

# 1.INTRODUCTION

## 1.1 purpose

The GIU Food-truck System is a comprehensive web-based application designed to enable the members of the GIU community to reserve menu items from specific food-trucks on campus for pick-up within a given time window, thus alleviating the problem with long-waiting times for food and beverage items during peak periods in between classes. This system enables seamless menu browsing, order placement, and order management for food-truck customers as well as providing a similarly intuitive, efficient, and scalable solution for food service providers. The intended audience for this software are the GIU community members and food truck staff.

## 1.2 Scope

- Customer web app food browsing menus, placing orders and tracking order progress from a food court within the GIU campus
- Food truck portal for order management
- Admin panel for managing users, and food trucks

## 1.3 Users

- Customers
- Food trucks
- System Administrators

## 2. High level architecture

- Frontend: Modern HTML, JavaScript, and JQuery. Or JavaScript Framework
- Backend: RESTful API using [Node.js](#)
- Database: Relational (PostgreSQL)
- Authentication: currently, none
- Payment Gateway: currently, none
- Hosting: currently, none

## 3.Functional requirements:

### 1.User story:

- As a user, I want to sign up, log in and log out, so that I can securely access the system.
- As a client, I want to be able to add selected items to my cart and specify the quantity so that I can easily prepare my full order for purchase.
- As a client, I want to edit, cancel, or delay my order, so that I can adjust my choices when needed.
- As a client, I want to see items marked as sold out, so that I don't order unavailable food.
- As a client, I want to select one of the available pickup slots, so that I can schedule my order for a convenient time.

- As a client, I want to place my food order at least 30 minutes in advance, so that the food truck has enough time to prepare it.
- As a client, I want to receive updates when my food preparation begins and when it is ready for pickup, so that I can arrive on time.

## **2.Food Truck owner story:**

- As a food truck operator, I want to update the menu and mark items as sold out, so that clients always see correct information.
- As a food truck operator, I want to view incoming orders, so that I can manage them effectively.
- As a food truck operator, I want to confirm, reject, or update orders, so that I can control preparation flow.
- As a food truck operator, I want to manage order overflow and apply penalties, so that I can keep operations fair and efficient.

## **3.Admin story:**

- As an admin, I want to manage customers and food truck accounts.
- As an admin, I want to be able to log in and out of the admin panel.

## **4.Non-functional requirements:**

- page loads in under 5 seconds 99% of the time.
- Backup & Recovery: Automated daily backups
- Concurrent Users: Support for at least 500 simultaneous users
- Usability: Intuitive UI/UX, multilingual support.
- Scalability: Support scaling for new regions and features.
- Compatibility: Android, iOS, Web.

## **5.Future scope:**

- Membership system.
- Light and dark mode
- Reviews
- Wallet system

## **6.External Interface Requirements**

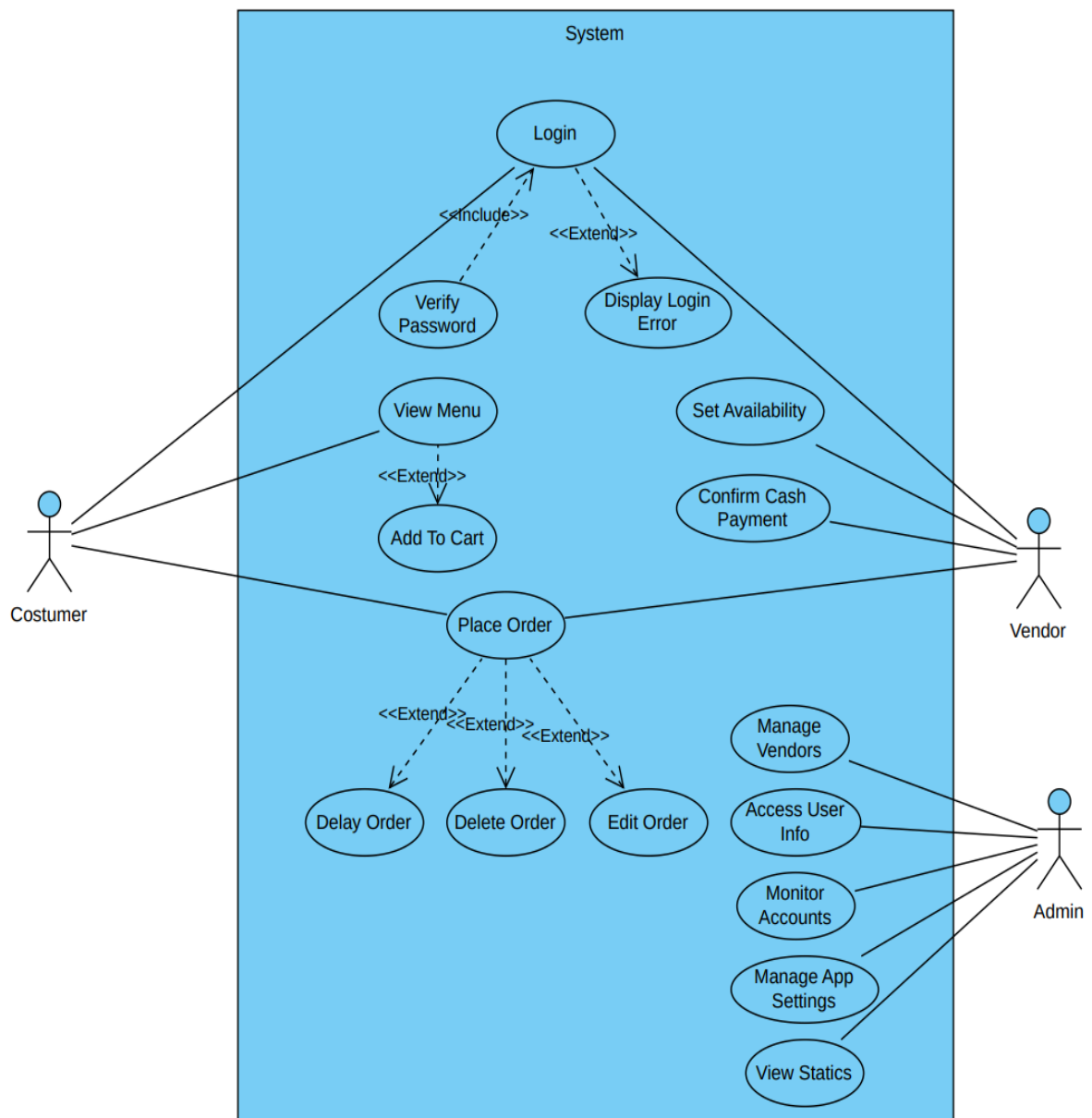
- University authentication (for GIU community access)

## **7.Constraints**

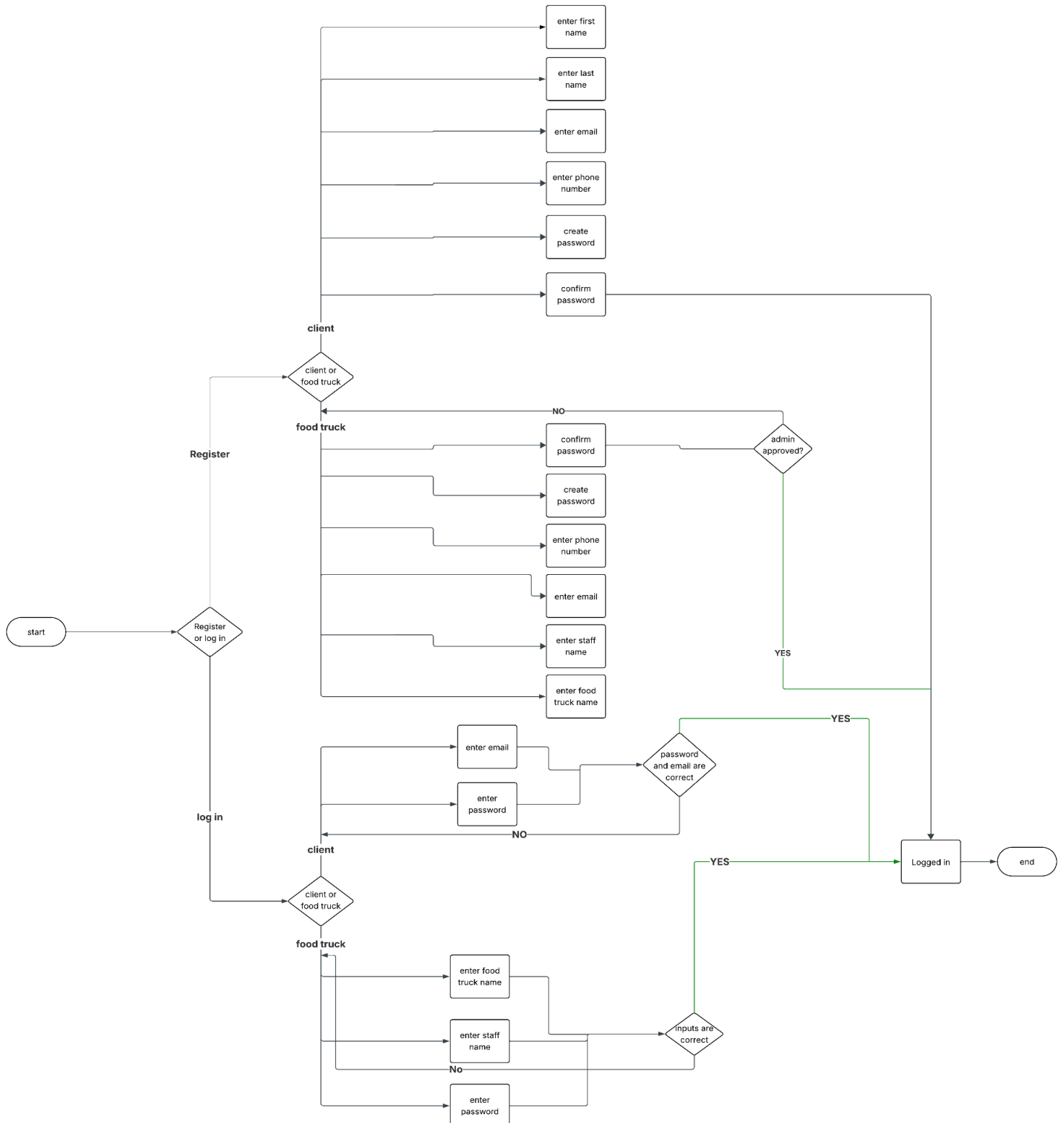
- Limited to internal GIU users
- Must run efficiently on standard web and mobile browsers
- There is no payment gateways for online transactions
- No delivery system
- Must comply with local data privacy regulations (e.g., GDPR)
- System Operating Hours for Food Service Providers:  
8:30 am - 4:30 pm

- System Operating Hours for Food-truck Patrons:  
8:30 am - 4:00 pm

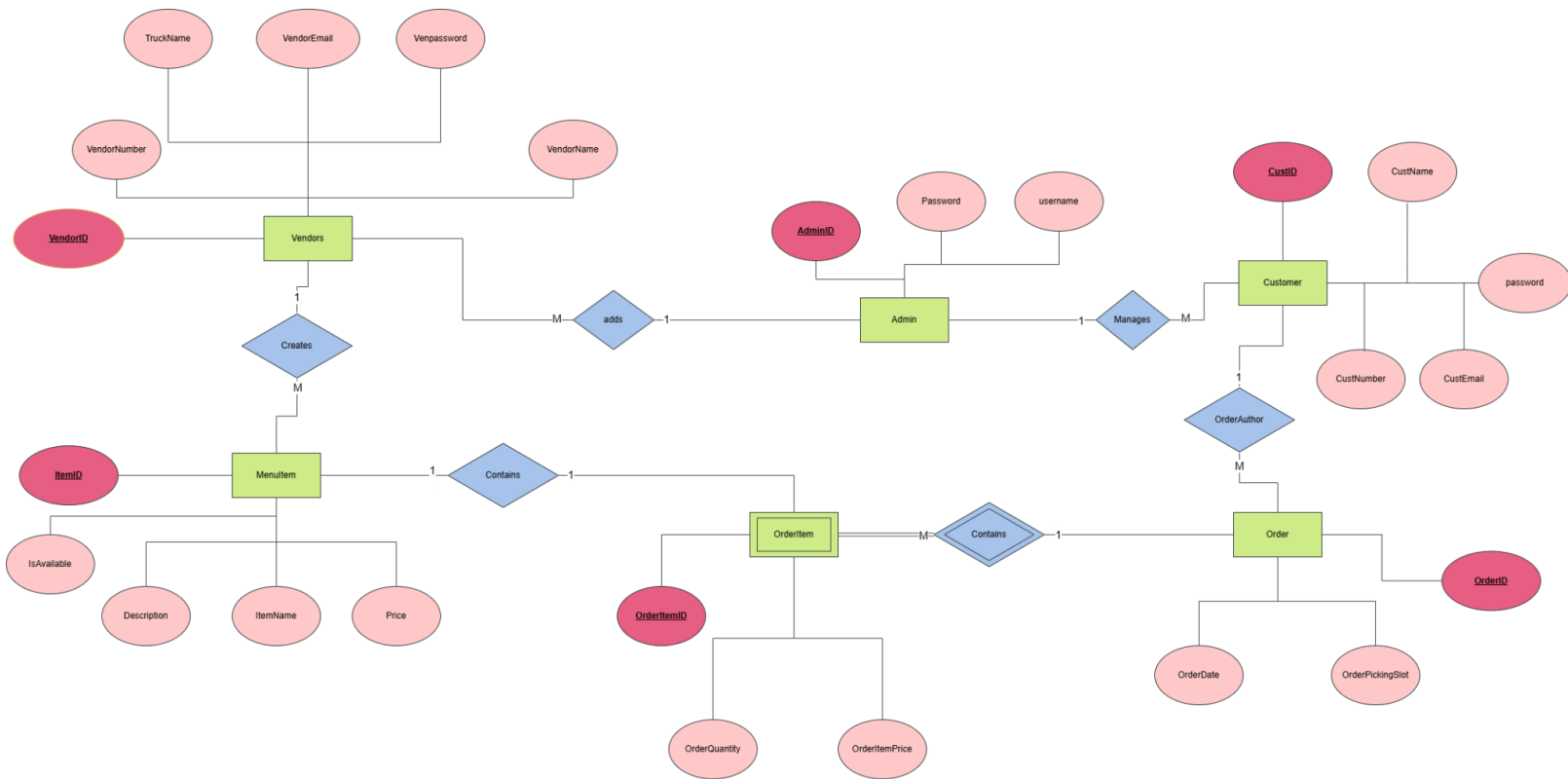
## Use-case Diagram:



## Flow Chart:



# ERD



# Tables

