REQUIREMENTS

TEAM ESPRESSO DELIVERY

(DION GREEN, TREVOR GREEN, DOVE RAY, ADELE ROUSSEAU)

PROFESSOR ADKISSON

SWE 3133, GROUP BBB

OCTOBER 9, 2022

TABLE OF CONTENTS

‖ REQUIREMENTS DEFINITION

1) Order System:

1.1 Menu database that contains item names, descriptions, and price

1.2 Menu customization options such as sizes and addons that modify the price accordingly

1.3 Order contents, that stores the items included in the order and any specifications

1.4 Ability to add and remove items from the order

1.5 Ability to add "notes" to the order for customer requested specifications

1.6 Cancel order option to abandon the current order

1.7 Show total price and tax total dynamically as items are added

1.8 Payment card authentication that checks that the imputed card number is valid during checkout

1.9 Receipt database that stores all post-checkout data for every order completed

1.10 Order should be removed from active orders after checkout is completed

1.11 Total price plus tax should show during checkout

1.12 Ability to add, remove or edit items from the menu database

1.13 Ability to suspend items from the menu, preventing them from being selected for an order without removing the item data from the system, item can be unsuspended at a later time

2) Customer Profiles:

2.1 Database of all customer profiles stored in the system that includes name, phone number, email, and reward points total.

2.2 Ability to use a customer profile in the checkout of an order, rewarding points to said profile based on the total monetary price or allowing the order to be paid for in reward points if the customer has enough stored, removing said points after

2.3 Ability to add a new customer to the database during checkout

2.4 Ability to manually add reward points to specific customers

2.5 Configurable reward points so the user can control how many points are awarded for every dollar spent

3) Nonfunctional Requirements:

ℹ 3.1 This program is made to work on a desktop computer running windows 10 or later, compatibility on other systems or versions is not guaranteed

Requirements Priority Table:

Requirement tag	Requirement necessity
1.1	Must have
1.2	Need to have
1.3	Must have
1.4	Must have
1.5	Nice to have
1.6	Must have
1.7	Nice to have
1.8	Must have
1.9	Need to have
1.10	Must have
1.11	Need to have
1.12	Must have
1.13	Nice to have
2.1	Must have

2.2	Must have
2.3	Must have
2.4	Nice to have
2.5	Need to have
3.1	Must have

‖ DECISION TABLE

Conditions	Condition Entry				
Is Member?	Member			Anonymous	
Presented valid credit card?	Yes	No		Yes	No
Has sufficient points?	-	Yes	No	-	
Actions	**Action Entry**				
No valid payment method			X		X
Pay with credit card	X			X	
Pay with rewards points		X			
Earn rewards points	X				

> ℹ️ *This table demonstrates the differences in payment methods of a customer who is a member and a customer who is ordering anonymously.*

USE CASE DIAGRAM
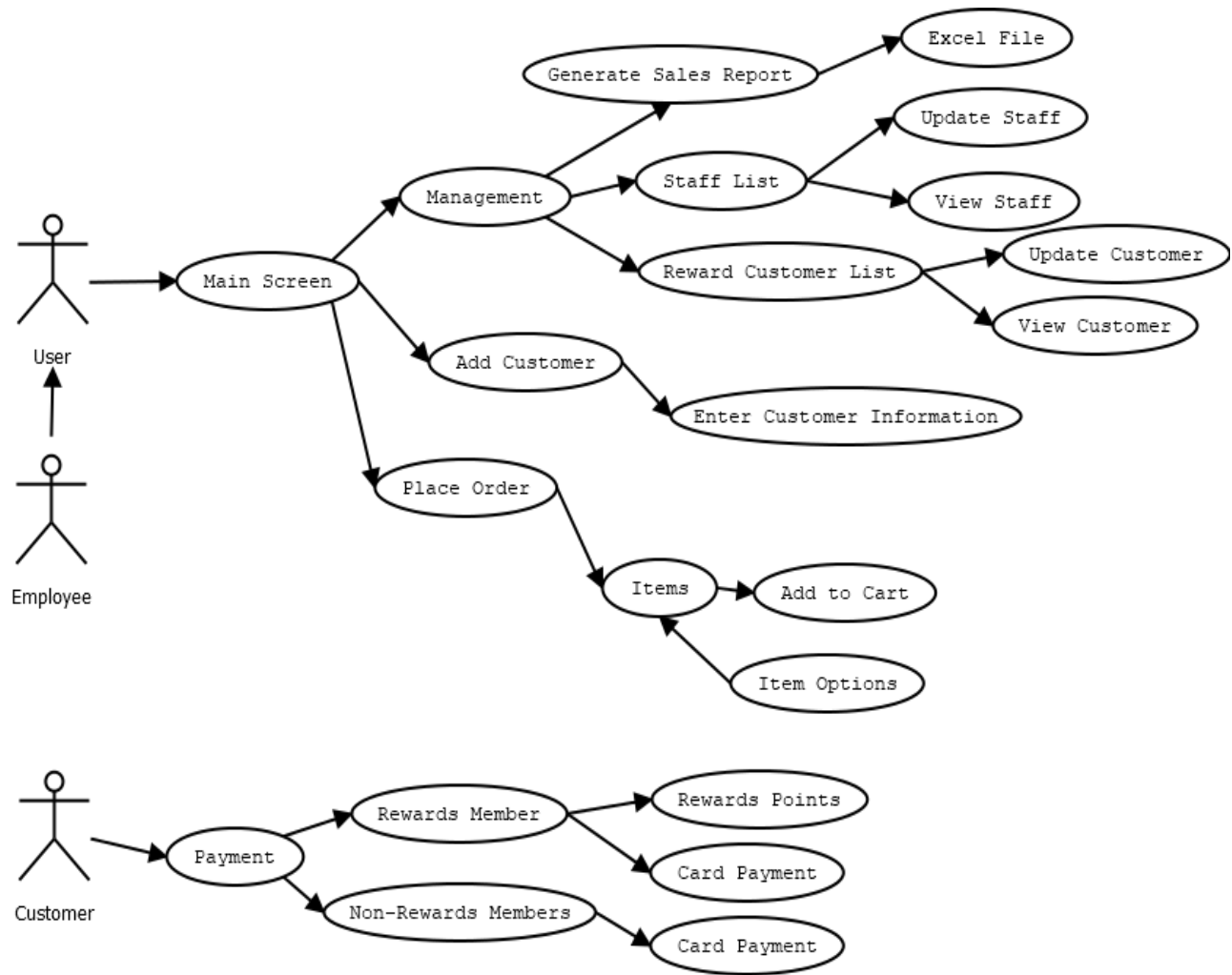
USE CASE FLOW:

Flow of Events For Existing Member Ordering a Drink:

ℹ Preconditions:

A customer must be a member of the coffee shop.

Main Flow:

The "Customer List" button will be pressed to allow for the user to give their name to be matched to the list. Then the customer can order their drink and add any kind of customizations they would like. When the customer goes to pay, they can either pay with money, or with reward points. If they pay with money, they get a corresponding amount of reward points.

Sub-Flows:

[Drink Selection]: Allows the kind of drink to be selected.

[Extras]: Allows different kinds of flavorings and toppings to be added.

[Payment]: The drink selection screen will also calculate the payment needed, adding together the price of the base drink, the extras, and the tax. Pressing the button will lead to the Payment Screen.

[Finalizing Payment]: The user can pick between paying with a credit card or paying with reward points. If the user pays with a card, it will add the corresponding amount of reward points (rounded down), to the user's profile. After payment is successful it will lead to the receipt screen.

Alternate Flows:

If the order is canceled at any time, then the system goes back to the main screen.

Flow of Events for a Customer That is Not a Member Buying a Drink:

ℹ Preconditions:

The customer is not a member of the coffee shop.

Main Flow:

The "Order Drink" button will be pressed. Then the customer can order their drink and add any kind of customizations they would like. When the customer goes to pay, they must pay with their credit card.

Sub-Flows:

[Drink Selection]: Allows the kind of drink to be selected.

[Extras]: Allows different kinds of flavorings and toppings to be added.

[Payment]: The drink selection screen will also calculate the payment needed, adding together the price of the base drink, the extras, and the tax. Pressing the button will lead to the Payment Screen.

[Finalizing Payment]: The user must pay with a card. After payment is successful it will lead to the receipt screen.

Alternate Flows:

If the order is canceled at any time, then the system goes back to the main screen.

If the credit card is not valid an error message appears.

Flow of Events for Adding a Customer to the Database:

Preconditions:

The customer is not a member of the coffee shop.

Main Flow:

The barista clicks the "Add Customer" button which leads to the Add Customer screen. On that screen the customer gives their first name, last name, and phone number. The phone number is verified to be unique and valid. After the customer is added it goes directly to the order drink screen.

Sub-Flows:

[Information]: The user's first name, last name, and phone number are verified to be real, and if they are valid, they are added to the customer database. After they are added the system switches to the Order Drink Screen.

Alternate Flows:

Canceling on the Add Customer screen will lead back to the home screen.

Flow of Events for Generating a Sales Report:

Main Flow:

When needed a user will be required to generate a sales report for the coffee shop. From the main screen the user will navigate to the management button, this will take them to the management screen. In the management screen the user will be able to press a button to generate a sales report.

Sub flow:

Opening an excel file with sales report: An excel file while be generated after clicking the generate a sales report, allowing the user to view the specific data in the sales report.

Alternate Flow:

Going to the Main Screen: Pressing the home button will take the user back to main screen.

Flow of Events for Viewing Customer List:

Main Flow:

When needed a user a will be able to view the list of reward customers in the coffee shop system. From the main screen the user will navigate to the management button, this will take them to the management screen. In the management screen the user will be able to press a button to view a list of rewards members in the coffee shop system.

Sub flow:

Modifying Member Information: After a list of rewards members is present the user will have the ability to edit the rewards customers information.

Alternate Flow:

Going Back: Pressing the back button will take the user back to the management screen

Going to Main Screen: Pressing the home button will take the user back to main screen.

Flow of Events for Viewing Staff List:

Main Flow:

When needed a user will be able to view the list of a staff members in the coffee shop system. From the main screen the user will navigate to the management button, thus will take them to the management screen. In the management screen the user will be able to press a button the view the list of current staff members and their information.

Sub Flow:

Modifying staff member's information: After the list of staff members is generated, the user will be able to view and modify some staff member information

Alternate Flow:

Going Back: Pressing the back button will take the user back to the management screen

Going to Main Screen: Pressing the home button will take the user back to main screen.

Flows of Events for Viewing Customer Receipt:

Preconditions:

Customer order: The user must have already taken the customer's order

Payment: Before the user can generate a receipt for the customer, they must take the customers payment.

Main Flow:

The user will be presented with the receipt screen. They can then display it to the customer which shows the customer the drinks they ordered including all customizations. They screen will also display the subtotal, tax, and total, along with the payment method used

Flow of Event for Customer Providing Payment:

ℹ Preconditions:

Customer Order: The customer must have an active order placed to pay for an order

Main Flow:

The user will be presented with a payment screen where then the customer will pay for the order by using either rewards points or credit card.