

Introduction:

This document describes the requirements of “Weimar-ecommerce”, a new online platform which sells and delivers electronic devices across Weimar. Using this application customers can choose and order products and get them delivered to their doorstep. In addition to that, this application provides the ability to the company’s employees to manage their daily work-related activities.

Scope:

This application is going to be a console application that supports operations related to selecting, purchasing, and delivering products as well as managing the inventory. Suitable instructions and messages should be shown to the users on the console itself. The scope will be extended by storing the updates made by different users and the same will be used to trigger necessary actions for other users.

Intended Users:

There will be 3 categories of users, who will possess access to log on to the application:

1. Customer: Who is interested in buying the products.
 - a) New Customer
 - b) Existing Customer
2. Delivery Agent: Who is responsible for delivering the products.
3. Store Manager: Who is responsible for taking care of items’ stock in the inventory.

Functional Objectives:

- 1) The application should provide login option to every type of user mentioned in the intended users section using username and password. A New Customer must first be prompted to create a new account to be able to login.
- 2) To create a New Customer account, the following details should be entered: Username, Password, First Name, Last Name, Telephone number (country code not required), Postal code, Address.

Constraints to be applied on the above-mentioned parameters:

Parameter	Accepted Input type	Maximum number of characters	Additional constraint
Username	String	NA	Unique
Password	String	NA	NA
First Name	String	NA	NA
Last Name	String	NA	NA
Telephone number	Number	10	Non-negative whole numbers
Postal code	Number	5	Non-negative whole numbers
Address	Number	NA	NA

- 3) Once a new account is created, the person should be asked to login using the created username and password. Correct combination of username and password should allow login.
- 4) Delivery Agent and Store Manager have their accounts already created in the database. So, both parties shouldn’t be able to create accounts to manage their work-related activities. They can only login using their existing credentials.
- 5) Any customer, after login, must be given a choice to either view the status of the existing orders (which are empty for a new customer by default) or create a new order.
- 6) Checking existing orders: Customers should be shown the order ids created by them and they have to enter the correct order id to view the latest status.

- 7) Creating new order: Customers should be shown the list of products in the inventory and their prices. Depending on the quantity of items they select, their bill amount should be generated. To confirm the payment, the customers need to enter amount in the console. After a successful payment, a unique order id should be generated. Below table discusses the possibilities:

User Action	Payment Status	Further Actions
Enters payment amount less than the bill amount	Failed	Retry payment or Exit
Enters payment amount equal to the bill amount	Success	Display Unique Order ID
Enters payment amount greater than the bill amount	Success	Display change + Display Unique Order ID

- 8) Manager's Activities: A Manager can perform the below activities:
- Up on login, he should be shown the list of items along with their quantity.
 - Manager should be able to add items to the inventory (item name + quantity).
- 9) Delivery Agent's Activities: A Delivery Agent can perform the following activities:
- Up on login, he should be shown the list of order ids to be delivered.
 - Agent must choose an order id from the available list and update the status (On the way or Delivered).
- 10) Status of an order, updated by Delivery Agent should reflect to the Customer upon login in the form of an alert.
- 11) The possible order statuses are : {Order confirmed, On the way, Delivered}.

Note: The following sub-features shall be implemented on priority:

- Login functionality for all user types and account creation for new customers.
- Order creation by customer
- Order update by delivery agent
- Inventory update by manager

Schematic Diagram:

