Software Requirements Specification

**For the**

**Customer discount management system**

**Version 1.0**

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1. **Introduction**

*1.1 Purpose*

The purpose of this document is to provide a complete and detailed description of the software product. This document describes the target audience, hardware and software requirements. The document defines the capabilities and methods of system management, how the system will respond to the client's actions.

*1.2 Scope of Project*

This program is an application created for Android system to provide and manage discounts for customers of the store chain. The system allows to increase the satisfaction and interest of store customers by rewarding them with user discounts. By increasing efficiency and productivity, the system remains simple and easy to understand for store employees.

The system allows to manage discounts at three levels: administrator, salesman and customer. The software allows users to keep up-to-date with current purchase discount requirements, salesman to add new customer accounts, and administrators to manage the discount system. The system is fully automated and only requires store personnel to add new customers and change the discount system.

*1.3 Glossary, Acronyms, and Abbreviations*

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| **Term** | **Definition** |
| Software Requirements Specification (SRS) | a document that completely describes all of the functions of a proposed system and the constraints under which it must operate. For example, this document. |
| Salesman | a person who sells things in a store. |
| Customer | a person who buys a product or service. |
| Administrator | a person whose job is to manage store personnel. |

*1.4 References*

*- E-Commerce Platform Model*

*- User Roles and Permissions Model*

- *Loyalty Program Model*

- *Special Offers and VIP Program Model*

*1.5. Overview of Document*

The remaining sections of this document provide a general description, including characteristics of the users of this project, the product's hardware, and the functional and data requirements of the product.

The second chapter, the Overall Description section, of this document gives an overview of the functionality of the product. It describes the informal requirements and is used to establish a context for the technical requirements specification in the next chapter.

The third chapter, Requirements Specification section, of this document is written primarily for the developers and describes in technical terms the details of the functionality of the product.

Both sections of the document describe the same software product in its entirety, but are intended for different audiences and thus use different language.

**2.0 Overall Description**

*2.1 System Environment*

The discount management system consists of three participants. Salesman, Manager and have access to the system through the application.

*2.2 Functional Requirements Specification*

This section outlines the use cases for each of the active readers separately. The Salesman, Manager and Administrator have only one use case apiece.

2.2.1 Salesman Use Case

Use case: add a new Customer

Diagram:

Brief Description: At the customer's request, the salesman creates a new and unique account for the customer.

Initial Step-By-Step Description

Before this use case can be initiated, the customer asked to be registered in the system to receive discounts in the store.

1. Salesman selects the option to register a new Customer.
2. The Customer provides his phone number.
3. The Salesman enters this phone number.
4. The system adds the new Customer to the database.

2.2.2 Administrator Use Case

Use case: add a new Salesman

Diagram:

Brief Description: The Administrator adds a new salesman to the system to give him the necessary management capabilities.

Initial Step-By-Step Description

1. The Administrator selects the option to add or update a Salesman and Manager.
2. The system presents a choice of adding or updating.
3. The Editor chooses to add or to update.
4. If the Administrator is updating a Salesman, the system presents a list salesman to choose from and presents a grid filling in with the information; else the system presents a blank grid.
5. The Editor fills in the information and submits the form.

2.2.3 Manager Use Case

Use case: change a certain Customer's discount

Diagram:

Brief Description: Manager changes the discount level of a Customer (for example, if the Customer wins a contest or a draw).

Initial Step-By-Step Description

1. The Manager selects the option to change the Customer's discount level.
2. The system prompts to enter the Customer number.
3. The Manager enters the Customer number into the search bar.
4. The system outputs the Customer account information.
5. The Manager enters/selects the new discount level/gifts and confirms the changes.
6. The system records the changes in the database.

*2.3 User Characteristics*

Salesman, Manager and Administrator must have Android device and also they are expected to be Android literate. They should also be familiar with installing and maintaining app updates.

The Salesman must be able to enter information and be familiar with using the buttons and pull-down menu.

The Administrator must be able to enter information and to use the search bar and pull-down menu.

The Manager must be able to enter information and be familiar with using the buttons and pull-down menu.

The detailed look of these pages is discussed in section 3.2 below.

*2.4 Non-Functional Requirements*

**3.0 Requirements Specification**

*3.1 External Interface Requirements*

The only link to an external system is the link to the Discount System (DS) Database to add/verify the membership of a Customer. The DS Database fields of interest to the customer discount management system are customer (ID) number, customer’s current discount level and phone number (an optional field for the DS Database). All other DB tables are designed to support the main DS DB and are not directly related to the application.

The add a new customer Salesman use case records a new customer of the discount system into the DB.

The change a certain customer's discount Manager use case records a new value to the discount level field.

*3.2 Functional Requirements*

3.2.1 add a new Customer

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| **Use Case Name** | Add a new customer. |
| **XRef** | Section 2.2.1, add a new customer. |
| **Trigger** | Salesman selects the option to add a new customer to the DB. |
| **Precondition** | Salesman logged into his account on the app. The "Add new customer" button is on the screen. |
| **Basic Path** | 1. The salesman presses the button. 2. The system displays empty fields with information about the customer. 3. The salesman enters the information and clicks the "Confirm" button. 4. The system records the new client in the DB. |
| **Alternative Paths** | None. |
| **Postcondition** | The "Add new customer" button is on the screen. |
| **Exception Paths** | The Salesman may quit the app at any time. |
| **Other** | None. |

3.2.2 add a new Salesman

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| **Use Case Name** | Add a new Salesman. |
| **XRef** | Section 2.2.2, add a new Salesman. |
| **Trigger** | Administrator selects the option to add a new Salesman. |
| **Precondition** | Main screen with "add new salesman" and "change customer discount" buttons. |
| **Basic Path** | 1. The Administrator presses the button "add/change new salesman". 2. The system displays empty fields with information about the salesman if salesman is already exists; else system displays empty fields. 3. The salesman enters the information and clicks the "Confirm" button. 4. The system records changes in the DB. |
| **Alternative Paths** | None. |
| **Postcondition** | Main screen is displayed. |
| **Exception Paths** | The Administrator may quit the app at any time. |
| **Other** | None. |

3.2.3 change Customer discount

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| **Use Case Name** | change a certain Customer's discount. |
| **XRef** | Section 2.2.2, change a certain Customer's discount. |
| **Trigger** | Manager selects the option to change the customer discount, add happy birthday gifts and vip gifts for vip clients. |
| **Precondition** | Main screen with "add new salesman" and "change customer discount" buttons. |
| **Basic Path** | 1. The Manager presses the button "change customer discount". 2. The system displays search bar to enter customer phone number. 3. The system displays the customer's name, old discount and a field to enter the new one. 4. Administrator enters new value of discount and clicks the "Confirm" button. 5. The system records changes in the DB. |
| **Alternative Paths** | None. |
| **Postcondition** | Main screen is displayed. |
| **Exception Paths** | The Manager may quit the app at any time. |
| **Other** | None. |