ICE CREAM SHOP INSIGHTS

PROBLEM STATEMENT

Current manual sales tracking is time-consuming and prone to errors.

Difficulties in accessing and analyzing sales data lead to delays in decision-making.

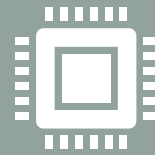Lack of real-time data analysis hinders responsive action to market demands.

Goal: Develop an automated system to streamline sales data recording and provide actionable insights.

PROPOSED SOLUTION

A robust, web-based application designed to automate and enhance operational efficiency.

Features include real-time sales tracking, invoice generation, an analytics dashboard, secure user authentication, and product performance analysis.

Special focus on creating new orders/invoices seamlessly within the system.

SYSTEM REQUIREMENTS

- **Hardware**: Essential hardware includes a server with at least an Intel Core i5 processor, 8GB RAM, and 100GB HDD for optimal performance. Client devices require stable internet access and should support modern web browsers.

- **Software**: The system is platform-independent, supporting all major operating systems such as Windows, macOS, and Linux. It leverages several key software technologies:
  - **Backend**: Python 3.8+, Flask for the server-side logic, Flask-SQLAlchemy for database interactions, and mysql-connector-python for connecting to the MySQL database.
  - **Frontend**: Employs HTML5 and CSS3 for structure and styling, JavaScript for interactive elements, and Bootstrap for responsive design. Google Charts is integrated for sophisticated, real-time data visualizations.
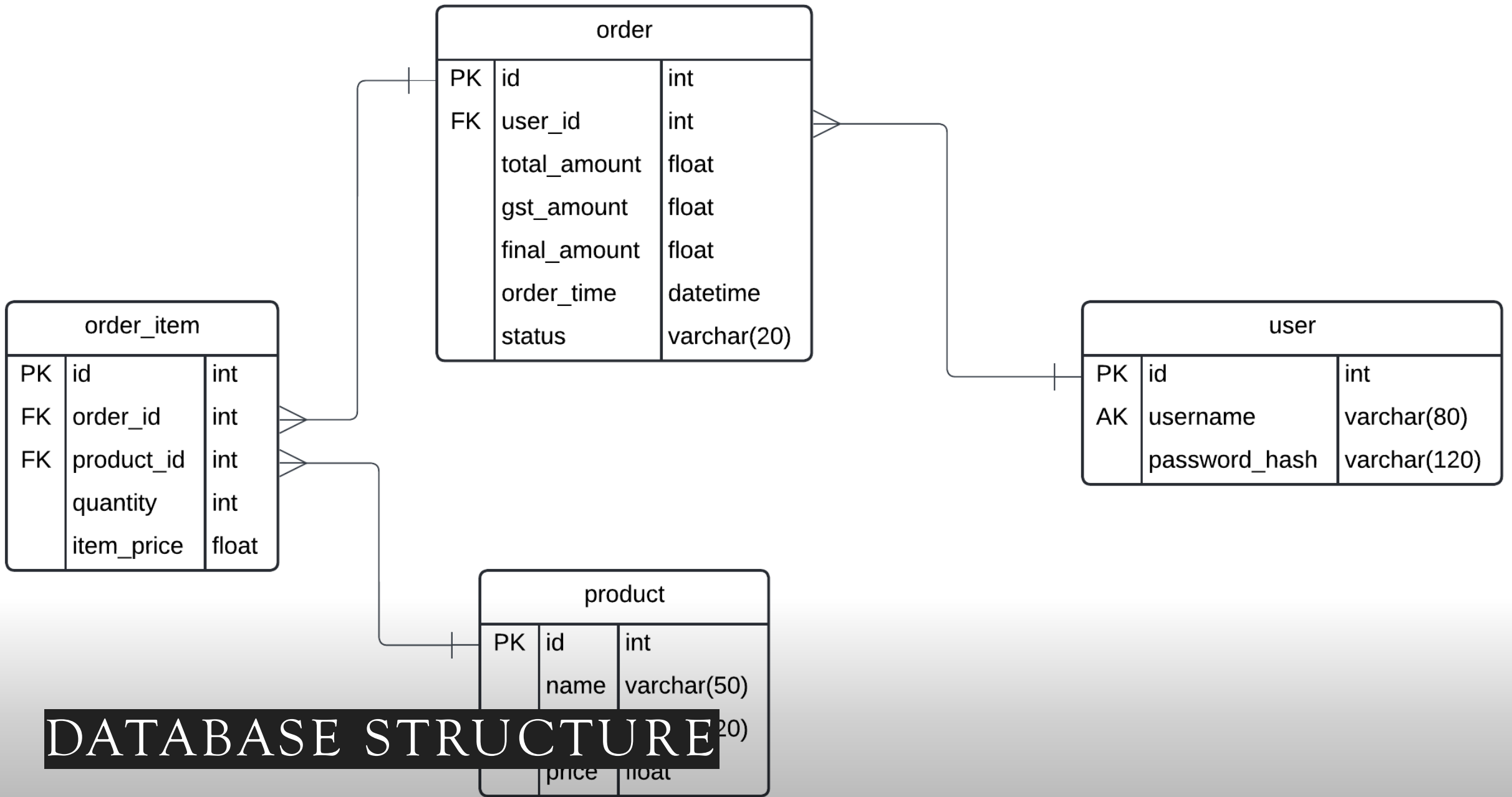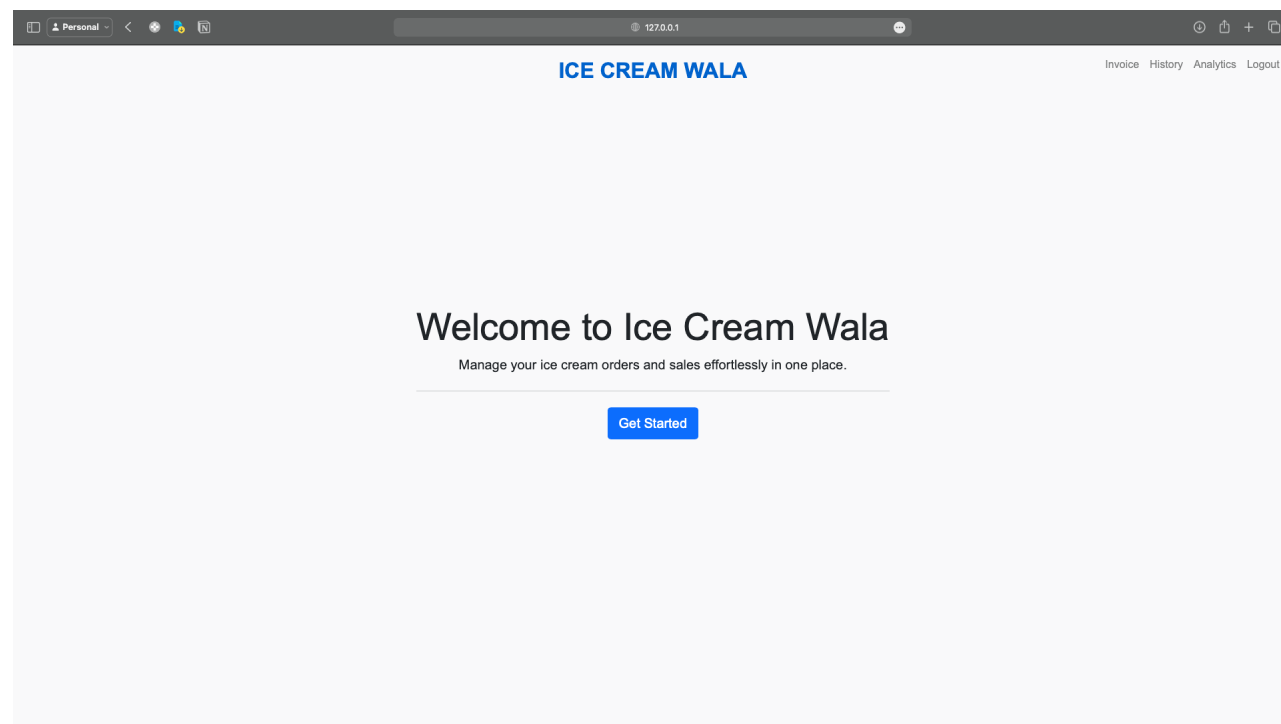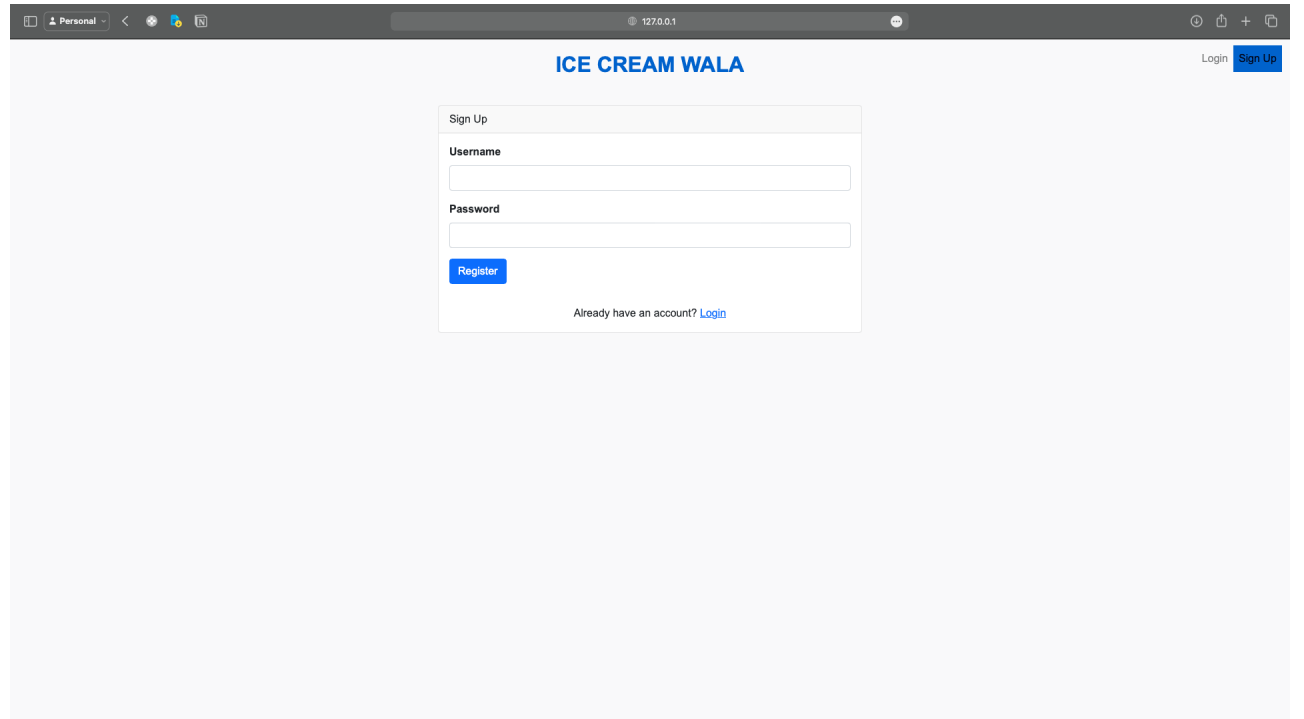
DATABASE STRUCTURE

ENTITIES EXPLAINED

- **User**: Handles data related to system users including administrators and staff, with fields for authentication.

- **Product**: Catalogs available products, detailing their specific attributes like size and price.

- **Order**: Records transaction details, linked to users and consisting of multiple order items.

- **OrderItem**: Connects products to their respective orders, tracking quantities sold and prices.

RESULTS - LANDING PAGE

ICE CREAM WALA

Invoice History Analytics Logout

Welcome to Ice Cream Wala

Manage your ice cream orders and sales effortlessly in one place.

Get Started

RESULTS –
SIGNUP
PAGE

Login Sign Up

ICE CREAM WALA

Sign Up

Username

Password

Register

Already have an account? Login

RESULTS – LOGIN PAGE

ICE CREAM WALA

Login   Sign Up

Login

Username

Password

Login

Don't have an account? Sign up

RESULTS – INVOICE PAGE

ICE CREAM WALA

Create New Order

Create New Order

Product

Soda

Size

Standard - $4.0

Quantity

Add Item

Order Details:

Product	Size	Price	Quantity	Subtotal
Smoothie	Small	$10.0	2	$20.00
Water Bottle	Standard	$3.0	1	$3.00
Soda	Standard	$4.0	1	$4.00

Payment Method: ● Cash ○ Card

GST (18%): $4.86

Grand Total: $31.86

Complete Order

RESULTS – HISTORY PAGE
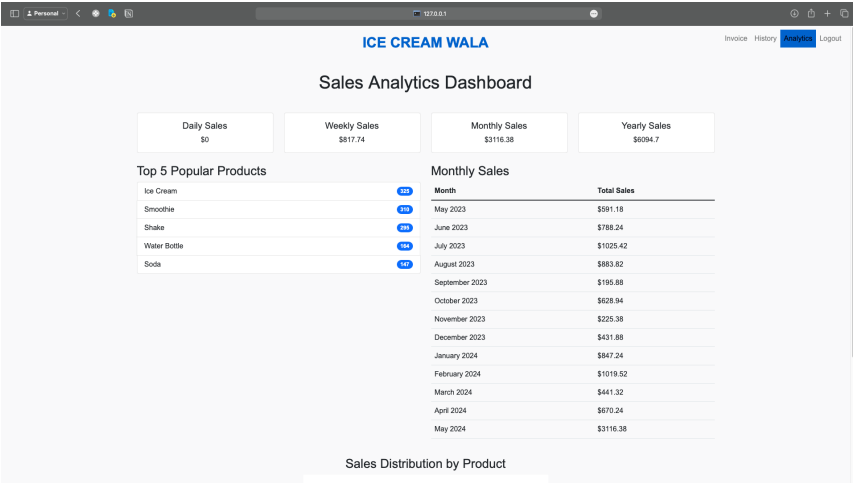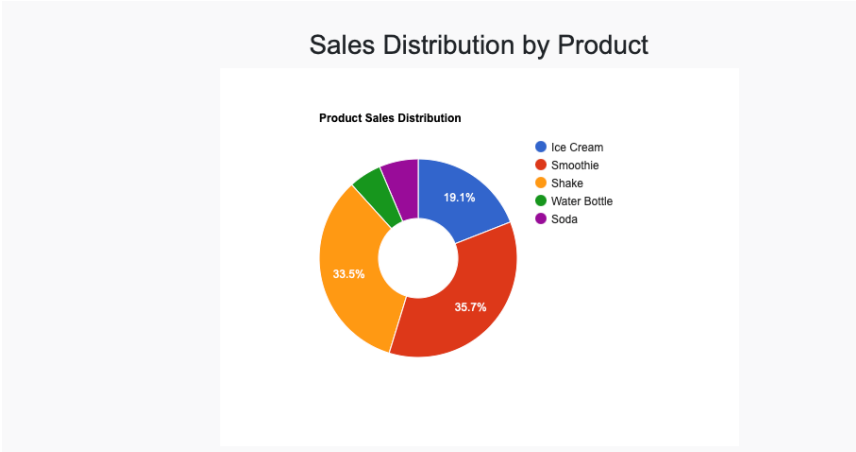
RESULTS – ANALYTICS PAGE

CONCLUSION

Enhanced operational efficiency and strategic insight.

Improved product management and decision-making capabilities.

Robust security features ensuring data integrity and scalability.