PROJECT

SUPER MARKET MANAGEMENT SYSTEM

Abstract

The Supermarket Management System (SMS) is a software solution designed to streamline and automate various operations within supermarkets. It features a backend powered by MySQL for efficient data management and a frontend developed using Python's Tkinter library, providing a user-friendly graphical interface. The SMS facilitates product management, customer relationship management, and sales processing, thereby enhancing operational efficiency and improving.

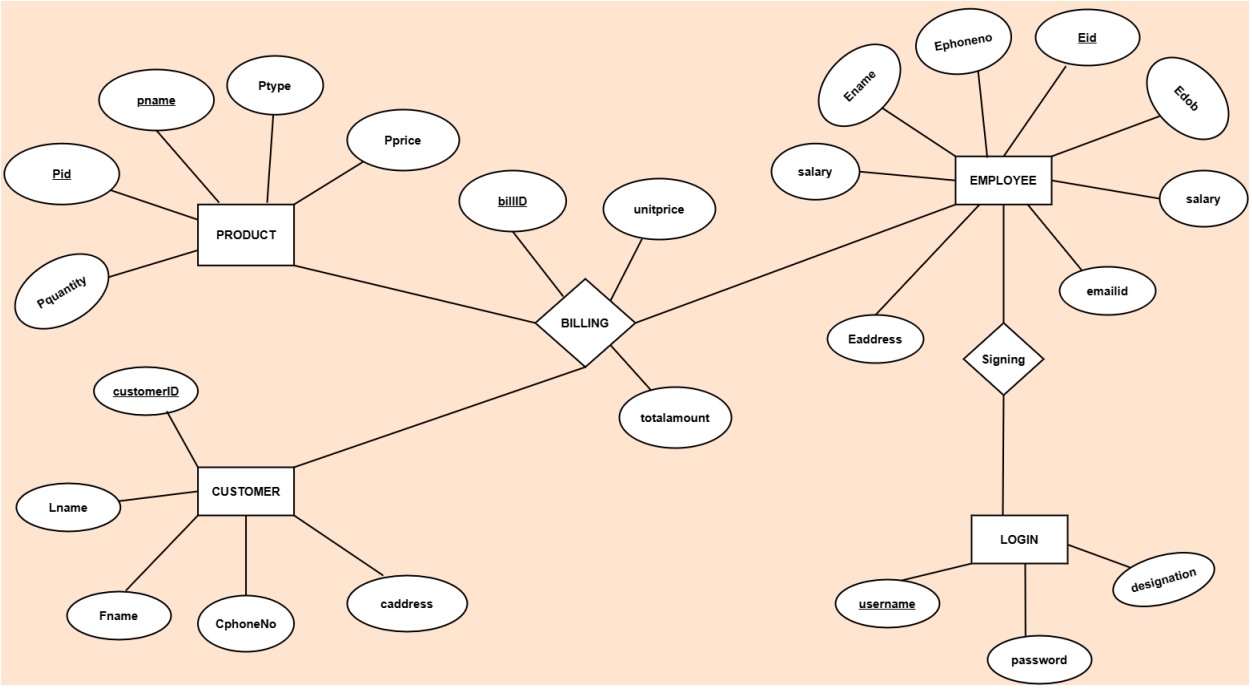
System Design

- **MySQL:** MySQL is a powerful relational database management system used for storing and managing data efficiently. It provides robust data handling capabilities, allowing the Supermarket Management System to maintain accurate and reliable records of products, customers, and transactions.
- **Python:** Python is a high-level programming language that enables quick and easy development of applications. It serves as the primary language for backend processing in the Supermarket Management System, facilitating data manipulation and interaction with the database.
- **Tkinter:** Tkinter is a built-in Python library used to create graphical user interfaces (GUIs). It provides a simple and intuitive way to design the user interface for the Supermarket Management System, ensuring an accessible experience for users as they navigate through the system.

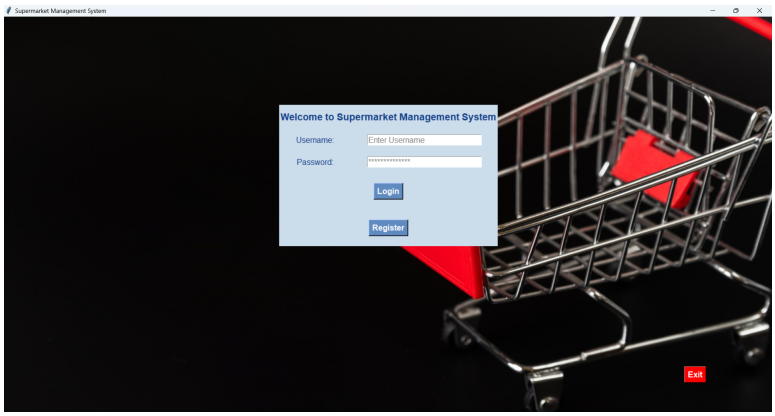
Database Design

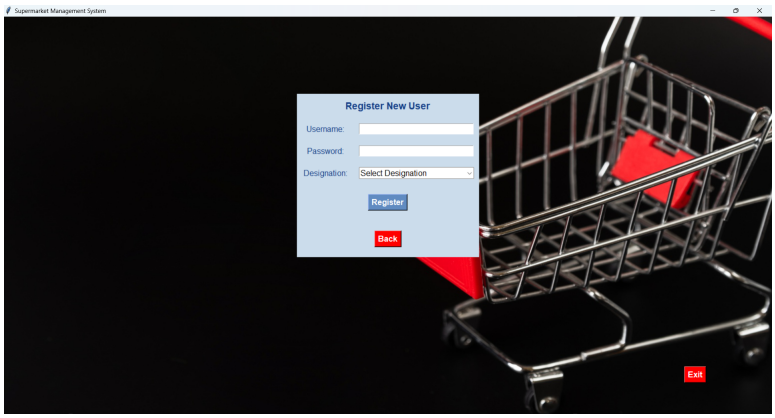
- **Login:-** Stores login credentials and access levels for system users.
- **Employee:-** Contains details about the supermarket's staff, such as ID, name, role, and contact information.
- **Product-** Holds information on items available for sale, including product ID, name, category, price, and stock quantity.
- **Customer:-**Records customer details, including customer ID, name, contact information, and purchase history.
- **Billing:-**Represents the transaction relation, linking customers with purchased products, quantities, and the total bill amount.

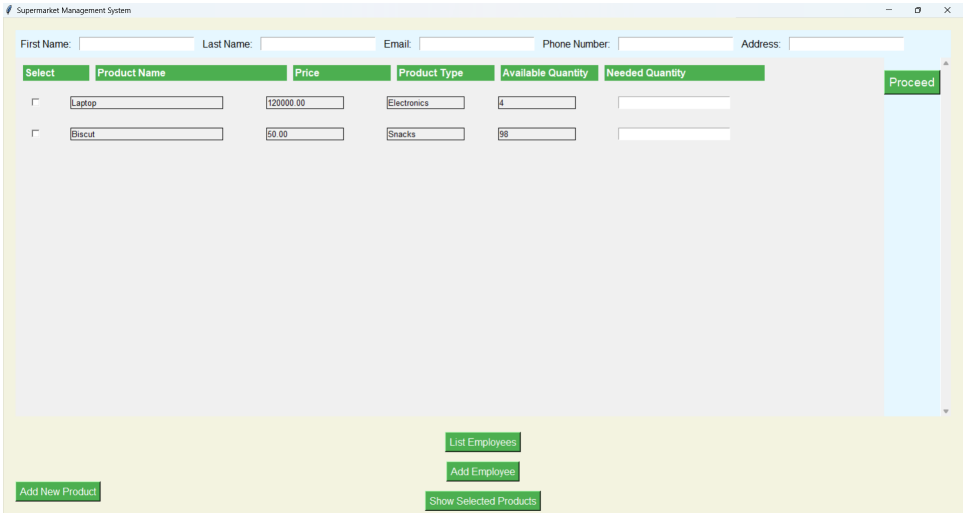
ER Diagram

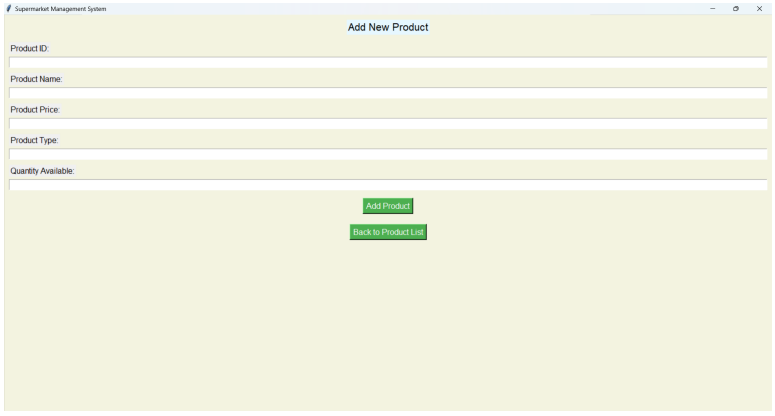


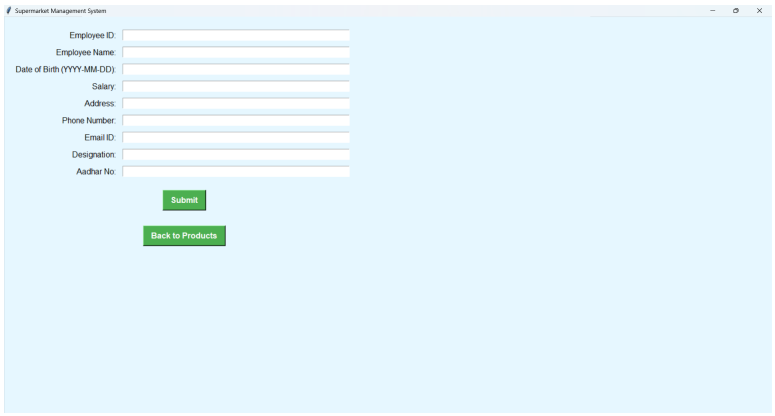
Screenshot Layouts

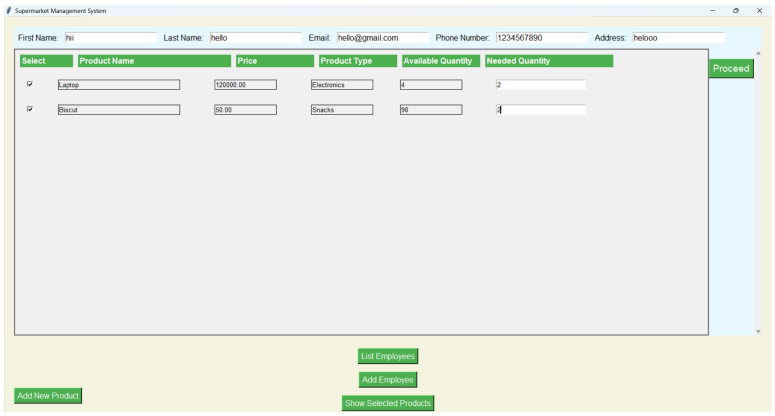


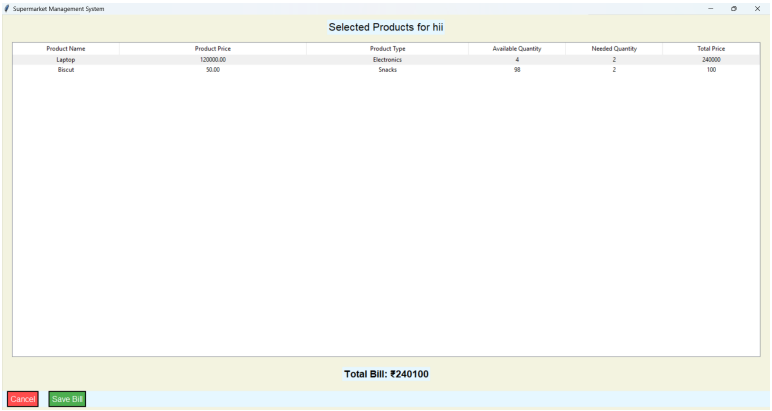



Supermarket Management System
First Name:
Last Name:
Email:
Phone Number:
Address:
Select
Product Name
Price
Product Type
Available Quantity
Needed Quantity
Laptop
120000.00
Electronics
4
Biscut
50.00
Snacks
98
Proceed
List Employees
Add Employee
Add New Product
Show Selected Products


Supermarket Management System
Add New Product
Product ID:
Product Name:
Product Price:
Product Type:
Quantity Available:
Add Product
Back to Product List


Supermarket Management System
Employee ID:
Employee Name:
Date of Birth (YYYY-MM-DD):
Salary:
Address:
Phone Number:
Email ID:
Designation:
Aadhar No:
Submit
Back to Products


Supermarket Management System
First Name: hii
Last Name: hello
Email: hello@gmail.com
Phone Number: 1234567890
Address: helooo
Select
Product Name
Price
Product Type
Available Quantity
Needed Quantity
Laptop
120000.00
Electronics
4
2
Biscut
50.00
Snacks
98
3
Proceed
List Employees
Add Employee
Add New Product
Show Selected Products



Conclusion

The Supermarket Management System effectively addresses the operational challenges faced by supermarkets by automating key processes and enhancing customer service. With a straightforward interface and reliable data management, the SMS empowers supermarkets to operate efficiently and respond to customer needs effectively..