

1. Introduction

1.1 Purpose

The purpose of this document is to define the software requirements for the **Clothing Store Management System (Clothify Store)**. This system aims to streamline store operations, including inventory management, sales tracking, and reporting.

1.2 Scope

The system will be a **standalone JavaFX application** designed for a clothing store. It will support **user management, product catalog, inventory control, order management, and reports generation**. The system will be built using **JavaFX, Hibernate, Jasper Reports, MySQL, and Maven**.

1.3 Intended Audience

- Software Developers
- Store Administrators
- Business Analysts
- Project Stakeholders

2. System Overview

2.1 Features

- User Authentication & Management
- Product & Inventory Management
- Supplier & Employee Management
- Order Processing & Invoicing
- Sales & Inventory Reporting

3. Functional Requirements

3.1 User Management

- Admin can add/edit/delete users

- Employees can update their passwords
- OTP-based password reset functionality

3.2 Product Management

- Add/Edit/Delete/View products
- Products categorized into **Men, Women, Kids** sections
- Auto-generated **Product IDs**

3.3 Inventory Management

- Track stock levels
- Update inventory upon sales or restocking
- Handle product returns

3.4 Order Management

- Place new orders
- Generate invoices & send to customers via email
- Track previous orders

3.5 Reporting

- Admin can generate **Sales Reports** (Daily/Monthly/Annual)
- Employees can generate **Inventory & Employee Reports**
- Reports are generated using **Jasper Reports**

4. Non-Functional Requirements

4.1 Performance

- The system should be optimized for **fast load times**
- Database queries should be efficient

4.2 Security

- User passwords should be **encrypted**
- Only admins should have access to **critical actions** (e.g., user creation, sales reports)

4.3 Usability

- The system should have a **modern UI** using **JFoenix (Material Design for JavaFX)**
- The UI should be **responsive & resizable**

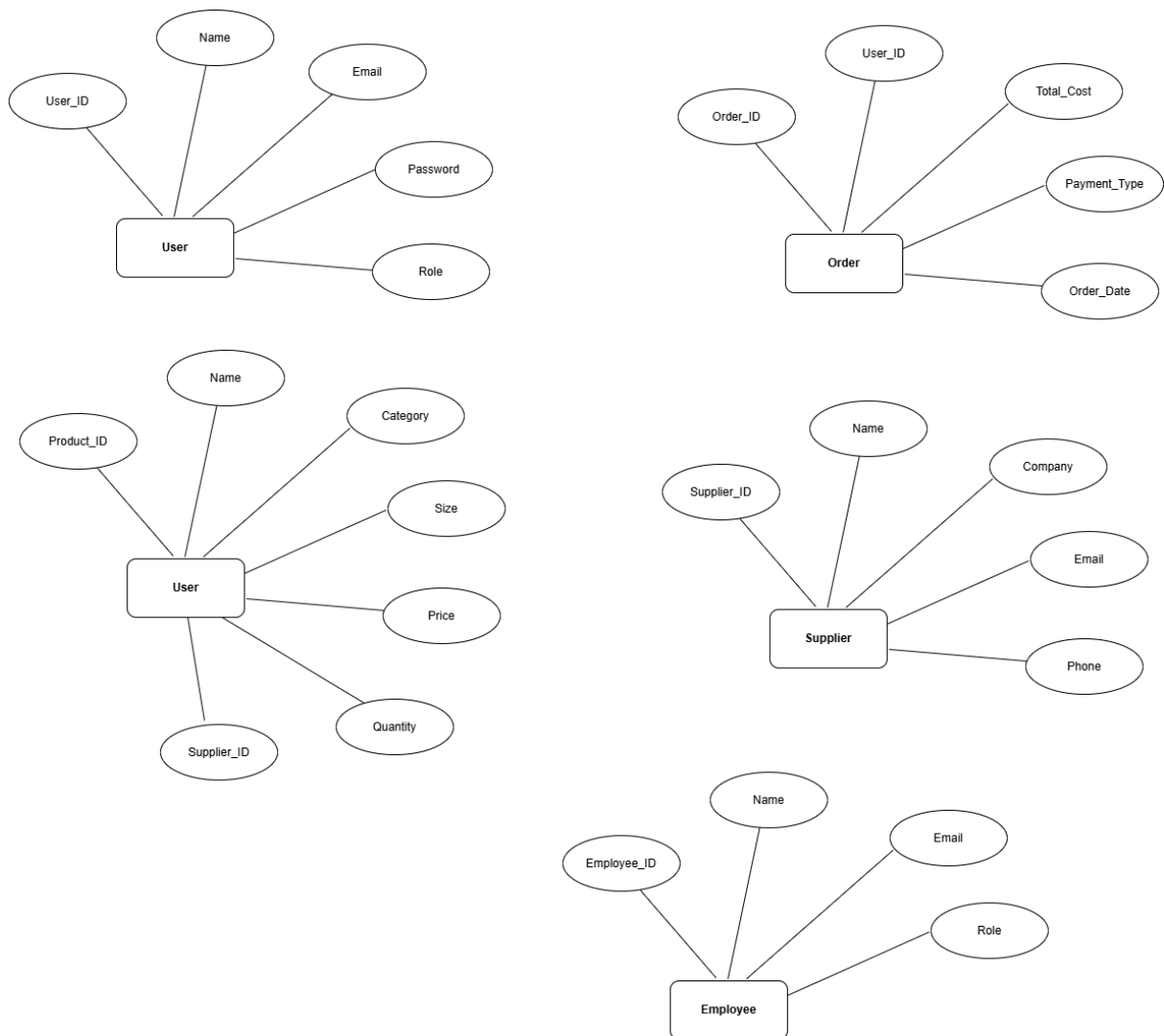
5. System Architecture

- The system follows a **Layered Architecture**
 - **Presentation Layer** (JavaFX UI)
 - **Service Layer** (Business Logic)
 - **Data Access Layer** (Hibernate & MySQL)

6. Use Case Diagram

- [Include Use Case Diagram]

7. ER Diagram



8. Constraints and Assumptions

- The application should run on **Windows, macOS, and Linux**
- Internet connection required for **email-based password reset**

9. References

- JavaFX: <https://openjfx.io/>
- Hibernate: <https://hibernate.org/>
- Jasper Reports: <https://community.jaspersoft.com/>