Software Requirements Specification

for

A Food Delivery System for Schine Student Center

Version 1

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1. Introduction

This is the Software Requirements Specification (SRS) for the Schine Student Centre Food Delivery System! This document serves as a comprehensive guide outlining the functional and non-functional requirements, user interactions, and system architecture for the development of a seamless food delivery platform tailored specifically for the Schine Student Centre community.

1.1. Purpose

1. Define the functional and non-functional requirements of the food delivery system.
2. Establish a clear understanding between developers and users regarding the system's capabilities and limitations.
3. Provide a basis for system design, implementation, testing, and validation.
4. Serve as a reference for future maintenance, updates, and enhancements of the system.

1.2. Scope

The scope of this SRS encompasses the development of a comprehensive food delivery system tailored for the Schine Student Center at Syracuse University. The system aims to streamline the ordering and delivery process for students, faculty, and staff within the campus premises. The document specifies the requirements for the following:

1. User-friendly web and mobile interfaces for browsing menus, placing orders, and managing accounts.
2. User authentication and account management.
3. Order management.

1.3. Definitions

BDD: Block Definition Diagram
UML: Unified Modeling Language

1.4. References

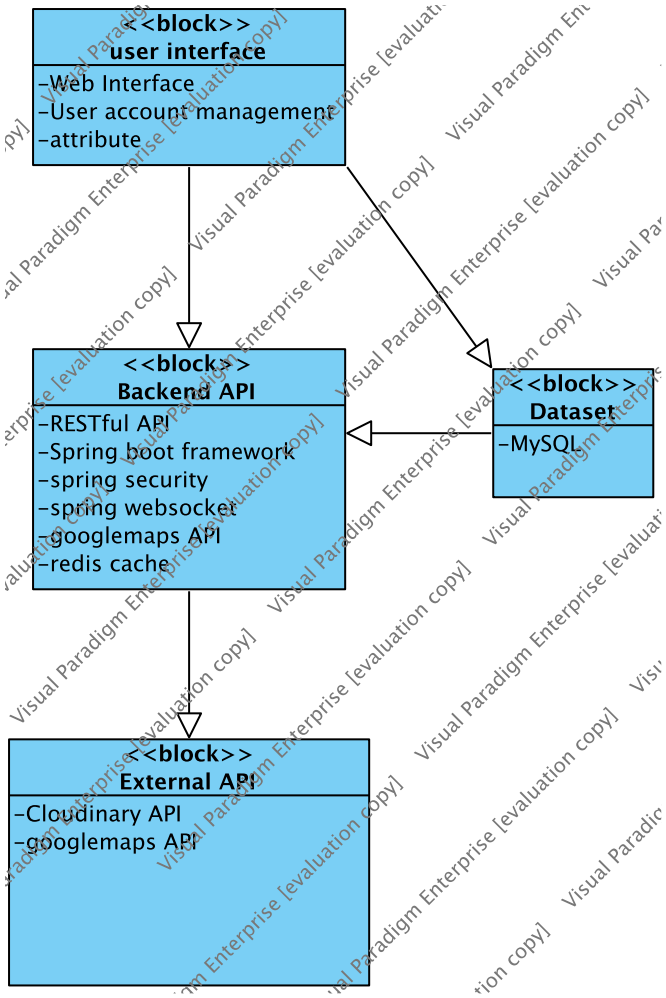
1. IEEE Std 830-1998 - IEEE Recommended Practice for Software RequirementsSpecifications - Revision of IEEE Std 830-1933

2. Overall Description

2.1. Product Perspective

The food delivery system proposed for the Schine Student Center at Syracuse University aims to address the existing void in providing convenient and efficient dining options for the campus community. The food delivery system for the Schine Student Center represents a significant advancement in campus dining, providing users with a convenient, efficient, and enjoyable culinary experience. Figure 1 depicts a system overview using a UML Block Definition Diagram (BDD).

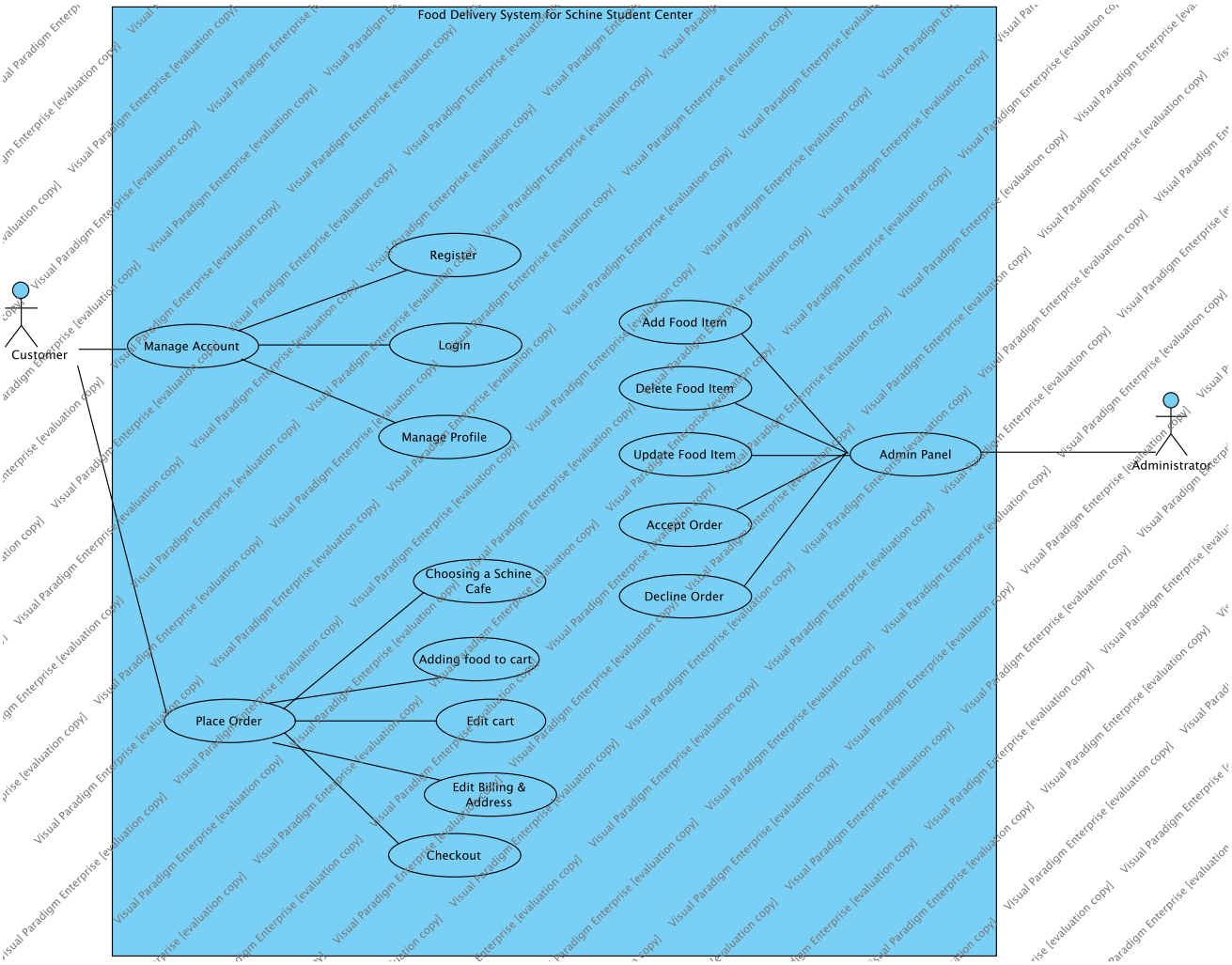
2.1.1. Block Defenition Diagram (BDD)



2.2. Product Functions

The use case diagram below displays the system's users and how they expect to interact with it.

2.2.1. Use Case Diagram



2.2.2. Administrator

ID: AC60

2.2.3. Customer

ID: AC59

The "Customer" actor in the use case diagram represents individuals utilizing the food delivery system at the Student Schine Center. Customers engage with the system to place orders for food items available within the establishment, facilitating efficient and convenient dining experiences. As primary users of the system, customers interact with various functionalities such as browsing menus, selecting items, specifying delivery preferences, making payments, and tracking order statuses. Their participation in the system is crucial for initiating and completing food delivery transactions, ensuring satisfaction and fulfillment of culinary preferences within the campus communit

2.2.4. Food Delivery System for Schine Student Center

Add Food Item

ID: UC126
The "Add Food Item" functionality enables users to add specific food items to their virtual shopping cart within the food delivery system at the Student Schine Center.

Accept Order

ID: UC129
The "Accept Order" functionality allows restaurant staff or delivery personnel to acknowledge and accept incoming orders within the food delivery system at the Student Schine Center.

Adding food to cart

ID: UC121
The "Adding Food to Cart" functionality allows users to select desired food items from the menu and add them to their virtual shopping cart within the food delivery system at the Student Schine Center.

Admin Panel

ID: UC125
The Admin Panel serves as the centralized control hub within the food delivery system at the Student Schine Center, providing administrators with tools and functionalities to manage various aspects of the system, including menu management, user management, order tracking, and analytics.

Checkout

ID: UC124
The "Checkout" functionality allows users to review their selected items, provide necessary delivery information, select payment methods, and complete the transaction within the food delivery system at the Student Schine Center.

Decline Order

ID: UC130
The "Decline Order" functionality enables restaurant staff or delivery personnel to reject incoming orders within the food delivery system at the Student Schine Center.

Choosing a Schine Cafe

ID: UC120
The "Choosing a Schine Cafe" functionality allows users to select a specific cafe within the Schine Center from which they wish to order food items within the food delivery system.

Delete Food Item

ID: UC127
The "Delete Food Item" functionality allows users to remove specific food items from their virtual shopping cart within the food delivery system at the Student Schine Center.

Edit Billing & Address

ID: UC123

The "Edit Billing & Address" functionality allows users to update their billing information and delivery addresses within the food delivery system at the Student Schine Center, ensuring accuracy and relevance of their account details.

Edit cart

ID: UC122

The "Edit Cart" functionality allows users to modify the contents of their virtual shopping cart within the food delivery system at the Student Schine Center before proceeding to checkout.

Login

ID: UC118

The "Login" functionality enables users to access their accounts within the food delivery system at the Student Schine Center by providing valid credentials.

Manage Account

ID: UC113

The "Manage Account" use case encapsulates the functionality enabling customers to maintain and update their personal information within the food delivery system at the Student Schine Center. This use case empowers customers to manage their account details, including profile information, contact details, delivery addresses, and payment methods. Through this feature, customers can ensure the accuracy and relevance of their account information, enhancing the overall user experience and facilitating seamless transactions. Key functionalities within this use case may include options for updating personal details, changing passwords, adding or removing payment methods, managing delivery preferences, and viewing order history. Effective implementation of the "Manage Account" use case contributes to customer satisfaction and retention by providing them with control and flexibility over their account settings within the food delivery ecosystem.

Manage Profile

ID: UC119

The "Manage Profile" functionality allows users to update and maintain their personal information within the food delivery system at the Student Schine Center, ensuring accuracy and relevance of their account details.

Update Food Item

ID: UC128

The "Update Food Item" functionality allows users to modify specific attributes or details of a food item within the food delivery system at the Student Schine Center, such as its name, description, price, or availability.

Place Order

ID: UC114

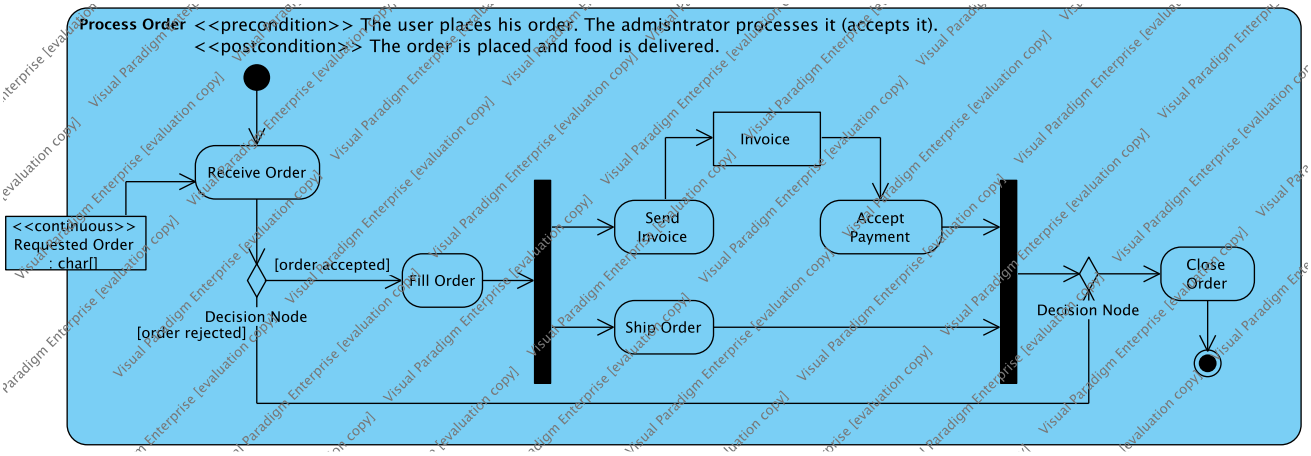
The "Place Orders" functionality enables users to select food items from the menu and initiate the process of ordering within the food delivery system at the Student Schine Center.

Register

ID: UC117

The "Register" use case encompasses the process through which users can create new accounts within the food delivery system at the Student Schine Center. This use case facilitates the onboarding of new customers into the system, allowing them to establish their presence and access its features. During registration, users provide essential information such as their name, email address, contact details, and optionally, delivery preferences. Upon successful registration, users gain access to the full range of functionalities offered by the food delivery system, including browsing menus, placing orders, managing accounts, and tracking deliveries. The "Register" use case plays a pivotal role in expanding the user base of the system and initiating positive engagement with prospective customers, ultimately contributing to the growth and sustainability of the food delivery service within the campus community.

Activity Diagram



Process Order

User Selection:

The process begins when a user accesses the food delivery system through the web interface or mobile application.

The user browses available restaurants and menus to select desired food items.

Order Placement:

Once the user has selected the desired items, they proceed to place the order.

The system collects necessary order details, such as food items, quantity, delivery location, and any special instructions.

Order Submission:

After confirming the order details, the user submits the order through the system.

The system validates the order information for accuracy and completeness.

Order Processing:

Upon receiving the order, the system processes it for delivery.

The system verifies the availability of selected items and ensures they adhere to any dietary restrictions or preferences specified by the user.

Order Fulfillment:

Once the order is prepared, it is handed over to the designated delivery personnel.

The delivery personnel follow the provided delivery instructions to ensure timely and accurate delivery to the user's specified location on campus.
Delivery Confirmation:
Upon successful delivery, the user receives a notification confirming the completion of the order.
The system updates the order status to "delivered" and records the transaction details for future reference.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Accept Payment
The payment made by the customer is successful and is received by the restaurant.


unnamed


Close Order
Order is closed when received by the customer


Decision Node


Decision Node


Fill Order
The order placed is prepared and ready to deliver.


Invoice


Receive Order
The order placed by the customer is received by the administrator/restaurant


Send Invoice
The invoice/bill is sent to the customer.


Ship Order
The order is shipped to the customer's address with the help of a delivery partner.

Requested Order