

Food Delivery System Requirements Specification

Group members:

David Keçi

Greisi Jaho

Era Mulla

Erisa Zaimi

Ardisa Beqja

Klea Haxhiu

Page 1 of 126 Dermatology clinic app Requirements Specification

Table of Contents

1.Executive Summary					3
1.1 Project overview					3 1.2
Purpose and scope of this spec	ification				4
2.Product/ Service Description					5
2.1 Product context					5 2.2
User Characteristics					5 2.3
Assumptions					
					7
	2.4				Constraints
8					2.5
Dependencies					
8					
3.Requirements					
	9		3.1	Functional	Requirements
					9
	3.2				Non-Functional
Requirements					
18			3.2.	1	Product
Requirements					
18		3.2.1.1		User	Interface
Requirements					
18					3.2.1.2
Usability				• • • • • • • • • • • • • • • • • • • •	
20					3.2.1.3
Efficiency					

20		3.2.1.3.1	Performance
Requirements			
21			3.1.2.3.2
Responsiveness			
21		3.2.1.4	Dependability
21			
			3.2.1.5
Security			
22		3.2.2	Organizational
Requirements			
22		3.2.1.1	Environmental
Requirements			
22	3.2.1.2	Operational	Requirements
			22 3.2.1.3
Development			22 3.2.1.3
Development			
Development Requirements		3.2.3	External
Development Requirements23		3.2.3	External

Page 2 of 126 Dermatology clinic app Requirements Specification

	3.2.3.1	Regulatory
Requirements		
23	3.2.3.2	Ethical
Requirements		
24	3.2.3.3	Legislative
Requirements		

24		3.2.3.3.3	1	Accounting
Requirements				
25		3.2.3.3	.2	Security
Requirements				
25				
	3.3			Domain
Requirements				
25				4.Software
Design				
26		4.1		User
Scenarios				
26		4.2	Use	Cases
32	4.3	Use	Cases	Extended
37				
4.4				
BPMN				
5	4 4.5 Data Flo	w		
Diagrams				
58 4.6 Entity-Relati	onship			
Diagram				
61-62 4.7 Activity				
Diagrams				
63 4.8 Timing				
Diagram				
80 4.9 State				
Diagram				
80 4.10 Sec	quence			

Diagrams
Diagrams
89 4.12 Class
Diagram
94 4.13 Object
Diagram
99 4.14 Package
Diagram
102 4.15 Component
Diagram
103 4.16 Deployment
Diagram
105 5. Design Patterns
106
6.Appendix
115

Page 3 of 126

Dermatology clinic app Requirements Specification

1. Executive Summary

1.1 Project Overview

The food delivery industry has seen tremendous growth in recent years, and we aim to capitalize

on this trend by providing a high-quality food delivery system that is both efficient and user-friendly. Our system will allow users to easily browse menus, place orders, and track their deliveries in real-time, making the process of ordering food as seamless as possible.

One of the core functionalities of our system is user authentication. This will ensure that only authorized users are able to access the system and place orders. Users will be required to create an account, which will allow them to save their delivery addresses, payment details, and favorite restaurants for future orders. This feature will also enable us to provide personalized recommendations to users based on their order history and preferences.

Another important feature of our system is restaurant search and selection. Users will be able to search for restaurants based on their location, cuisine, and ratings. They will also be able to view menus, reviews, and ratings of the restaurants before placing an order. This feature will allow users to make informed decisions when selecting a restaurant, which will enhance their overall experience with our system. Once a user has selected a restaurant, they will be able to browse the menu and select the items they wish to order. The system will provide users with a detailed description of each item, including ingredients, allergens, and nutritional information. Users will also be able to customize their orders by adding notes or special instructions. Once the user has finalized their order, they will be able to pay for it securely using a variety of payment options.

After the order has been placed, the user will be able to track its status in real-time. They will receive notifications when the order is accepted by the restaurant, when it is being prepared, and when it is on its way for delivery. This feature will provide users with peace of mind, knowing that they can track their orders every step of the way. Once the order has been delivered, the user will be able to rate and review the restaurant and the delivery service. This feature will allow other users to make informed decisions when selecting a restaurant, and it will also help us to improve the overall quality of our system. For restaurant owners and managers, our system will provide a restaurant management interface that will allow them to manage their menus, orders, and delivery settings. This feature will enable them to efficiently manage their operations and provide a high-quality service to their customers.

Finally, we will also provide a delivery management interface that will allow us to manage our fleet of delivery drivers. This feature will ensure that deliveries are made in a timely and efficient manner, and it will allow us to provide a high-quality service to our users.

In summary, our food delivery system will provide a convenient and efficient way for users to order food and for restaurants to manage their orders and delivery settings. With features such as user authentication, restaurant search and selection, menu browsing and item selection, order placement and payment, order tracking and delivery status, user ratings and reviews, restaurant management interface, and delivery management interface, we aim to deliver a user-friendly and reliable system that meets the needs of both customers and restaurant owners/managers.

The purpose of this specification is to provide a detailed description of the food delivery system project, its functionalities, and its intended audience. This document is intended for developers, project managers, and stakeholders who are involved in the development of the food delivery system.

Within the scope of these specifications are the requirements and functionalities related to the food delivery system project.

- A detailed description of the product features, including their functions and capabilities.
- · A technical overview of the system processes and user interface
- The user and system requirements that have been identified for the product.
- · A clear outline of the functional and non-functional components required for the product
- An explanation of how users will access and interact with the product, including specific use cases and scenarios
- Any dependencies or constraints that may impact the development or implementation of the product, such as technical limitations or regulatory requirements.

Out of scope are any requirements or functionalities that are not directly related to food delivery, such as

- · Inventory management: While inventory management is important for restaurants, it may not be directly related to the core functionality of a food delivery system.
- · Reservation management: If the system is designed solely for food delivery, then managing reservations would likely be considered out of scope.
- customer relationship management.
- Legislative requirements for the product

2. Product/service description

This software will allow users to communicate effectively with doctors and send photographs of their skin. Because a dermatologist can readily diagnose a skin concern

using a photograph, this app will save patients time. The user can complete a form and submit the skin photo as well as any other health information that the doctor may require, such as previous medical documents.

The doctor can avoid providing medication that contains chemicals that could induce an allergic reaction in the patient if he or she has access to these files. After the doctor has made the diagnosis, he can contact the patient and issue a printable prescription. If the patient approves to order the medications from the clinic, then the dermatologist can add the required medications to the patient's cart, meanwhile the pharmacist will provide further details of the order.

2.1 Product context:

Food Delivery System is a software that gathers a wide range of food services into one application and makes it easier for those who would like an outdoor meal in their cozy houses. We are creating this application keeping in mind busy individuals,families with young children,allergic people,those who love to keep track of their calories, planned or last minute gift ideas and anyone who may have difficulty leaving their home.

We provide on our software, features that currently no system on the market provides such as, calorie counter, customizable menus and item description, personalized recommendations, multiple language support, group orders, making our app not only general, but also unique by having extra features.

The system provides a simple,well-organized, fast, and effective system as everyone gets their services in real time. This system is considered an independent system as it operates independently of any specific restaurant or food establishment and requires its own components, such as a platform and delivery personnel, to function.

2.2 User Characteristics:

A) Customer

- Customers need to be 18+ in order to be provided with the service.
- May be female/male.
- Customers can have any income level, as long as they are able to afford to purchase and order food.
- Customers may have different educational levels, but generally they should be well-educated and have knowledge on how to use these kinds of systems.
- Customers should live and order food in areas where the delivery is possible and available.
- Different customers may have specific food preferences or requirements (vegan, vegetarian,

gluten-free).

B) Restaurant

- Restaurants have to be specific about the cuisine options they offer.
- Location of the restaurant is crucial for delivering food to customers.
- The menu of each restaurant needs to be detailed (to have descriptions and pictures of the dish) and also include the price.
- Each restaurant profile needs to have ratings and reviews to help customers into choosing the right restaurant for their order.

C) Delivery person

- The person who will be responsible for the delivery needs to be over 18, female or male.
- Can use different ways of transportation as long as they provide their driver's license and vehicle registration.
- Should have good knowledge of the city and areas where food may be delivered, to take the fastest and safest routes.
- Needs to have good communication skills to interact with the customers.
- Delivery persons need to be healthy and physically fit to handle the job.

D) Administrator

- Administrator of the app should be qualified to maintain and keep the app up and running.
- Must have technical skills such as data analysing, software development, database management and web technologies.
- They need to have excellent management skills to manage different operations and also the relationships between customers, restaurants and delivery persons.
- Should have good communication skills.
- Needs to be a strategic thinker and planner for the good of the business and app development.
- The admin should have strong problem-solving skills to address every problem the app may face along the way.

2.3 Assumptions:

- Assumption about User: The food delivery system will be used by a wide variety of customers, including individuals, families, and businesses.
- Assumption about Platform: The food delivery system will be built as a web-based platform that can be accessed from any device with an internet connection.
- Assumption about Food Delivery Partners: The food delivery system will partner with multiple restaurants and food establishments to offer a diverse range of cuisines and menu items.

- Assumptions about Payment Methods: The food delivery system will offer a variety of payment methods, including credit/debit cards, PayPal, and other popular payment systems.
- Assumption about Delivery Range: The food delivery system will have a specified delivery range, beyond which orders will not be accepted.
- Assumptions about Delivery Time: The food delivery system will guarantee a certain delivery time, with options for express delivery at an additional cost.
- Assumption about Order Tracking: The food delivery system will allow users to track their orders in real-time, from preparation to delivery.
- Assumptions about Customer Service: The food delivery system will provide excellent customer service, with options for contacting support via phone, email, or live chat.

2.4 Constraints

The system will potentially have the following constraints:

Time

The time available for building this project is twelve weeks. This amount of time will be splitted into peaces for different tasks like planning, modeling, developing which will take the most of it, meetings with the stakeholders (which will cost at minimum 3 hours per week) or the client and recreating parts of the project.

Budget

The budget for this project consist of these important aspects:

The number of stakeholders: Our projects have six stakeholders which are writing the documentation, three developers, one program tester and one administrator for the system.

Equipment: Equipments needed for the project of creating an OS in "Food Delivery Service", are 9 "hp","Dell" Laptops, one printer for the documents

needed, requirements for other stakeholders.

Money: Money budget is \$9800 +-, depending on the prices of the laptops and the need for more working people.

Technology

The development team has the latest technology available on their laptops, or language versions.

Scope

This "Food Delivery Service", will allow the user to order food online,pay by different methods, chat with the restaurant or delivery person, reserve a table in the restaurant, create their own profile with available recipes, diets or caloric-deficit counter, make gifts for their family or friends, make collaborations with other businesses or advertise this own business. A more detailed description is available in 3 1.2 sections.

Integration

The system must integrate with the second-hand banks which will make the payment available through the credit cards.

Quality

The quality of this project is of a high level since it will be tested by our program tester.

• User Experience

The software will be understandable for every type of user +18 years old. The reason for this minimum age is because it has to do with credit cards or working people in Albania. The requirements are simple and the software is designed in a way that attracts the eye of the user.

2.5 Dependencies

- 1. Internet connectivity The system needs a good internet connection to work properly. This means that users need to have access to a stable internet connection to use the platform. Without a reliable internet connection, the platform won't be able to function as intended.
- **2. Location services** The system uses location services to find nearby restaurants

that can deliver food to the user's location. This means that the platform needs permission to access the user's location to provide accurate information about nearby restaurants and their availability.

- **3. Payment processing systems** The system uses secure payment processing systems to allow users to pay for their orders safely and quickly. This means that the platform needs to integrate with trusted payment providers to ensure the safety and security of user financial information.
- **4. Database management systems** The system stores information about users, restaurants, menus, and orders in a database so it can be easily accessed and managed. This means that the platform needs a reliable and efficient database management system to store and manage all this data securely.
- **5. Delivery personnel** The system needs delivery drivers to deliver the food to customers. This means that the platform needs to partner with reliable delivery partners who can deliver orders promptly and efficiently.
- **6. Customer service support** The system has customer support available to help users with any problems or questions they have. This means that the platform needs to have trained customer support representatives who can address user concerns and issues effectively.
- **7. Third-party software integrations** The system may use other software tools to improve its performance and user experience. This means that the platform needs to integrate with third-party software solutions such as chatbots, recommendation engines, and social media platforms to enhance its functionality and improve the user experience.
- **8. Product inventory management systems** The system needs a way to make sure that restaurants have enough supplies to fulfill orders. This means that the platform needs to integrate with inventory management systems to keep track of restaurant supplies and ensure they have enough inventory to fulfill orders.
- **9. Restaurant partners** The system depends on partnerships with restaurants to provide food options to customers. This means that the platform needs to establish reliable and trustworthy relationships with restaurant partners to ensure a steady supply of food options for users.
- **10. User participation and engagement** The system needs users to place orders and give feedback to improve. This means that the platform needs to encourage user participation and engagement, such as by offering promotions, discounts, and loyalty programs.
- 11. System maintenance and updates The system needs to be maintained and updated regularly to keep it working well and secure. This means that the platform needs to have a team of developers and IT professionals who can maintain and update the platform regularly to fix bugs, address security vulnerabilities, and add new features and functionality.