Courier Service Requirements Specification

Version 1.0

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1.   Executive Summary

1.1   Project Overview

Courier Service is a software product that aims to facilitate the current postal services by working as an intermediary between the agencies that want to ship their products and the couriers. Both the agencies, and the couriers, will be able to connect with each other through a user-friendly interface where each user will have their own menus and where everything will be administered by the admin, which in our case will be the CEO of the Courier company. The agencies will be able to create orders, gather them, print the bill and keep track or the orders created. Overall, the agencies themselves are the clients of the postal firm that will be using our software, and as such they will be provided with all the options required in the software. On the other side, the couriers will be able to take the orders from the agencies, deliver them to the respective buyer, and at the end of the day generate a daily report to keep track of their finances.

1.2   Purpose and Scope of this Specification

In scope

The following specifications describe the purpose of this product and how it intends to be used:

● The purpose of this project is to facilitate the process of delivering packages by acting as a medium of connection between the agencies and the couriers of the postal firm.
● Target users are the agencies that choose to work with the postal firm and the employed couriers of the postal firm.
● All the users of this software must be within the Albanian borders.
● A user-friendly interface and a software that can be accessed from the web and used through different smart devices will be provided.
● The admin will register or deactivate users' accounts.
● Users' personal information is guaranteed to be secure and not misused.

Out of Scope

The following specifications aim to elucidate the terms and conditions of using this product:

● This software does not take responsibility over the damaged packages gathered by the agencies. The postal firm will only be aware of the price and weight of the package.
● In case of inconveniences with the product, maintenance services will be offered immediately to the party experiencing the troubles.

2.   Product/Service Description

2.1   Product Context

This software is independent and self-contained. It serves the context of creating a comfortable digital connection for the postal service companies and their clients. The product will offer flexibility for its users, since it will be able to be accessed from everyone with an internet connection.

2.2   User Characteristics

Courier Service will have three types of users that will be differentiated by their role:

● Agencies
● Couriers
● Admin

- **Agencies** will be the clients of the postal firm. They will have their own unique interface and their menus for logging in and changing their password, creating an order, gathering the orders, printing the bills as well as a dashboard for keeping track of the orders.

- **Couriers** will be the employed staff of the postal firm. They will have a unique interface as well as the menus for logging in, opening the bags, delivering the orders and generating a daily report at the end of their shift to keep track of their finances.

- **Admin** will preferably be the CEO of the postal firm, but it can be anyone with the competence to surveil the overall work of all the users. The main duty of the admin will be to create or deactivate users according to the circumstances, and have a general overview of the daily reports of his employees.

2.3 Assumptions

- It is assumed that a reliable internet connection is available from every user that wishes to access the application.
- It is assumed that the product will be able to run and work efficiently in every browser.
- We expect the project to be fully delivered in 12 weeks.

2.4 Constraints

- Lack of cooperation within the group members may lead to project failure.
- Lack of cooperation from the admin may lead to delays in user registering or deleting.
- Further constraints may be encountered.

2.5 Dependencies

- This software product is dependent in the fact that the users are connected to the internet.
- Every user is dependent on having a smart device to access and perform operations on the product.
- Login and authentication are required for every user so that it can use the software.

3. Requirements

3.1 Functional Requirements

CS – The courier service software product

FR – Functional requirements for the product

Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
CS_FR_01	User registration	The registration of each user can only be done by the admin. The users will be identified by a unique username, a password for their account and the user role. Users must be registered in order to access the services of the software.	1	15/04/22	Arb Koçi
CS_FR_02	User Login	The user will login to the system through its username and password for his identified role. The user won't be able to login if the password is incorrect and if his account hasn't been registered by the admin for his specific role.	1	15/04/22	Arb Koçi

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CS_FR_03	Friendly, distinct user-interface	A unique user-interface will be provided for the different types of users. Ease of usability and navigation through the individual menus of each role will be provided.	1	15/04/22	Arb Koçi
CS_FR_04	User update account details	The software will provide the users the ability to change their passwords at any time.	1	15/04/22	Arb Koçi
CS_FR_05	Admin User Role	Admin's user-interface will consist of three menus that represent its role functionality. The first menu will be to register users. The second menu will be to deactivate users according to the circumstance, for example a courier that no longer works for the postal firm. The third menu will be a general overview of the daily reports from each employee(courier).	1	15/04/22	Arb Koçi
CS_FR_06	Agency User Role	Agencies that have chosen to work with the postal firm operating on our software will have a user-interface that will consist of 5 menus that represent its role functionality. The first one is authentication menu and interface to change account password. The second one is to create the order. The third one is to print the bill for each order with a unique QR code to be scanned by the courier after delivery. The fourth one is to gather the orders in such way that every agency has an employee from the postal firm to handle the packaging. One agency may have one or more couriers. At last, a menu for keeping track of the orders through the report dashboard will be provided.	1	15/04/22	Arb Koçi

Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
CS_FR_07	Courier User Role	The courier employees of the postal firm will be responsible for delivering the packages from the agencies to the respective buyer. They will be able to interact with the agencies through the presence of three menus on their user-interface. The first one will be a menu for accessing the orders that are created by the agencies. A courier may deliver packages from one or more agencies. The second menu will be for the delivery process. The courier should scan the QR code on the printed bill from the agency if he has delivered the order to the buyer. If the order gathered from the agency hasn't been delivered in the expected day for several circumstantial reasons, the order should be gathered again and a reason for not delivering must be mentioned. The last menu consists of a daily report dashboard that will generate financial overviews for each courier at the end of their day.	1	15/04/22	Arb Koçi

3.2   Non-Functional Requirements

3.2.1 Product Requirements

3.2.1.1 **User Interface Requirements**

Given that the software will be a web application, the user interface of the software shall be compatible to any browser and operating system. Initially, a login authentication page will be displayed to every user, distinct for each role, where they can insert their registered credentials: username and password. If the login is successful, the user will be redirected to the unique functionalities for its role. Administrator can create new users or deactivate current ones.

3.2.1.2 **Usability**

Learnability

● 　The regular user interface will be of a minimal user-friendly design.
● 　Every role will be guided on how to use the interface.
● 　The software will be designed to be easy to learn and intuitive.

3.2.1.3 **Efficiency**

3.2.1.3.1   Performance Requirements

● 　The performance shall depend upon the internet connection speed of each user.
● 　The software shall support unlimited users and data to be loaded.

3.2.1.3.2   Space Requirements

3.2.1.4 **Dependability**

Availability

The software will be available 24/7 for every user wishing to access the product. It will cover and operate in the whole Albanian region, given that agencies may have orders from every city of Albania and the postal firm will have employees covering specific geographical regions within Albania.

Reliability

Maintenance

Simplicity of coding structure and documentation throughout the whole development process will be provided so that going back to improve and maintain the software is easily doable.

Integrity

3.2.1.5 **Security**

The factors that will protect the system from malicious or accidental access, modification, disclosure, destruction, or misuse for our product are as follows:

- Encryption of data
- Authentication Middleware in C#
- Token for tracking the timeline for every user activity given that all users will be within Albania