Requirements (version 1)

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1 Introduction

This document contains the first version of a set of specifications for an online e-commerce platform.

2 Functional Requirements

- The system must have the following entities in order to describe the current situation of orders and clients:

  - Items: items that can be sold. An item has a name, price and category.
  - Cart: the current items a client has chosen but not yet ordered.
  - Order: a single order made by a client.
  - Clients: all registered and unregistered clients that already ordered something.

- The following categories must exist, but it should be possible to add new categories to the store:
  Phone, Tablet, Computer, Image, Sound, Home & Living, Kitchen, Travel, Fashion, Sport

- All items must be displayed in a catalog, ordered by category. Every category should be displayed on a separate page. A user can sort the items according to their name, popularity, or price.

- A user can add/remove items to/from the cart and change the desired quantity.

- A user can enter a discount code, which affects either a single item or the entire cart.

- A user has the ability to order the items in his cart. The user then has to fill in some standard information and afterwards select a payment method.

- When a payment has been received a confirmation e-mail has to be sent to the user.

- An administrator must be able to make changes to placed (but not yet delivered) orders.

- An administrator should be able to get an overview of all open and delivered orders.

- A user is able to log in and get an overview of his personal information, his mailing preferences and his open and delivered orders.

- An overview of some of the most popular items should be displayed on the home page of the shop.

- An administrator must be able to get some statistics and analysis of previous orders. Such as: for each item the total amount sold, find items that are often sold together, etc. The Eclat algorithm for itemset mining is required.

- Personalisation (like recommendations) for registered users should be present in order to improve the user experience.

- A user should be able to cancel his order as long as it is not yet ready for delivery.

- A warehouse worker should be able to view the currently unfulfilled Orders.

- A warehouse worker should be able to mark an Order as ready for delivery.

- An administrator must be able to add warehouse workers to the system as well as remove them.

3 Non-Functional Requirements

- Programming Language: Java

- Web-based UI

- Adaptability: UI should be displayed nice on every device

- Availability

- Robustness

- Easy-to-use

- No inconsistent states should occur