e-Bi - Software Requirements Document (SRD)

Controle de Versão

Version	Date	Author	Change
0.1	01/10	Gabriel Pinheiro	Document creation.
0.2	03/10	Gabriel Pinheiro	Add introduction and initial functional requirements.

1. Introduction and Purpose

1.1 Introduction

e-Bi is a full back-end environment project for an e-commerce platform. It aims to include all the basic functions (and some extra ones) of a real e-commerce system, from product selection to payment integration and product shipping. All external integrations will use staged resources whenever possible; if not feasible,

mocks will be employed, as this project does not seek to be a real production application.

1.2 Purpose

The purpose of this project is to build a tangible and realistic e-commerce back-end from scratch. All the effort aims to facilitate learning in areas such as requirements evaluation, architectural decision-making, best coding practices, and system integration. Throughout the development process, challenges will be encountered, problems solved, and lessons learned. Additionally, the project will focus on identifying failures and exploring resolutions.

2. Requirements

2.1 Functional Requirements

- **Product Catalog Management**

  - The system shall allow users to search for products.

  - The system shall provide detailed descriptions of products.

  - The system shall support filtering of products based on various criteria.

  - The system shall allow users to mark products as favorites.

  - The system shall display products that are on sale or promotion.

- **Shopping Cart and Payment Processing**

  - The system shall allow users to process payments securely.

  - The system shall calculate and display shipping costs and availability.

- **User Account Management**

  - The system shall allow users to manage their accounts (create, update, delete).

  - The system shall implement two-factor authentication (2FA) for account security.

- The system shall send emails to users about promotions and offers.

- **Logistics and Reporting**

  - The system shall generate invoices for purchases.

  - The system shall integrate with a shipping provider for item collection or generate reports of items to be shipped.

- **Inventory Management**

  - The system shall manage product inventory levels and update stock accordingly.

- **Product Reviews and Ratings**

  - The system shall allow users to rate products and leave comments.

- **Promotional Features**

  - The system shall enable users to view promotional offers on selected products.

- **Order History**

  - The system shall allow users to view their order history and status.

- **Wishlist Functionality**

  - The system shall allow users to create and manage wishlists of products they are interested in.

- **User Notifications**

  - The system shall send notifications to users regarding order updates, promotions, and other relevant information.

2.2 Non-functional Requirements

3. External Requirements

4. Assumptions and Constraints

4.1 Assumptions

4.2 Constraints