Software Requirements Specification (SRS) Document

GIU Food-Truck System

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1. Introduction

1.1 Purpose

This system is created for GIU students and staff who want to order food easily from the campus food truck without waiting in long lines. It will help them check the menu, place an order, and get notified when their food is ready for pickup. It will also help food truck staff manage incoming orders and inventory more efficiently.

1.2 Intended Audience

- **Students & Staff:** Who want to order food quickly.
- **Food Truck Staff:** Preparing and serving orders.
- **Administrators/Managers:** Reviewing sales, updating menus, and managing inventory.
- **Developers/Instructors:** Reviewing the project.

1.3 Scope

The GIU Food-Truck System allows users to browse the menu, place orders, cancel orders, and get notified when their food is ready. Staff can manage incoming orders and mark them as complete. This first version will not include full online payment integration (orders will be confirmed for cash pickup only).

1.4 Document Overview

This document describes the purpose, requirements, architecture, and features of the GIU Food-Truck System, as well as future improvements.

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2. Product Vision and Scope

2.1 Product Vision

To provide a convenient and organized way for the GIU community to order food from the campus food truck, reducing waiting times and making operations smoother.

2.2 Product Scope

The system will:

- Display the daily food truck menu.
- Allow customers to place, edit, or cancel food orders.
- Notify customers when their order is ready for pickup.
- Allow staff to view and update order statuses.

The system will not:

- Handle online payments (cash on pickup only).
- Provide delivery services.
- Include nutritional details.

2.3 Target Users

- **Students & Staff:** Customers placing orders.
- **Food Truck Staff:** Managing and preparing orders.
- **Admin:** Monitoring sales, updating menus, and managing stock.

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3. High-Level Architecture

3.1 Overview

The system will include three main layers:

- **Frontend:** Web interface for customers to order.
- **Backend:** Server managing order processing and staff dashboards.
- **Database:** Stores orders, menu, and user details.

3.2 Technology Stack

- **Frontend:** HTML, CSS, JavaScript (or React).
- **Backend:** Node.js with Express.
- **Database:** PostgreSQL.
- **Authentication:** Email/password for staff & admin, guest mode for customers.

3.3 System Components

- User & Role Management
- Menu Management
- Order Management
- Notifications (order ready)
- Sales & Inventory Reports

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4. Functional Requirements

4.1 User Stories

Students/Staff (Customers):

- As a student, I want to view the food truck menu so I can decide what to order.
- As a student, I want to place an order online so I don’t wait in line.
- As a student, I want to cancel or edit my order if I change my mind.
- As a student, I want to get notified when my order is ready for pickup.
- As a student, I want to check my past orders.

Food Truck Staff:

- As a food-truck operator, I want to view all incoming orders in real time.

- As a food-truck operator, I want to update the order status (e.g., preparing, ready).
- As a food-truck operator, I want to mark items as unavailable when sold out.
- As a food-truck operator, I want to update the menu daily.

System Administrator:

- As an administrator, I want to add/remove menu items.
- As an administrator, I want to view sales and performance reports.
- As an administrator, I want to manage system users and roles.

4.2 Main Features

- **Digital Menu & Ordering**: Displays available food items and lets customers order.
- **Order Queue Management**: Staff can view and update orders.
- **Notifications**: Alerts when food is ready.
- **Reports**: Track sales and menu performance.

4.3 Use Case Example

Use Case: Placing a Food Order

- **Actor:** Student
- **Steps:**
  1. Student logs in (or uses guest mode).
  2. Views menu and selects items.
  3. Confirms order.
  4. System saves order and sends confirmation.
- **Alternative:** If an item is sold out, system suggests another option.

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5. Non-Functional Requirements

- Page loads under 3 seconds.
- Supports at least 200 simultaneous users.
- Daily backups for order and sales data.

- Secure passwords for staff and admins.
- Easy to use on both mobile and desktop devices.

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6. Constraints

- Must use Node.js and PostgreSQL.
- No online payments in version 1.
- Must be finished within the semester.
- Limited to GIU campus food truck.

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7. Future Scope

- Add online payment integration.
- Mobile app version.
- Real-time inventory tracking.
- QR codes for faster pickup.
- Customer loyalty and discount system.

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8. Glossary

- **Order:** Food items requested by a customer.
- **Menu:** Available food truck items.
- **Customer:** Student or staff ordering food.
- **Staff:** Food truck employees preparing orders.
- **Admin:** Manager overseeing reports and updates.