimal training required for users to become proficient in using it.
- The online food delivery system is easy to navigate, with clear and intuitive menus, and straightforward browsing.
- The ordering process is simple and user-friendly, with easy selection of items, easy customization of the order, and an easy checkout process.
- The website or mobile application has fast load times, so that customers can quickly access the information they need and place their orders.
- The design and layout of the website are consistent throughout the site, with clear and recognizable branding.

3.2.1.3 Efficiency

- The online food delivery system ensures that orders are delivered in a timely manner, with an estimated delivery time provided to the customer during the ordering process.
- The system ensures that orders are accurately processed and delivered to the customer, with minimal errors or mistakes.
- The system provides efficient tracking of orders, allowing customers to easily track the status of their delivery and receive real-time updates.
- The system provides efficient and responsive customer service, with fast response times to inquiries and complaints.

3.2.1.3.1 Performance Requirements

- The website or mobile application can handle a minimum of 500 concurrent users during peak traffic times.
- The system has a maximum response time of 2 seconds for any user action, such as clicking a button or entering information.
- The database can store a minimum of 30,000 customer records and order histories.
- The system can handle an increasing number of orders during busy periods, such as holidays or weekends, with a minimum increase of 50% compared to regular business days.
- The system should dynamically adjust the availability of menu items based on their popularity, ensuring that popular items are not out of stock for extended periods.

3.2.1.3.2 Space Requirements

- The user interface is designed to use the available screen space efficiently, with easy-to-read text, clear images, and intuitive navigation, even on smaller screens.
- The system requires minimal physical space on the user's device, with the ability to run efficiently in the background without consuming excessive resources.

3.2.1.4 Dependability

Availability

- The online food delivery system must be available to users 24 hours a day, 7 days a week, to ensure that users can place orders and receive their food at any time.
- The system must have a high level of availability, with a target uptime of at least 99.9%, to ensure that users can place orders and receive their food with minimal downtime or service disruptions.

- The system must be available in all geographic areas where the service is offered, with the ability to provide accurate information on delivery times and availability based on the user's location.
- The system must have a maximum permitted number of failures per hour of no more than 0.01%, to ensure that the system operates at a high level of reliability and dependability.
- ***Memorability:*** The system must be designed to be easy to use and remember, with clear and intuitive navigation, and with the ability to store user preferences and order history for future use.
- ***Errors:*** The system must minimize the occurrence of errors, with the ability to detect and correct errors quickly and efficiently, and with clear and effective error messages and support options for users.
- ***Satisfaction:*** The system must be designed to provide users with a high level of satisfaction, with the ability to provide accurate and timely information on order status and delivery times, and with responsive and effective support options for any issues or concerns that may arise.
- ***Capacity:*** The system must have sufficient capacity to handle a large volume of orders and users, with the ability to scale up or down as needed to handle changes in demand, without experiencing slowdowns or crashes.

Reliability

- The system should be available 24/7, with minimal downtime for maintenance or upgrades.
- The system should be designed to prevent crashes or system failures and have a robust backup and recovery plan in place.
- The system must be reliable, with a target meantime between failures (MTBF) of at least 10,000 hours, to minimize the frequency and impact of system failures on users and business operations.

Monitoring

- The food delivery system will be designed with security and reliability as top priorities. The user interfaces will be intuitive and user-friendly, with a focus on providing a seamless and efficient user experience.
- The system will be built to minimize the risk of crashes and downtime, with proactive monitoring and maintenance procedures in place to ensure maximum uptime and availability.
- To ensure data integrity and prevent errors, the system will use field validation to validate user input, such as when a customer creates an account, places an order, or updating personal information.
- When input does not meet the system's requirements, the user will receive clear and informative error messages explaining the issue and how to correct it.

Maintenance

- The online food delivery system will be built with a backend database using MySQL and an APACHE server. These platforms will be utilized for maintenance and efficient data storage and retrieval.
- The system will be developed in a modular fashion, allowing for easy extension by adding new modules as needed to meet changing requirements.
- The system is designed to log errors and system events in a clear and comprehensive manner, making it easier to identify and troubleshoot issues.
- In the event of a system malfunction, a system restart may be attempted as a first line of defense.

Integrity

- The system should ensure the accuracy and completeness of all data entered by the user or system, including order details, payment information, and delivery address. Any errors or discrepancies shall be promptly identified and corrected.
- The system should have appropriate backup and disaster recovery procedures in place to ensure the availability and integrity of user data in the event of a system failure or disaster.

3.2.1.5 Security

- The system shall be designed to prevent unauthorized access, modification, or deletion of user data. Appropriate security measures, such as encryption and secure authentication, shall be implemented to protect user information from unauthorized access.
- Hashed password for each user account.
- Sensitive data such as user information and payment details should be encrypted to protect it from unauthorized access.
- The system should log all user activity to provide an audit trail in case of security incidents. This can include logging of login attempts, user actions, and system changes.

3.2.2 Organizational Requirements

3.2.2.1 Environmental Requirements

Server Infrastructure: The website requires a server infrastructure to host and maintain the website, manage user data, and handle the transactions securely. The server should be in a secure and reliable environment with backup power and cooling facilities to ensure uninterrupted service.

Internet Connectivity: The website requires a stable and fast internet connection for users to access the website from anywhere and place orders. The website should be optimized to work on different internet speeds and bandwidths.

Hardware Requirements: The hardware requirements for the website depend on the scale of the business and the number of users expected. The website should be compatible with different devices such as desktops, laptops, tablets, and mobile phones.

Security Requirements: The website should have security features such as SSL certificates, firewalls, and intrusion detection and prevention systems to protect the user data and prevent unauthorized access or attacks.

Power Backup: The website should have a power backup system in case of power outages or failures to ensure uninterrupted service.

3.2.2.2 Operational Requirements

Availability: The website should be available 24/7, as customers may want to order food at any time of the day.

Reliability: The website should be reliable and perform consistently, without any downtime or errors.

Security: The website should have robust security measures to protect customers' personal and financial information.

Speed: The website should be fast and responsive, with quick loading times, so that customers can easily browse and order food.

Customer support: The website should have a customer support system in place, such as a chatbot or email support, to help customers with any queries or issues they may face while using the platform.

3.2.2.3 Development Requirements

Front-End
To develop the client-side of our software we are using the following technologies:
HTML, CSS, JS

Back-End
To develop the server-side of our software we are using the following technologies:
PHP, MySQL

3.2.3 External Requirements

3.2.3.1 Regulatory Requirements

- The online food delivery system should comply with food safety regulations set by the government or local health authorities, such as proper handling, storage, and transportation of food items, and regular inspections of restaurants and delivery personnel.
- The online food delivery system should comply with accessibility regulations, such as providing accessible features such as keyboard navigation, and alternative content formats.

3.2.3.2 Ethical Requirements

The online food delivery system should support local and small businesses, such as promoting their products and services, and offering fair and competitive terms for partnership and collaboration.

3.2.3.3 Legislative Requirements

The online food delivery system should comply with consumer protection laws, such as providing accurate and complete information about products and services and offering fair and transparent terms and conditions.

3.2.3.3.1 Accounting Requirements

The online food delivery system should maintain accurate financial records, such as revenue, expenses, profits, and losses, and provide timely and reliable financial reports to investors, regulators, and other stakeholders.

3.2.3.3.2 Security Requirements

The online food delivery system should respect customer privacy, such as protecting their personal and financial information, and providing clear and concise privacy policies and terms of service.

3.3 Domain Requirements

- Compliance with food safety regulations and standards.
- Integration with existing POS (point-of-sale) systems used by restaurants.
- Support for multiple currencies and payment methods.
- Integration with popular mapping and navigation services for accurate delivery tracking.
- Incorporation of dietary restrictions and allergen information for menu items.
- Collaboration with food suppliers to ensure timely and fresh ingredient delivery.

4. User Scenarios/Use Cases

Nr	Name	Description
US_01	User registration	Customers can create an account on the food delivery platform by providing basic details such as their name, email address, contact number, and location.
US_02	User login	User can enter username and password to enter their account.
US_03	View what this service offers	User can see where to login, where to see menus and other services.
US_04	Search restaurants	Customers can search for restaurants based on their location, cuisine, rating, and other filters.

US_05	View menu	Customers can view the menu of a restaurant, along with prices, descriptions, and images of each item.
US_06	Place order	Customers can place an order by selecting the items they want to order, specifying any customizations or special requests, and selecting a payment method.
US_07	Track order	Customers can track the status of their order in real-time, from the time it is placed until it is delivered.
US_08	Rate and review	Customers can rate and review restaurants and their dishes, providing feedback to help other customers make informed choices.
US_09	Manage account	Customers can manage their account information, including their contact details, delivery addresses, and payment methods.
US_10	Restaurant registration	Restaurants can create an account on the food delivery platform by providing basic details such as their name, contact information, and location.
US_11	Manage menu	Restaurants can manage their menu items, prices, descriptions, and images, as well as add or remove items as needed.
US_12	Manage orders	Restaurants can manage their incoming orders, view order details, and update the status of each order as it is prepared and delivered.
US_13	Payment processing	The platform should be able to securely process payments from customers and distribute payments to restaurants.
US_14	Customer support	Customers should be able to contact customer support for assistance with their orders, and restaurants should be able to contact support for assistance with their account or orders.
US_15	Restaurant Management	Restaurants can manage their menu, update pricing, and availability of items.
US_16	Delivery Management	Delivery personnel can manage their delivery schedule and update the status of the order delivery.