Cairo University
Faculty of Computers and Artificial Intelligence

CS251

Intro. to Software Engineering

Toffee

Software Requirements Specifications

Version 1.0

ID	Name	Email	Mobile
20210346	Mohamed Essam Mahmoud Osman	11410120210346@stud.cu.edu.eg	+20 11 1931 5089
20210508	Maya Ayman Zain El-Din	11410120210508@stud.cu.edu.eg	
20210524	Rawan AbdelRahman Younis Mohamed	11410120210524@stud.cu.edu.eg	

March-2023

CS251: Phase 1 – MRM
Project: Toffee

Software Requirements Specifications

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Software Requirements Specifications

Team

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Document Purpose and Audience

Purpose

The purpose of this document is to provide a clear and comprehensive overview over the system's functional and non-functional requirements. This document is intended to be a primary communication tool among stakeholders and developers to ensure that everyone involved has a common understanding of how the system should behave. This document will facilitate the development team's job by providing it with the necessary information regarding the system that will ensure the most effective implementation of the software and minimize reworking time, hence overall costs and delays.

Audience

- Stakeholders
- Development Team

Introduction

Software Purpose

The purpose of Toffee is to facilitate the process of buying sweets from the store for the customer by providing an easy, fast online alternative. The customers will have access to all the store's catalog to view/order through the mobile and web applications. The software will

Software Requirements Specifications

also provide the manager with enough information about customers and statistics about how the store is performing. The system will also provide an admin with certain privileges regarding the application.

It ensures to improve the overall experience of both customers and managers.

Software Scope

- The system will have an organized and simple view of items in the store.
- It helps the customer to order, send gifts, re-order and see the delivery's time and location.
- An easy navigation through different products' descriptions in catalog and a fast track of sales in the application.
- It provides statistics for the manager to monitor his/her store to know which item is the most selling or the daily and monthly salary, and determine the employee of the month through points.
- Awards the customers with loyalty points to improve the customer relations.

Definitions, acronyms, and abbreviations

Phrase	**Definition**
OTP	A one time password that is automatically generated to authenticate the user for a single transaction or login.
DBMS	Database management system is a software that enables developers to control, maintain and access the database.
Availability	It shows how likely the system is accessible to the user at a given point in time . If a customer opens it at any time, will it always work fine ?
Performance	It refers to how fast the software system is responding to a certain users' action or how much the user waits till the target operation is performed.
Scalability	Refers to the maximum workload the software system can withstand with the same high performance.
Portability	It shows how the system can be run on different hardware devices or with various pieces of softwares.

Software Requirements Specifications

Compatibility	It shows if the system can exist and runs perfectly with other software systems.
Maintainability	Refers to how much time the system takes to be restored after a failure.
Reliability	Refers to the probability that the system is performing well without a failure.
Useability	It indicates how the system is effective and friendly to the users.
Effectiveness	It indicates the system always outputs what the user wants. It shows that the system should do the right things.
Efficiency	It indicates that the system uses the least amount of resources to do the desired order. It ensures that the system is doing the things right.
Readability	Refer to how clear is the source code of the system.
CM	Configuration management. It's a way to make sure that the system performs as expected to, as changes are made over time
Data integrity	Refers to how much the data taken from customers is correct and accurate.

Requirements

Functional Requirements

Requirement	**Requirement Statement**
User Registration	The system should enable a new user to create an account using his/her name, email, address, and password (with specific guidelines). An OTP should be sent to verify the email account and confirm registration.
User Login	The registered user should be able to login to the system (either web or mobile application) using a valid email and a matching password. The system should prompt the user to choose his/her role (either an admin or a regular user).
User Profile	The system should allow the user to view his/her profile.

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Edit Profile	The system should allow the user to edit his/her information (name, email, password, address).
Forgot Password	The system should allow the user to reset the password if forgotten. It will send an OTP to the registered email.
Add New Password	The system should allow the user to add a new password.
Reset Password	The system should allow the user to reset the old password.
Switch Profile	The system should allow the admin to switch between admin and customer profiles.
Search	The system should allow users to search for specific sweets by name or brand from the catalog (e.g., Galaxy, …).
Notifications	The system should notify the user if his/her order is going to arrive soon.
View Catalog	The system should allow the user to view the catalog of the available items at the store at the moment of accessing it.
View Item	The system will store the item's name, description, any available discounts, brand, and price. The system will allow the user to view the previously mentioned information.
View Statistics	The system should allow the admin to view statistics of the store (sales, popular products, revenue).
Suspend User	The system should allow the admin to suspend any user using his/her email due to any violation to certain rules.
Unsuspend User	The system should allow the admin to unsuspend any user using his/her email.
View Orders	The system should allow the admin to view all previous orders including each order's items , quantity , and price.
Set Loyalty Points Scheme	The system should allow the admin to set a specific loyalty scheme.

Software Requirements Specifications

Set Cash on Delivery Fee	The system should allow the admin to set cash on delivery fees.
Add Loyalty Points to Customer	Automatically set points (10% of order price if payment was online, 5% if cash) to the customer relative to purchase quantity. Loyalty Points have no expiry date.
Add Items	The system should allow the admin to add items to the catalog. The admin should add the item's name, description, whether it can be bought in kilos or as units, price, any discounts available, and category.
Update Item	The system should allow the admin to update any item's specifications (description, any available discounts, brand, the maximum allowed unit/kilo of any item the customer can buy, and price).
Remove Item	The system should allow the admin to remove items from the catalog.
Add Categories	The system should allow the admin to add categories to the catalog.
View Order History	The system should allow the user to view previous orders.
Re-order	The system should allow the user to re-order any previous order under the same conditions, if items are available.
Add to Cart	The system should allow the user to add an item and its quantity from 1 kilo/unit up to 50 kilos of loose items and 50 units of sealed ones items to the cart.
View Cart	The system should allow the user to view the items' name, quantity, and price selected in the cart. It should also allow the user to view the total price before applying any discounts, vouchers, or loyalty points. It will also include a checkout option.
Remove Item From Cart	The system should allow the user to remove items from the cart.
Check-Out	To check out, the customer should be logged in. The system should then display the final amount to be paid in addition to the delivery fee (same for every governorate). There may be an additional fee of 20 pounds (can be modified) if the customer selected cash on delivery. The system should also disable payment by cash option if the final amount to be paid exceeds 1000 pounds. If the check-out was successful, a confirmation message should be displayed. Otherwise, an error message should be displayed.

Software Requirements Specifications

Select Payment Method	The system will allow the user to pay via eWallets, Fawry, or cash. The system should display a confirmation message if payment was successful. Otherwise, it should display an error message.
Pay via E-Wallets	The system should request from the customer his/her wallet's credentials.
Pay via Fawry	The system should display a code for the customer to pay. Once payment is completed, a confirmation message will be sent.
Pay via Cash	The system should allow the user to pay via cash.
Apply Loyalty Points	The system should allow the user to apply loyalty points if any to the order.
Apply Vouchers	The system should allow the user to apply vouchers if any to the order. In case the applied voucher is greater than the order's cost, another voucher with the remaining amount will be sent to the user.
Verify Phone Number at Checkout	The system should verify the given phone number by sending an OTP.
Prompt the Customer for Address	The system should prompt the user to enter the address he/she wishes the order be delivered to.
Request eWallets Credentials	The system should allow the user to enter his/her eWallet's credentials.
Track Order	The system should allow the user to track his/her order (its current location and expected arrival time).
Cancel Order	The system should allow the user to cancel the order within 24 hours from ordering and if the payment method was eWallet or Fawry, the money is refunded as loyalty points.
Buy Voucher	The system should allow the user to buy a voucher from available ones.
View Vouchers	The system should allow the user to view his/her current vouchers along with their expiry dates.
Send a Voucher Gift	The system should allow the user to enter the gift's receiver email associated with his/her account and voucher code.
Contact Us	The system should allow the user to contact store's managers to inquire about

	any issue (e.g suspension).

Non Functional Requirements

Measure	Details
Accessibility	The system has web accessibility as there are not any barriers that prevent disabled people to go to the website as each part has an image and text that describe the situation yet it may need some limited bandwidth or internet speed to open.
Availability	The system works well most of the time. If the system is in maintenance or has a failure for other reasons, it stops working after updating mostly about one day and users must get notified before that.
Reliability	The system should work fine about 95% of the time in most of the cases.
Configuration management	The architecture of the system follows guided documentation for modeling, design, testing and maintenance. So it's easy to improve the performance, reliability and maintainability over time by just inspecting the architecture of the system.
Data Integrity	The system uses a database management system for storing the data of the users to hold data integrity and avoid any data violations or corruptions. DBMS always ensures that the records of customers are entered in the correct way.
Efficiency	The developers will do their best to make the program with the least amount of money by getting the most effective implementation of the software, minimize reworking time and avoid wasting materials.
Effectiveness	The system ensures to produce the desired order of the customer, not changing what people had ordered and making sure there is no misunderstanding in the application.
Maintainability	The system has high maintenance as it builds based on a design and model that can be easily modified and updated. Its implementation is clear to make the changes easier when new requirements appear. Every 2 weeks it gets a newer version of the product to modify errors or any unexpected working conditions.

Software Requirements Specifications

Platform	The system can work on desktop computers or mac laptops through any browser and also have a mobile application that supports both android and IOS.
Privacy	The system ensures privacy for the customers so that no other customers can view your stats or your information.
Readability	The source code follows the rules of clean coding so it is easy to read and know the control flow and operation of the code.
Scalability	The system is supporting up to 3000 simultaneous users without affecting the performance yet only 20 orders are taken at the same time due to delivery issues.
Usability	• The system is a user-friendly website based on the client's point of view that shows the customer everything he needs in a simple and organized format. • Sending or receiving a gift from the app takes at least 2 minutes. • Customers can easily order any candies or sweets by just a single click to add to the cart. • Going through verification to ensure that order goes to the right person may take 5 minutes based on the customer. • Suspending users by admin takes the least amount of time based on the database of the system. • Orders history available only for the last 6 months and delete after that.
Portability & compatibility	• The system supports android versions starting from android 10 and IOS starting from version 10.0. • The system is compatible with all browsers as edge, opera gx, chrome, and firefox except Internet explorer.
Performance	• The system can generate the order upon the click of the user and checking for address and number can be estimated within 5 minutes.

Software Requirements Specifications

	• If the order will be paid through Fawry pay, then the order holds till the user pays first. • The catalog runs at most within 30 seconds at the limited speed of the system. • Checking for the voucher code or loyalty point takes at most 1 minute. • The estimated delivery time is depending on the delivery man's distance from the customer by certain algorithms for the shortest path. • Search for anything in the catalog takes less than 2 minutes based on the data loaded in the catalog. • If there is a load in the application it may take more time to make an order by 1 minute at least.

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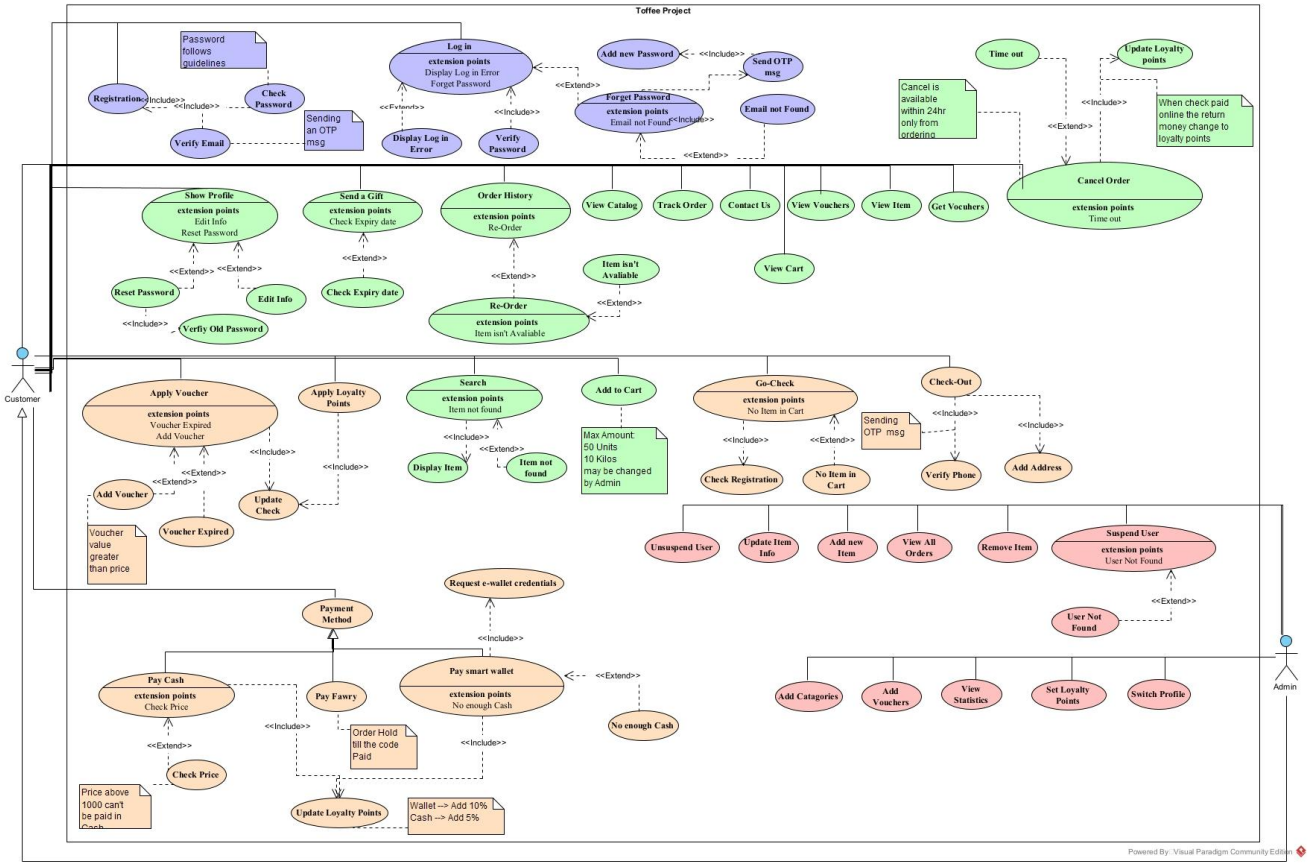
System Models

Use Case Model



Kindly Zoom in for details.

- **Customer:** The user that can view catalog and make orders.
- **Admin:** The person who can make anything in the application as monitoring, viewing, updating.

Software Requirements Specifications

Enriched User Stories

User Story #1

User Story ID	US #1
User Story Name	User Registration
Actors	Admin/Customer
Description	**As** a customer/admin **I like** to be able to register to the application/website **So** that I have a profile on the app/website
Pre condition	
Post condition	The user will have an active account
Acceptance Criteria	**Given** I'm a logged-out system user and I'm on the Sign-Up page **When** I fill in the name, email, address, and password fields and I click the Register button **Then** the system signs me up

Software Requirements Specifications

Scenarios

Normal Scenario

Actor Action	System Response
1- User clicks on Sign Up	
	2- System displays name, email, address, and password fields
3- User enters name, email, address, and password. 4- Click **Sign Up**	
	5- System sends an OTP to verify the email 6- System verifies the password follows certain guidelines 7- System displays a message to indicate successful registration 8- System redirects the user to his/her profile

Exceptional Scenario 1

Software Requirements Specifications

Actor Action	System Response
1- User clicks on Sign Up	
	2- System displays name, email, address, and password fields
3- User enters name, email, address, and password. 4- Click **Sign Up**	
	5- System sends an OTP to verify the email
6- No reply from the user (OTP expires)	
	7- System displays unable to register

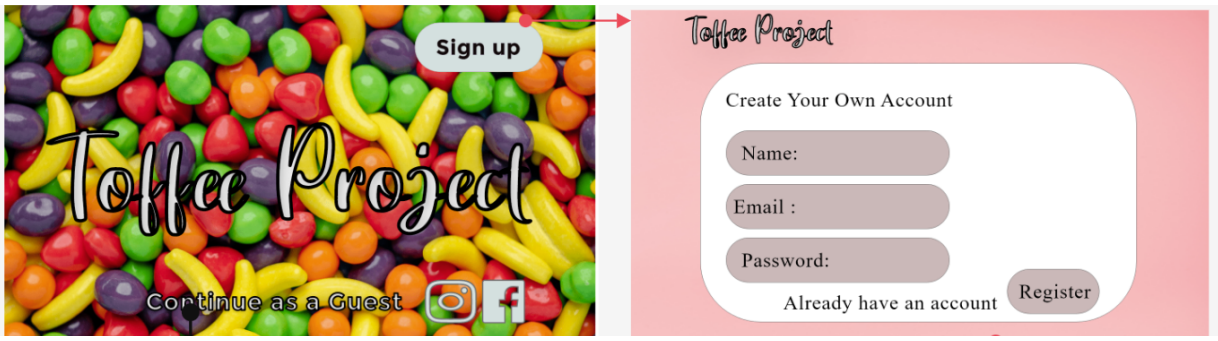
Exceptional Scenario 2

Software Requirements Specifications

Actor Action	System Response
1- User clicks on Sign Up	
	2- System displays name, email, address, and password fields
3- User enters name, email, address, and password. 4- Click **Sign Up**	
	5- System checks if the password follows certain guidelines 6- Password doesn't follow these guidelines, so the system displays "Please enter a new password and make sure it follows the guidelines displayed."

Software Requirements Specifications

Screen Design



Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Name	Text < 70 characters	Structured Text
Email	Text < 100 characters	Structured Text
Password	AlphaNumeric < 20	Password should contain letter(s) [at least one upper and one lower], digit(s), and symbol(s)

User Story #2

User Story ID	US #2
User Story Name	User Login

Software Requirements Specifications

Actors	Admin/Customer
Description	**As** a customer/admin **I like** to be able to login to the application/website **So** that I am at my profile page on the app/website
Pre condition	The user has an active account
Post condition	The user is directed to his/her profile
Acceptance Criteria	**Given** I'm a logged-out system user and I'm on the login page **When** I fill in the email and password fields and I click the Login button **Then** the system logs me in

Scenarios

Normal Scenario

Actor Action	System Response
1- User clicks on "Already have an account"	

Software Requirements Specifications

	2- System displays login page with email and password fields (and forget password option) and the option to login as an admin or customer
4- User enters email and password. 5- Click **Login**	
	6- System verifies the user's credentials 7- System redirects the user to his/her profile

Exceptional Scenario 1

Actor Action	System Response
1- User clicks on "Already have an account"	
	2- System displays login page with email and password fields (and forget password option) and the option to login as an admin or customer

Software Requirements Specifications

4- User enters email and password. 5- Click **Login**	
	6- System verifies the user's credentials 7- System denies access (credentials are invalid) 8- System displays invalid email/password message 9- System prompts the user to try again

Exceptional Scenario 2

Actor Action	System Response
1- User clicks on "Already have an account"	
	2- System displays login page with email and password fields (and forget password option) and the option to login as an admin or customer

Software Requirements Specifications

4- User clicks on forget password	
	7- System sends an OTP to the user's email address
8- User uses the OTP and creates a new password	
	9- System verifies password follows guidelines 10- System completes resetting the password and displays "Password has been reset successfully."

Exceptional Scenario 3

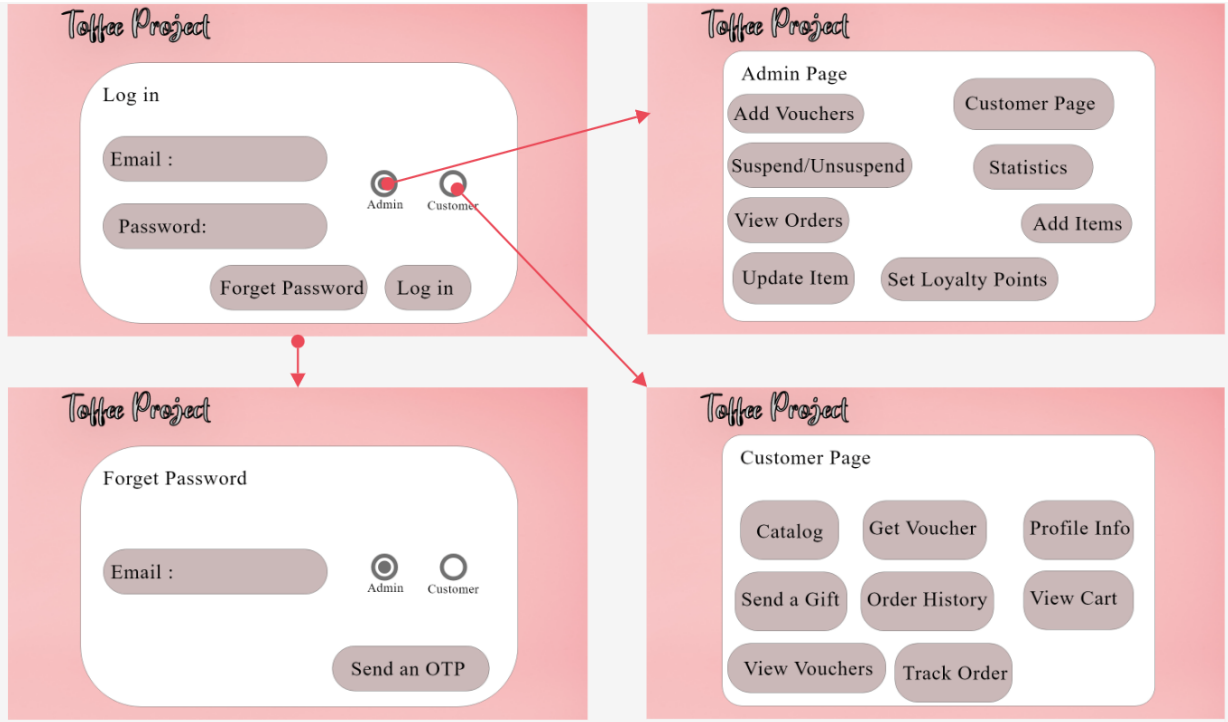
Actor Action	System Response
1- User clicks on "Already have an account"	
	2- System displays login page with email and password fields (and forget

Software Requirements Specifications

	password option) and the option to login as an admin or customer
4- User clicks on forget password	
	7- System sends an OTP to the user's email address 8- System finds the email invalid 9- System displays "Email not found" message

Software Requirements Specifications

Screen Design



Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Email	Text < 100 characters	Structured Text
Password	AlphaNumeric < 20	Password should contain letter(s) [at least one upper and one lower], digit(s), and symbol(s)

Software Requirements Specifications

User Story #3

User Story ID	US #3
User Story Name	Send a Gift
Actors	Customer
Description	**As** a customer **I like** to be able to send a gift to someone **So** that he/she are able to buy something via the app/website
Pre condition	The user has an active account
Post condition	The number of gifts the user has will decrease
Acceptance Criteria	**Given** I'm logged-in and I'm on the homepage **When** I send a gift to someone (via email address) **Then** this person shall be able to view this gift and access it via his/her email address then use it in the app/website

Software Requirements Specifications

Scenarios

Normal Scenario

Actor Action	System Response
1- User clicks on Send a Gift button	
	2- System redirects the user to the send gift page. 3- System displays email and code fields
4- User enters email and the code of the gift (voucher) 5- Click **Send**	
	5- System displays “Gift has been sent successfully”.

Exceptional Scenario 1

Software Requirements Specifications

Actor Action	System Response
1- User clicks on Send a Gift button	
	2- System redirects the user to the send gift page. 3- System displays email and code fields
4- User enters email and the code of the gift (voucher) 5- Click **Send**	
	5- System finds the email invalid 6- System displays an error message indicating the email is invalid

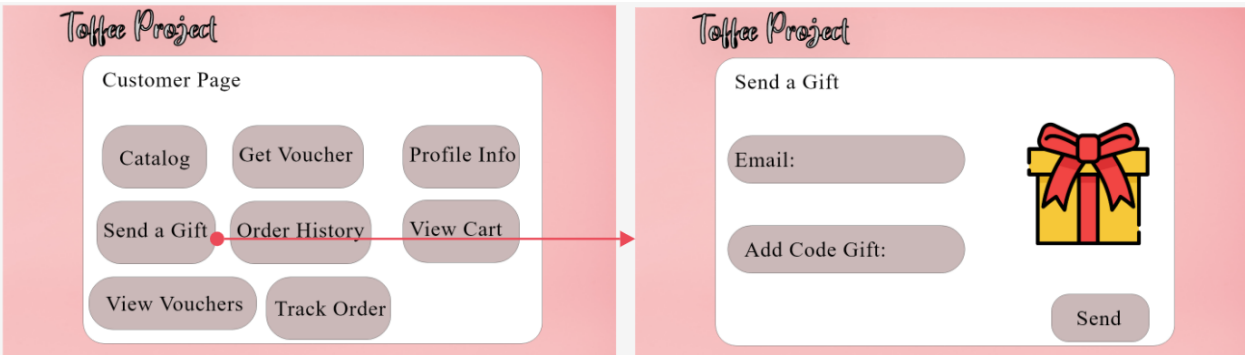
Exceptional Scenario 2

Software Requirements Specifications

Actor Action	System Response
1- User clicks on Send a Gift button	
	2- System redirects the user to the send gift page. 3- System displays email and code fields
4- User enters email and the code of the gift (voucher) 5- Click **Send**	
	5- System finds the code invalid or expired 6- System displays an error message

Screen Design

Software Requirements Specifications



Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Email	Text < 100 characters	Structured Text
Code	AlphaNumeric <= 10	Small/Capital letters and/or numbers

User Story #4

User Story ID	US #4
User Story Name	View Order History
Actors	Customer

Software Requirements Specifications

Description	**As** a customer **I like** to be able to view my ordering history **So** that I know what my order history is and reorder a previous order if I want
Pre condition	The user has an active account
Post condition	a list of all user's orders will appear for the user
Acceptance Criteria	**Given** I'm logged-in and I'm on the homepage **When** I view my order history **Then** the system displays my order history

Scenarios

Normal Scenario

Actor Action	System Response
1- User clicks on Order History button	
	2- System displays this user's order history page along with the option of reordering a previous order.

Software Requirements Specifications

Exceptional Scenario 1

Actor Action	System Response
1- User clicks on Order History button	
	2- System displays this user's order history page along with the option of reordering a previous order.
3- User clicks on Reorder button	
	4- System displays a success message if the items in the order are available currently

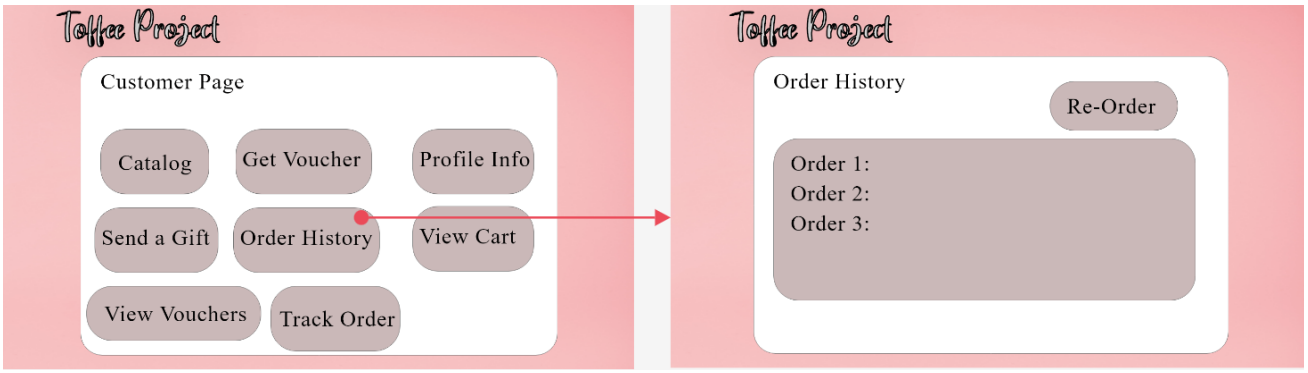
Exceptional Scenario 2

Actor Action	System Response
1- User clicks on Order History button	

Software Requirements Specifications

	2- System displays this user's order history page along with the option of reordering a previous order.
3- User clicks on Reorder button	
	4- System displays an error message if the items in the order aren't available currently

Screen Design



Software Requirements Specifications

User Story #5

User Story ID	US #5
User Story Name	View Catalog
Actors	Customer
Description	**As** a customer **I like** to be able to view the catalog **So** that I know what items are available currently
Pre condition	The user has an active account
Post condition	The user can see the catalog page.
Acceptance Criteria	**Given** I'm logged-in and I'm on the homepage **When** I view catalog **Then** the system displays the catalog

Scenarios

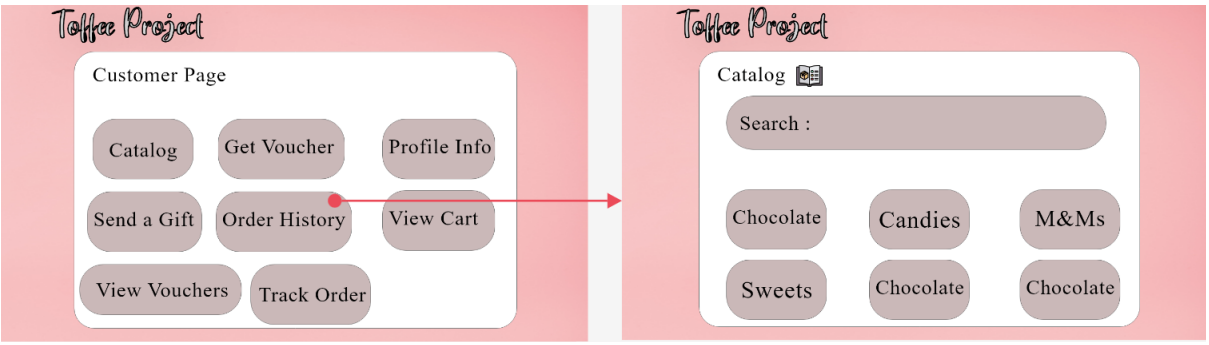
Normal Scenario

Software Requirements Specifications

Actor Action	System Response
1- User clicks on Catalog button	
	2- System displays the catalog

No Exceptional Scenarios

Screen Design



User Story #6

User Story ID	US #6
User Story Name	View Item

Software Requirements Specifications

Actors	Customer
Description	**As** a customer **I like** to be able to view any item in the catalog **So** that I know its description
Pre condition	The user has an active account
Post condition	The user can see the item's description page
Acceptance Criteria	**Given** I'm logged-in and I'm on the catalog page **When** I view an item **Then** the system displays the item's description

Scenarios

Normal Scenario

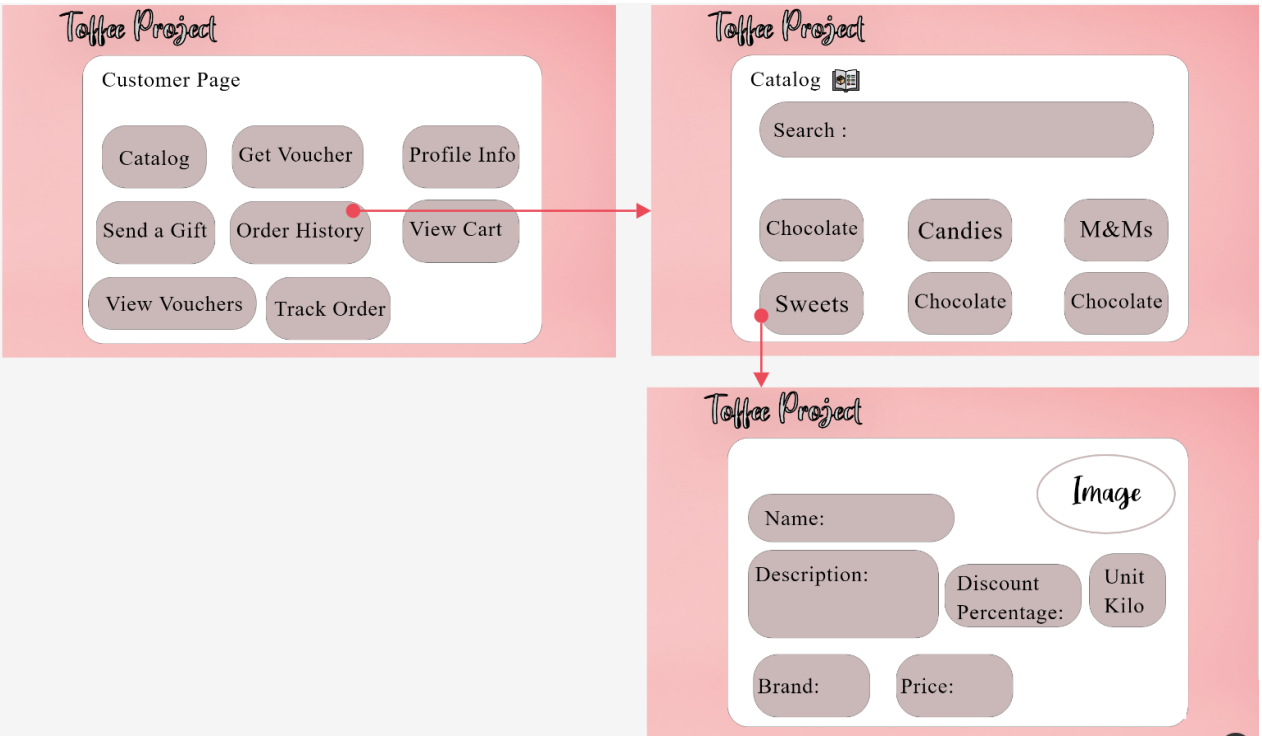
Actor Action	System Response
1- User clicks on any item	

Software Requirements Specifications

	2- System displays the item's description

No Exceptional Scenarios

Screen Design



Software Requirements Specifications

User Story #7

User Story ID	US #7
User Story Name	Track Order
Actors	Customer
Description	**As** a customer **I like** to be able to track my order **So** that I know when it will arrive
Pre condition	The user has an order not yet delivered
Post condition	The user can track his order through a map.
Acceptance Criteria	**Given** I'm logged-in and I'm on the homepage **When** I track the order **Then** the system displays the current status of the order and its expected time of arrival

Software Requirements Specifications

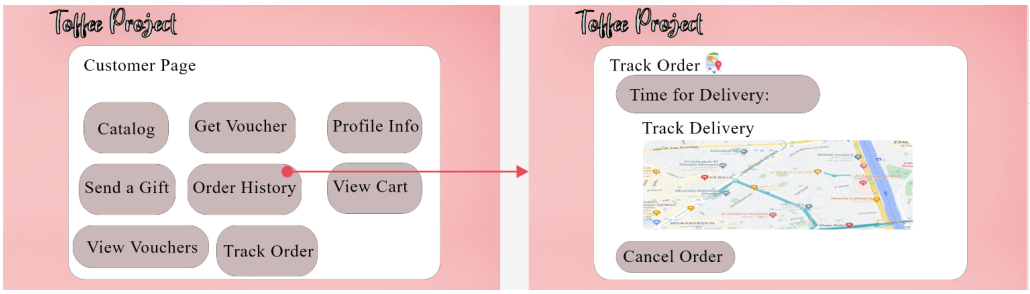
Scenarios

Normal Scenario

Actor Action	System Response
1- User clicks on Track Order button	
	2- System redirects the user to the track order page where the status and expected time of arrival of the order are displayed

No Exceptional Scenarios

Screen Design



Software Requirements Specifications

User Story #8

User Story ID	US #8
User Story Name	Contact Us
Actors	Customer
Description	**As** a customer **I like** to be able to contact an employee **So** that I can inquiry about anything
Pre condition	
Post condition	The user is connected to one of the store's clients.
Acceptance Criteria	**Given** I'm logged-in and I'm on the homepage **When** I click on contact us **Then** the system displays contact information for the user to send his/her inquiry

Software Requirements Specifications

Scenarios

Normal Scenario

Actor Action	System Response
1- User clicks on Contact Us button	
	2- System redirects the user to the Contact Us page where the store's contact information is displayed

No Exceptional Scenarios

Screen Design

Software Requirements Specifications

User Story #9

User Story ID	US #9
User Story Name	Pay Cash
Actors	**Customers/Admin**
Description	**As** a customer or admin **I like** to determine the payment method. **So,** I can confirm the order
Pre condition	There must be Items in the cart and User goes to check.
Post condition	The Order will be delivered to the customer.
Acceptance Criteria	**Given that** I want to pay by cash the delivery man. **When** I make an order from the system and choose to pay cash **Then** the system confirms the order.

Scenarios

Normal Scenario

Software Requirements Specifications

Actor Action	System Response
1- User Click Go-check	
	2- The system views the Check with the final price. 3- The system displays 3 options: Pay cash, pay Fawry, or Pay by a smart wallet.
4- User Select Pay Cash	
	5- System Check if the price is less than 1000. 6-system Add fees and delivery costs to the check
7- The user confirms the order	
	8- the system checks the address and phone. 9-the system adds 5% loyalty points to the user.

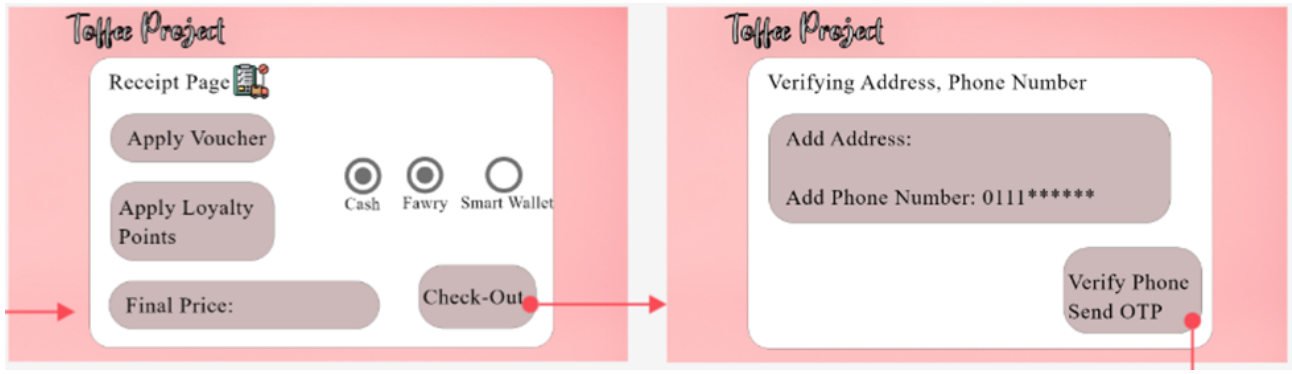
Software Requirements Specifications

No Exceptional Scenarios

Actor Action	System Response
1- User Click Go-check	
	2- The system views the Check with the final price. 3- The system displays 3 options: Pay cash, pay Fawry, or Pay by a smart wallet.
4- User Select Pay Cash	
	5- The system Found the Price is above 1000. 6-System displays msg, that user can't pay by cash. 7- system return to the payment method page.

Software Requirements Specifications

Screen Design



User Story #10

User Story ID	US #10
User Story Name	Pay Fawry
Actors	**Customers/Admin**

Software Requirements Specifications

Description	**As** a customer or admin. **I like** to determine the payment method **So,** I can confirm the order
Pre condition	There must be Items in the cart and User goes to check.
Post condition	The Order will be delivered to the customer.
Acceptance Criteria	**Given that** I want to pay by Fawry. **When** I make an order from the system and choose to pay Fawry **Then** the system sends an SMS msg to the user for the Payment.

Scenarios

Normal Scenario

Actor Action	System Response
1- User Click Go-check	

Software Requirements Specifications

	2- The system views the Check with the final price. 3- The system displays 3 options: Pay cash, pay Fawry, or Pay by a smart wallet.
4- User Select Pay Fawry	
	5- The system sends an SMS msg to the user to pay with Fawry. 6-the System holds the order
7- The user Pays the money using the code from the SMS msg	
	8- The system Confirms the order. 9- The system checks the address and phone.

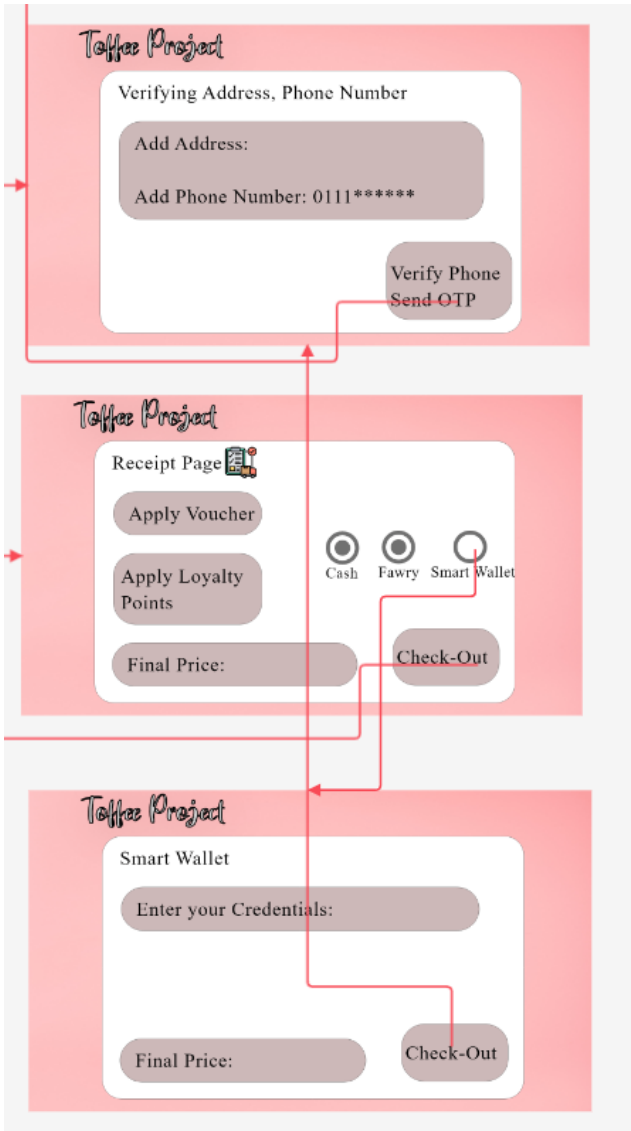
No Exceptional Scenarios

Software Requirements Specifications

Actor Action	System Response
1- User Click Go-check	
	2- The system views the Check with the final price. 3- The system displays 3 options: Pay cash, pay Fawry, or Pay by a smart wallet.
4- User Select Pay Fawry	
	5- The system sends an SMS msg to the user to pay with Fawry. 6-the System holds the order

Software Requirements Specifications

Screen Design



Software Requirements Specifications

User Story #11

User Story ID	US #11
User Story Name	Pay Smart wallet
Actors	**Customers/Admin**
Description	**As** a customer or admin. **I like** to determine the payment method. **So,** I confirm get the order.
Pre condition	There must be Items in the cart and User goes to check.
Post condition	The Order will be delivered to the customer.
Acceptance Criteria	**Given that** I want to pay by smart wallet. **When** I make an order from the system and choose to pay smart wallet **Then** the system deducts the money from my balance to confirm the order.

Scenarios

Normal Scenario

Software Requirements Specifications

Actor Action	System Response
1- User Click Go-check	
	2- The system views the Check with the final price. 3- The system displays 3 options: Pay cash, pay Fawry, or Pay by a smart wallet.
4- User Select Pay smart wallet	
	5- The system displays a message to take the credentials of the wallet.
6- User input the wallet's credentials.	

Software Requirements Specifications

	7-The system checks if the balance in the wallet is enough. 8-System deducts the money. 9-System confirms the order. 10- The system checks the address and phone. 11-System adds 10% loyalty points to the user.

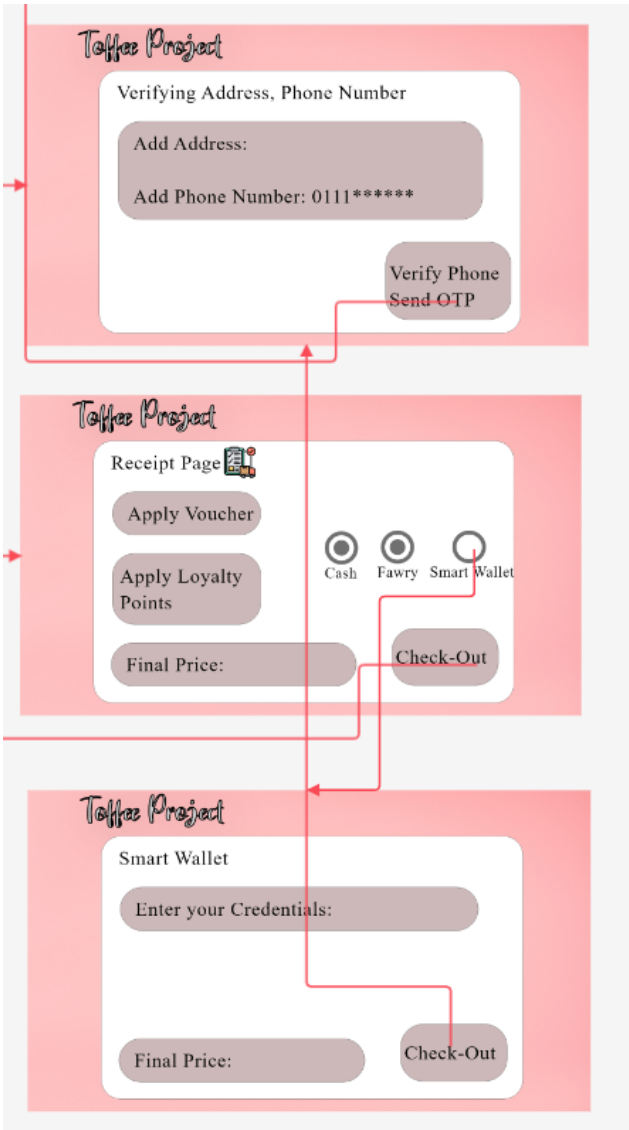
No Exceptional Scenarios

Actor Action	System Response
1- User Click Go-check	
	2- The system views the Check with the final price. 3- The system displays 3 options: Pay cash, pay Fawry, or Pay by a smart wallet.

Software Requirements Specifications

4- User Select Pay smart wallet	
	5- The system displays a message to take the credentials of the wallet.

Screen Design



Software Requirements Specifications

Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Credentials number	Integer 16 digits or less	It contains numbers with only no characters.

User Story #12

User Story ID	US #12
User Story Name	Suspend/Unsuspend user
Actors	**Admin**
Description	**As** an admin **I like** to suspend or unsuspend a user. **So,** he can't make anything illegal.
Pre condition	The user must be registered to the system
Post condition	The user will be blocked from using the application or unblocked.

Software Requirements Specifications

Acceptance Criteria	**Given that** I want to suspend or unsuspend a user. **When** I enter his email and click suspend or unsuspend **Then** the system blocks or unblock the user.

Scenarios

Normal Scenario

Actor Action	System Response
1- Admin clicks suspend/unsuspend option	
	2- The system displays the suspended user page with email and two options: suspend or unsuspend.
3- Admin enters the user email. 4-Admin clicks on suspend or unsuspend.	

Software Requirements Specifications

	5- System Check if the user is registered. 6-the system suspends or unsuspends the user based on the admin's choice. 7- system notify the user that he got suspended or unsuspended.

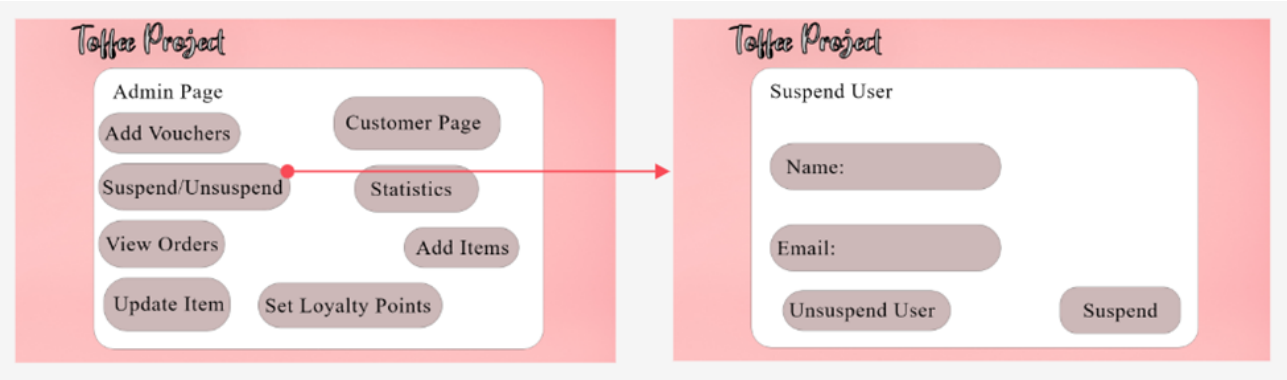
No Exceptional Scenarios

Actor Action	System Response
1- Admin clicks suspend/unsuspend option	
	2- The system displays the suspended user page With email and two options: suspend or unsuspend.

Software Requirements Specifications

3- Admin enters the user email. 4-Admin clicks on suspend or unsuspend.	
	5- The system didn't find the user in the registration database. 6-the system displays a message that the user can't be found. 7- system returns to the admin page.

Screen Design



Data Dictionary:

Software Requirements Specifications

Element Label	Type/Length	Data Validation / Business Rule
Email	Text < 100 characters	Structured Text

User Story #13

User Story ID	US #13
User Story Name	Remove Item
Actors	**Admin**
Description	**As** an admin **I like** to remove an item from the catalog. **So,** the customer can't buy it.
Pre condition	The Item must be available in the catalog.
Post condition	The item will be removed from the catalog.

Software Requirements Specifications

Acceptance Criteria	**Given that** I want to remove an item from the catalog. **When** the item becomes unavailable from the store. **Then** the system removed it from the catalog and made it unavailable.

Scenarios

Normal Scenario

Actor Action	System Response
1- Admin clicks removed item option	
	2- The system opens the catalog
3- the admin chooses the item to remove.	
	4- system display a message to confirm remove

Software Requirements Specifications

Screen Design

User Story #14

User Story ID	US #14
User Story Name	View All Orders
Actors	**Admin**
Description	**As** an admin **I like** to view all orders. **So,** I can see all orders made from the application or the website.
Pre condition	
Post condition	
Acceptance Criteria	**Given that** I want to view all the orders from the application. **When** I want to check the orders made. **Then** the system shows me records with all orders made.

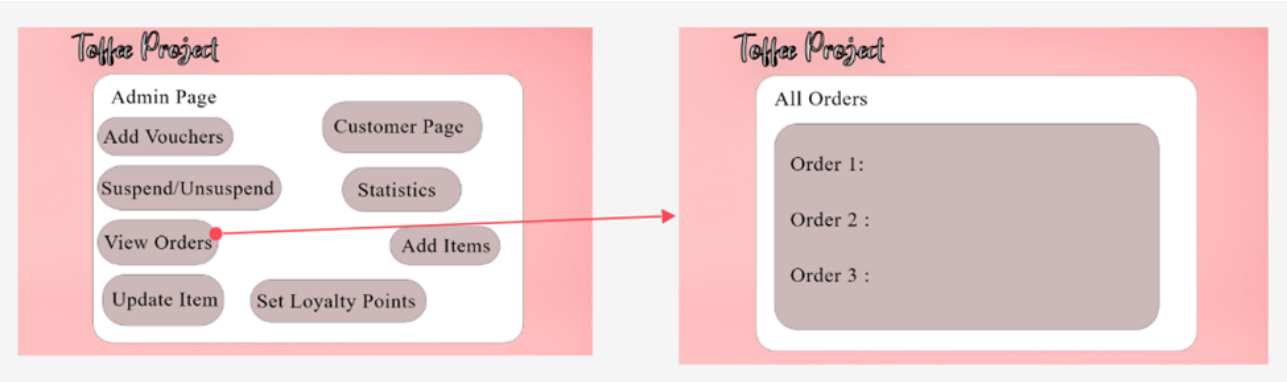
Software Requirements Specifications

Scenarios

Normal Scenario

Actor Action	System Response
1- Admin clicks view all orders option	
	2- The system displays all orders made with the application or the website.

Screen Design



Software Requirements Specifications

Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Email	Text < 100 characters	Structured Text

User Story #15

User Story ID	US #15
User Story Name	Add new Item
Actors	**Admin**
Description	**As** an admin **I like** to add new items to the catalog. **So,** the customers can see our new candies.
Pre condition	
Post condition	The item will be added to the catalog

Software Requirements Specifications

Acceptance Criteria	**Given that** I want to add a new item to the catalog. **When** the store made a new candy. **Then** the system displays it in the catalog so the customers can order it.

Scenarios

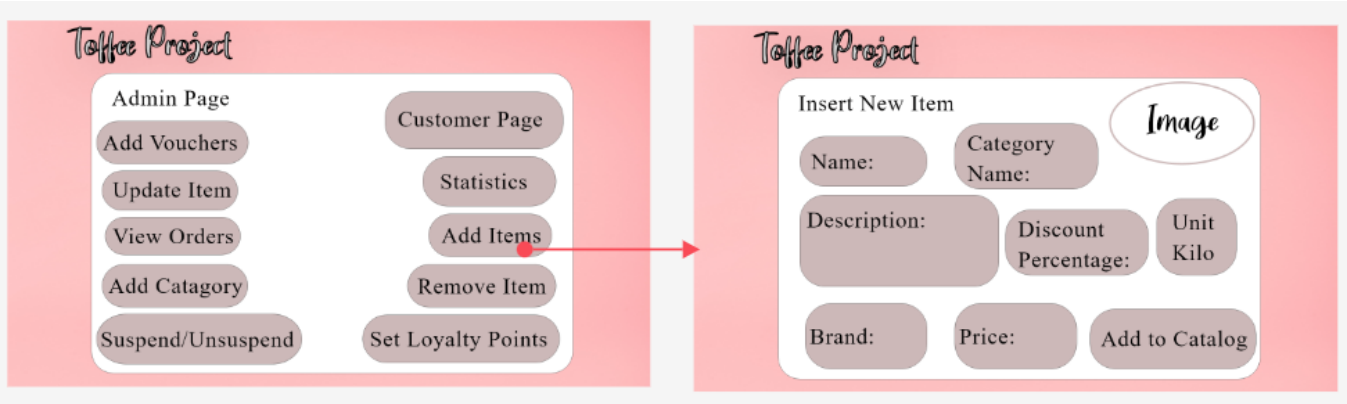
Normal Scenario

Actor Action	System Response
1- Admin clicks add new item option	
	2- The system displays the description page of the new item.
3- the admin fills the description page. 5- the admin choose which category to put the new item	

Software Requirements Specifications

	6- system adds the new item to the catalog.

Screen Design



Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Name	Text < 50 characters	Structured text

Software Requirements Specifications

Description	Text < 150 characters	The text defines what the item is.
Discount Percentage	Integer divided by 100	Follow the percentage style.
Brand Price Unit/Kilo	Text < 10 characters Integer value Integer values	 One of the two options to choose.

User Story #16

User Story ID	US #16
User Story Name	Update item Info
Actors	**Admin**

Software Requirements Specifications

Description	**As** an admin **I like** to Update the information about some items. **So,** the customers can know if it's still available or not and know the new updates to each item.
Pre condition	The item must be found in the catalog.
Post condition	The item will be updated in the catalog
Acceptance Criteria	**Given that** I want to update some item's information. **When** the item has a new price or any new description. **Then** the system displays the new item after the update.

Scenarios

Normal Scenario

Actor Action	System Response
1- Admin clicks Update item option	

Software Requirements Specifications

	2- The system opens the catalog
3- the admin chooses the item to be updated.	
	4- The system displays the information about the item with the ability to edit.

Screen Design

Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Name	Text < 50 characters	Structured text

Software Requirements Specifications

Description	Text < 150 characters	The text defines what the item is.
Discount Percentage	Integer divided by 100	Follow the percentage style.
Brand Price Unit/Kilo	Text < 10 characters Integer value Integer values	 One of the two options to choose.

User Story #17

User Story ID	US #17
User Story Name	Set Loyalty Points
Actors	**Admin**
Description	**As** an admin **I like** to add loyalty points to the user.

Software Requirements Specifications

	So, increase the relation with the customers to use the application once more.
Pre condition	The User must be registered in the system.
Post condition	The user will gain loyalty points to use.
Acceptance Criteria	**Given that** I want to add loyalty points to the user. **When** the user uses the application for ordering. **Then** the system notifies the user that he gains loyalty points.

Scenarios

Normal Scenario

Actor Action	System Response
1- Admin clicks set loyalty points option	
	2- The system displays a loyalty points page.

Software Requirements Specifications

3- the admin chooses an email and the number of points he wants to add.	
	4- system checks if the user is registered. 5-the system adds points to the user. 6-system notifies the user that he gains loyalty points.

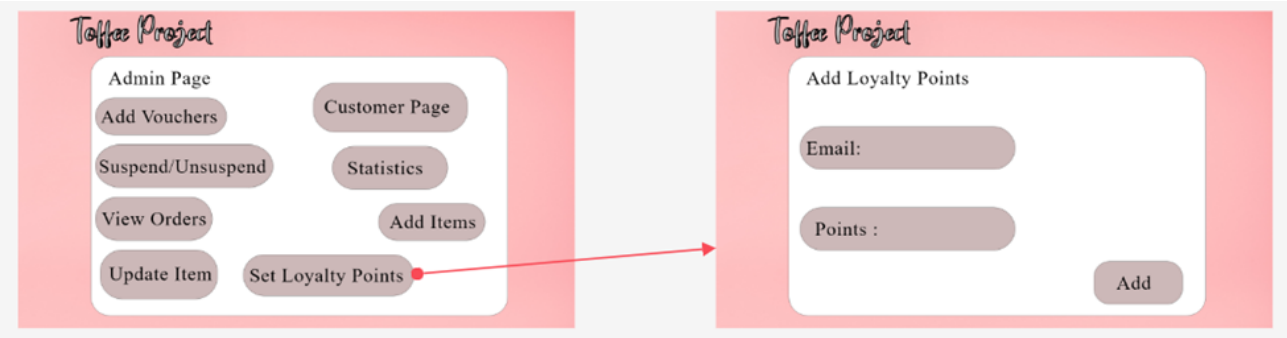
No Exceptional Scenarios

Actor Action	System Response
1- Admin clicks set loyalty points option	
	2- The system displays a loyalty points page.

Software Requirements Specifications

3- the admin chooses an email and the number of points he wants to add.	
	4- The system can't find the user in the database. 5-system displays a message that the user is not found. 6-system returns to the admin panel.

Screen Design



Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule

Software Requirements Specifications

Email	Text < 100 characters	Structured text, follow guidelines of emails.
Loyalty Points	Integer	The number shouldn't increase over 1000.

User Story #18

User Story ID	US #18
User Story Name	View Statistics
Actors	**Admin**
Description	**As** an admin **I like** to know the statistics about the application as to which is the most selling product or daily and monthly sales. **So,** the admin has more knowledge about his store and application which helps him in decision making.
Pre condition	
Post condition	The admin sees different statistics about the application and store.

Software Requirements Specifications

Acceptance Criteria	**Given that** I am on the admin panel and want to view statistics. **When** the admin wants to make a new decision about the store. **Then** the system shows him different statistics to help him.

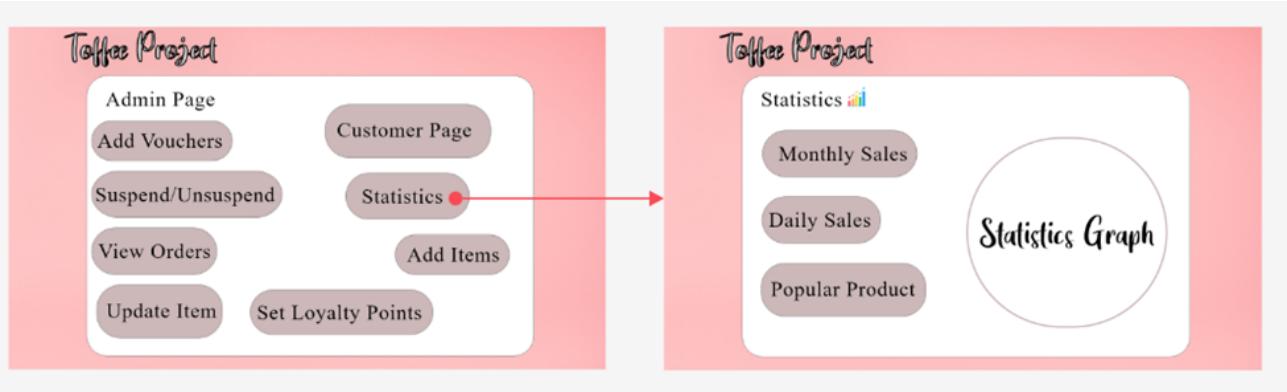
Scenarios

Normal Scenario

Actor Action	System Response
1- Admin clicks set view statistics option	
	2- The system displays different statistics such as daily sales, monthly sales, and popular products.

Software Requirements Specifications

Screen Design



User Story #19

User Story ID	US #19
User Story Name	Add Vouchers
Actors	**Admin**
Description	**As** an admin **I would like** to add a new voucher to the system. **So,** the user can get new vouchers or send them as a gift.

Software Requirements Specifications

Pre condition	The voucher mustn't conflict with another voucher.
Post condition	A new voucher was added to the system.
Acceptance Criteria	**Given that** I am on the admin panel. **When** the admin wants to insert a new voucher. **Then** the system takes information about the new one and inserted it into the system.

Scenarios

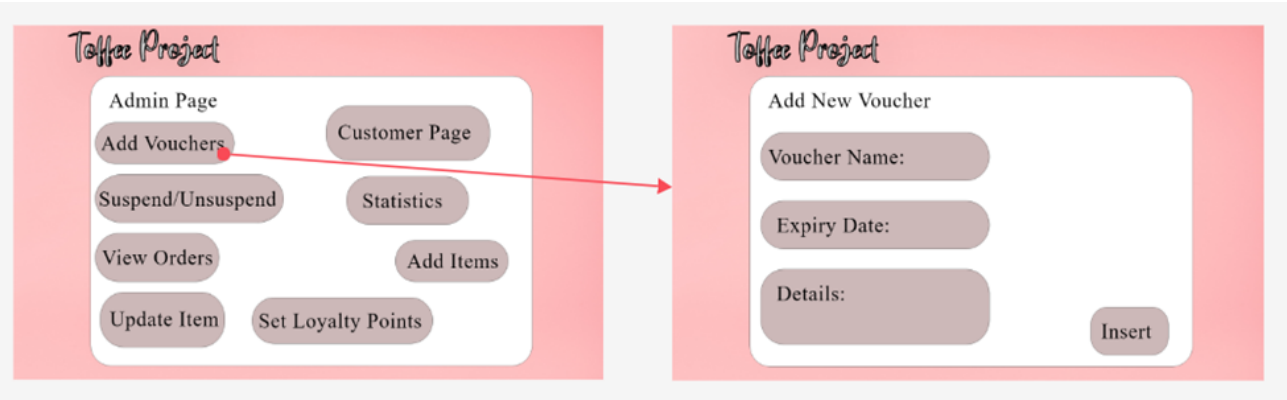
Normal Scenario

Actor Action	System Response
1- Admin clicks set add voucher option	
	2-the system displays a new voucher page.
3- Admins insert name, expiry date, and details about the voucher.	

Software Requirements Specifications

4- Admin clicks on insert.	4-the system inserts the new voucher into the system. 5- system notifies the users that a new voucher has been added.

Screen Design



Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Name	Text < 100 characters	Structured text.

Software Requirements Specifications

Expiry date	Text < 11 characters	Follow the style of the date.
Details	Text >20 characters	

User Story #20

User Story ID	US #20
User Story Name	Add Category
Actors	**Admin**
Description	**As** an admin **I like** to insert a new category in the system. **So,** the store can view its products correctly and the user gets his item easily through search.
Pre condition	The category wasn't made before
Post condition	A new category was added to the system.

Software Requirements Specifications

Acceptance Criteria	**Given that** I am on the admin panel. **When** the admin wants to insert a new category. **Then** the system takes information about the new one and inserts it into the system.

Scenarios

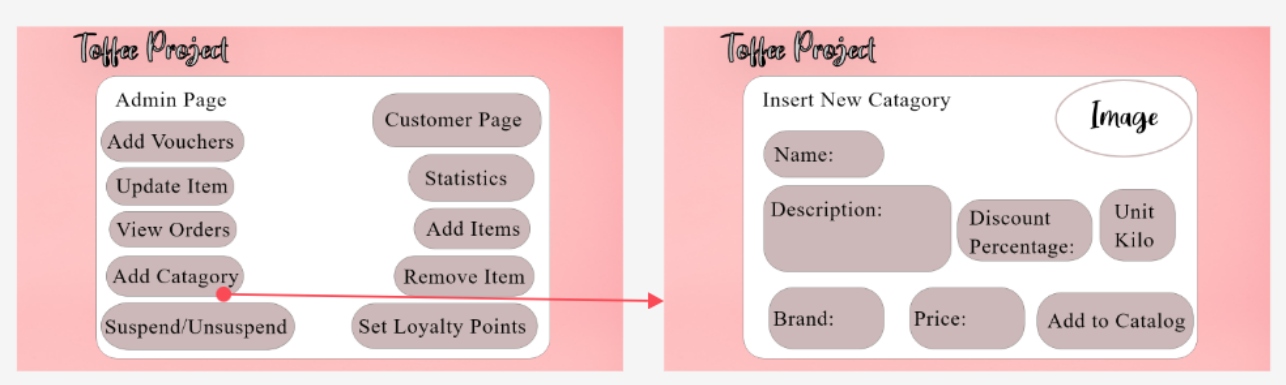
Normal Scenario

Actor Action	System Response
1- Admin clicks set add category option	
	2-The system displays a new category page.
3- Admins insert name, and details about the category. 4- Admin clicks on insert.	

Software Requirements Specifications

	4-the system inserts the new category into the system. 5- system notifies the users that a new category has been added.

Screen Design



Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Name	Text < 100 characters	Structured text.
Details	Text >20 characters	

Software Requirements Specifications

User Story #21

User Story ID	US #21
User Story Name	View & Edit Profile
Actors	Customer/Admin
Description	**As** a customer/admin **I like** to be able to view my profile **So,** I can edit my information
Pre condition	To be logged in
Post condition	Customer/admin's information will be edited
Acceptance Criteria	**Given** that I am logged in and in my profile page **When** I click edit Info **Then** the system allows me to edit my name, address, or email.

Scenarios

Normal Scenario

Software Requirements Specifications

Actor Action	System Response
1- User clicks on Profile	
	2- System displays profile page
3- User select Edit Info	
	4- System allows user to edit information fields
5- User changes his/her information and presses edit	
	6-System saves edited information 7- System displays updated profile

Exceptional Scenario 1

Actor Action	System Response

Software Requirements Specifications

1- User clicks on Profile	
	2- System displays profile page
3- User select Edit Info	
	4- System allows user to edit information fields
5- User leaves a field blank and presses edit	
	6-System displays an error message. 7- System recovers old information.

Screen Design

Software Requirements Specifications

Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Name	Text < 70 characters	Structured Text
Email	Text < 100 characters	Structured Text
Password	AlphaNumeric < 20	Password should contain letter(s) [at least one upper and one lower], digit(s), and symbol(s)
Address	Text < 255	Structured Text

User Story #22

Software Requirements Specifications

User Story ID	US #22
User Story Name	Reset Password
Actors	Customer/Admin
Description	**As** a customer/admin **I like** to be able to access my profile **So,** I can reset my password
Pre condition	To be logged in
Post condition	Customer/admin's password will be reset
Acceptance Criteria	**Given** that I am logged in and in my profile page **When** I click reset password **Then** the system allows me to reset my password.

Scenarios

Normal Scenario

Actor Action	System Response

Software Requirements Specifications

1- User Clicks Profile	
	2- System displays profile page
3- User selects Reset Password	
	4- System redirects the user to the reset password page.
5- User enters old password, new password, and repeated new password. 6- User Clicks Save	
	7-System verifies old password. 8-System verifies that the new password follows the guidelines. 9-System checks that both entered new passwords are the same. 10-System Saves the new password.

Exceptional Scenario 1

Software Requirements Specifications

Actor Action	System Response
1- User Clicks Profile	
	2- System Displays Profile Page
3- User Selects Reset Password	
	4- System redirects the user to the reset password page.
5- User enters old password, new password, and repeated new password. 6- User Clicks Save	
	7-System verifies old password. 8-Password verification fails. 9-System displays an error message.

Exceptional Scenario 2

Software Requirements Specifications

Actor Action	System Response
1- User Clicks Profile	
	2- System Displays Profile Page
3- User Selects Reset Password	
	4- System redirects the user to the reset password page.
5- User enters old password, new password, and repeated new password. 6- User Clicks Save	
	7-System verifies old password. 8-System verifies that the new password follows the guidelines. 9- System finds that the new password does not follow the guidelines. 10-System displays an error message.

Software Requirements Specifications

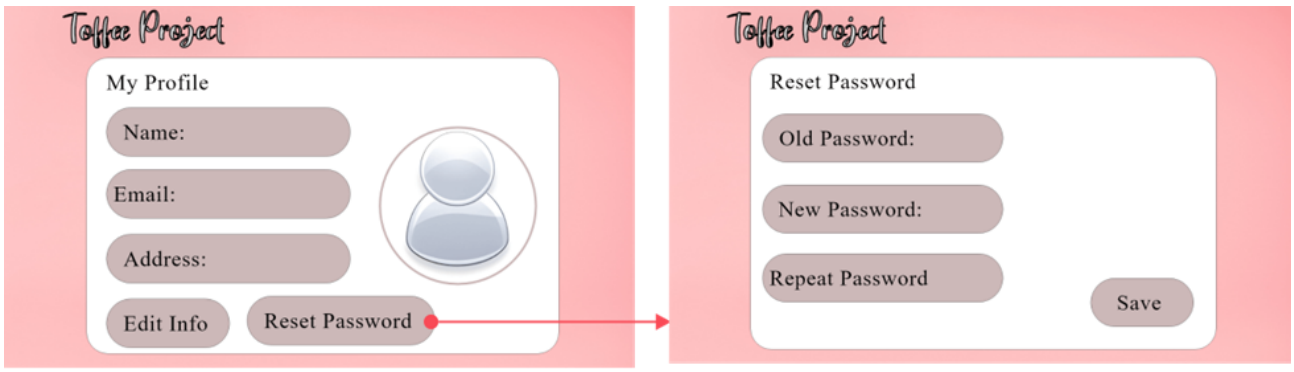
Exceptional Scenario 3

Actor Action	System Response
1- User Clicks Profile	
	2- System displays Profile Page
3- User Selects Reset Password	
	4- System redirects the user to the reset password page.
5- User Enters old password, new password, and repeated new password. 6- User Clicks Save	

Software Requirements Specifications

	7-System verifies old password. 8-System verifies that the new password follows the guidelines. 9-System checks that both entered passwords are matching. 10-System finds that the passwords aren't matching. 11-System displays an error message.

Screen Design



Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule

Software Requirements Specifications

Password	AlphaNumeric < 20	Password should contain letter(s) [at least one upper and one lower], digit(s), and symbol(s)

User Story #23

User Story ID	US #23
User Story Name	Add to Cart
Actors	Customer
Description	**As** a customer **I like** to be able to items to the cart, **So,** I can check out later.
Pre condition	To be logged in
Post condition	
Acceptance Criteria	**Given** that I selected an item **When** I click add to cart **Then** the system adds the selected item to my cart.

Scenarios

Software Requirements Specifications

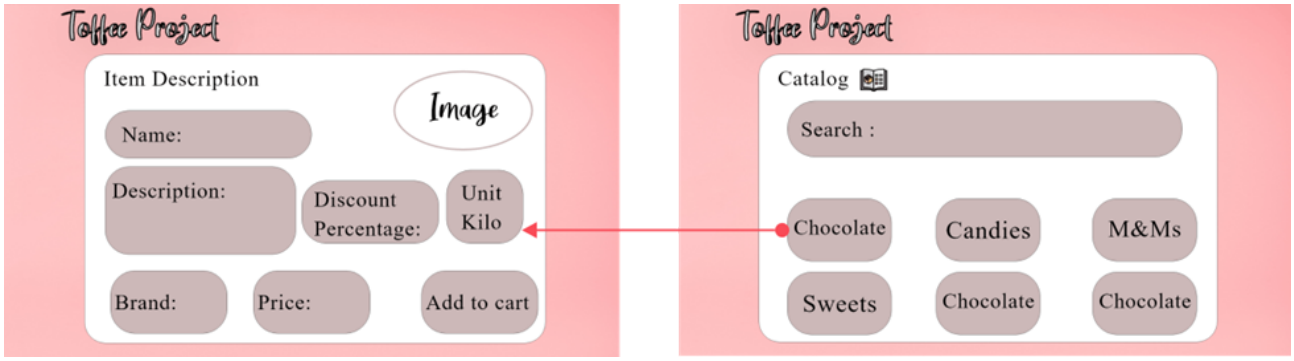
Normal Scenario

Actor Action	System Response
1- User clicks Catalog	
	2- System displays available items
3- User selects an item	
	4- System redirects the user to the item's description page.
5- User clicks Add to Cart	
	6-System adds selected items to cart.

No Exceptional Scenarios

Screen Design

Software Requirements Specifications



Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Name	Text < 25 characters	Structured text
Description	Text < 255 characters	Structured text
Discount Percentage	Numeric digits	
Unit/kilo	Numeric < 2 digits	A number between 1 and 50
Brand	Text < 25 characters	Structured text
Price	Numeric digits	A number in egyptian pounds

User Story #24

User Story ID	US #24

Software Requirements Specifications

User Story Name	View & edit Cart
Actors	Customer
Description	**As** a customer **I like** to be able to view my cart **So,** I can check out later.
Pre condition	To be logged in
Post condition	
Acceptance Criteria	**Given that** I am logged in and in the main page **When** I click view cart **Then** the system allows me to view all items in the cart and their quantities.

Scenarios

Normal Scenario

Actor Action	System Response
1-User clicks view cart	

Software Requirements Specifications

	2- System displays the added items and their quantities also a remove item or increase/decrease the quantity.
3- User clicks remove item	
	4- System removes item
5- User increases the quantity of the item by 1.	
	6-System increases the item quantity by 1.
7- User decreases the quantity of the item by 1.	
	8-System decreases the item quantity by 1.

Exceptional Scenario 1

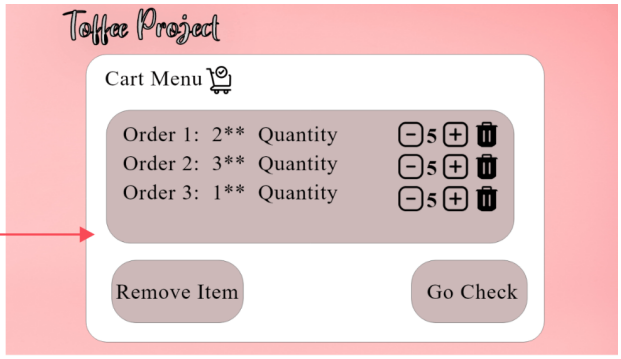
Actor Action	System Response
1-User clicks view cart	

Software Requirements Specifications

	2- System displays the added items and their quantities also a remove item or increase/decrease the quantity.
3- User clicks remove item	
	4- System removes item
5- User increases the quantity of the item by 1.	
	6-System displays a message “Maximum quantity reached” 7-System maintains maximum quantity for the item.
7- User decreases the quantity of the item by 1.	
	8-System decreases the item quantity by 1.

Screen Design

Software Requirements Specifications



Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Name	Text < 25 characters	Structured text
Description	Text < 255 characters	Structured text
Discount Percentage	Numeric digits	Percentage style
Unit/kilo	Numeric < 2 digits	A number between 1 and 50
Brand	Text < 25 characters	Structured text
Price	Numeric digits	A number in egyptian pounds

User Story #25

User Story ID	US #25

Software Requirements Specifications

User Story Name	Go-check
Actors	Customer
Description	**As** a customer **I like** to be able to go-check **So,** I can place my order.
Pre condition	To be logged in
Post condition	
Acceptance Criteria	**Given that** I am logged in and in the view cart page **When** I click go-check **Then** the system redirects me to the receipt page where the final price is displayed and other options such as apply vouchers or loyalty points , select payment method ,and check out.

Scenarios

Normal Scenario

Actor Action	System Response
1-User clicks go-check	

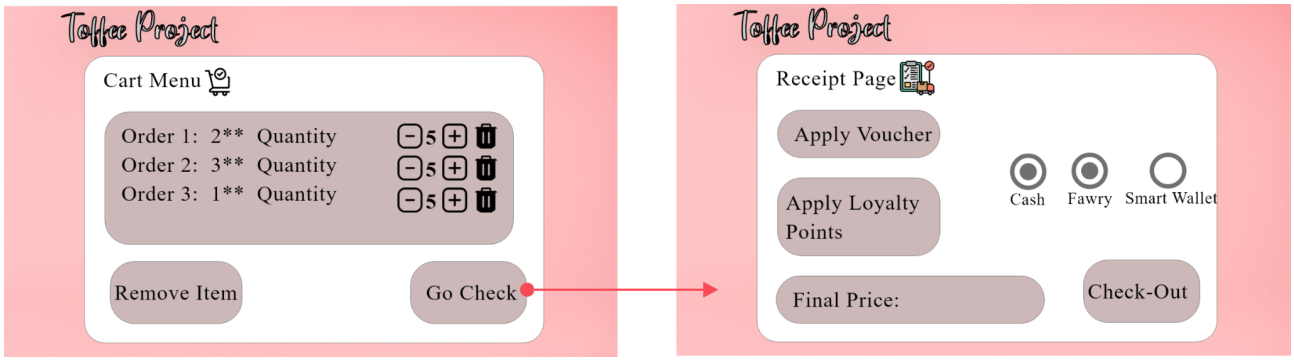
Software Requirements Specifications

	2- System displays the receipt page where the final price is displayed and other options such as apply vouchers or loyalty points , select payment method ,and check out.

Exceptional Scenario 1

Actor Action	System Response
1-User clicks go-check	
	2- System displays error message “No items in Cart to check out”

Screen Design



Data Dictionary:

Software Requirements Specifications

Element Label	Type/Length	Data Validation / Business Rule
Price	Numeric digits	Number greater than 1

User Story #26

User Story ID	US #26
User Story Name	Check out
Actors	Customer
Description	**As** a customer **I like** to be able to check out **So,** I can confirm my order.
Pre condition	To be logged in
Post condition	
Acceptance Criteria	**Given that** I am logged in and in the go-check page **When** I click check out **Then** the system prompts me to verify my address and phone number.

Software Requirements Specifications

Scenarios

Normal Scenario

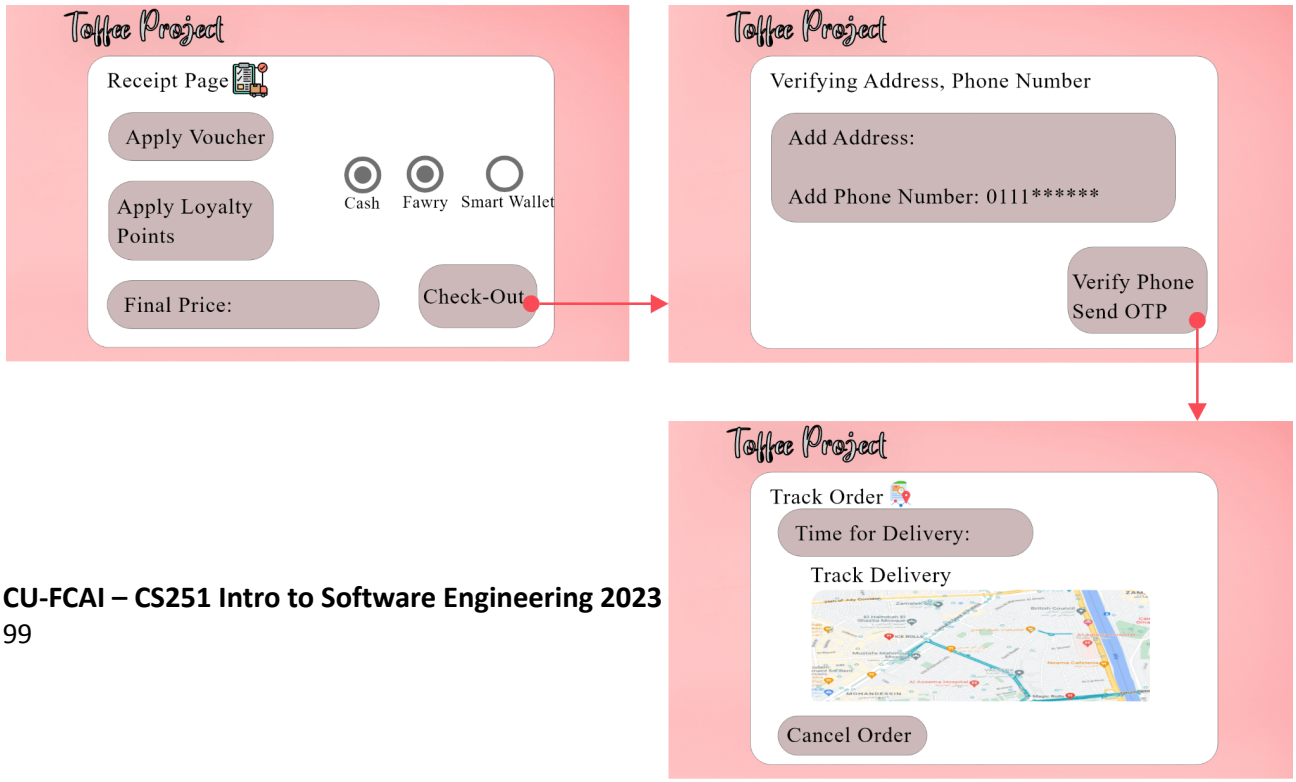
Actor Action	System Response
1-User clicks checkout	
	2- System displays checkout page 3- System prompts user for address and phone number
4- User enters address and phone number 5- User clicks verify phone number/ send OTP	
	6- System verifies phone number 7- System places order 8-System redirects user to track order page 9-System sends the user confirmation notification and the expected arrival time.

Exceptional Scenario 1

Software Requirements Specifications

Actor Action	System Response
1-User clicks checkout	
	2- System displays checkout page 3- System prompts user for address and phone number
4- User enters address and phone number 5- User clicks verify phone number/ send OTP	
	6- System fails to verifies phone number 7- System displays error message

Screen Design



Software Requirements Specifications

Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Address	Text < 255 characters	Structured text
Phone number	digits < 12	Valid number

User Story #27

User Story ID	US #27
User Story Name	Cancel order
Actors	Customer
Description	**As** a customer **I like** to be able to track my order **So,** I can cancel the order if I want.
Pre condition	To be logged in
Post condition	

Software Requirements Specifications

Acceptance Criteria	**Given that** I am logged in and placed an order **When** I place an order **Then** the system gives me the option of canceling my order

Scenarios

Normal Scenario

Actor Action	System Response
1-User clicks cancel order	
	2- System verifies that 24 hours have not passed 3- System cancels order 4- System updates the loyalty points to an amount equivalent to the one paid by Fawry or eWallets

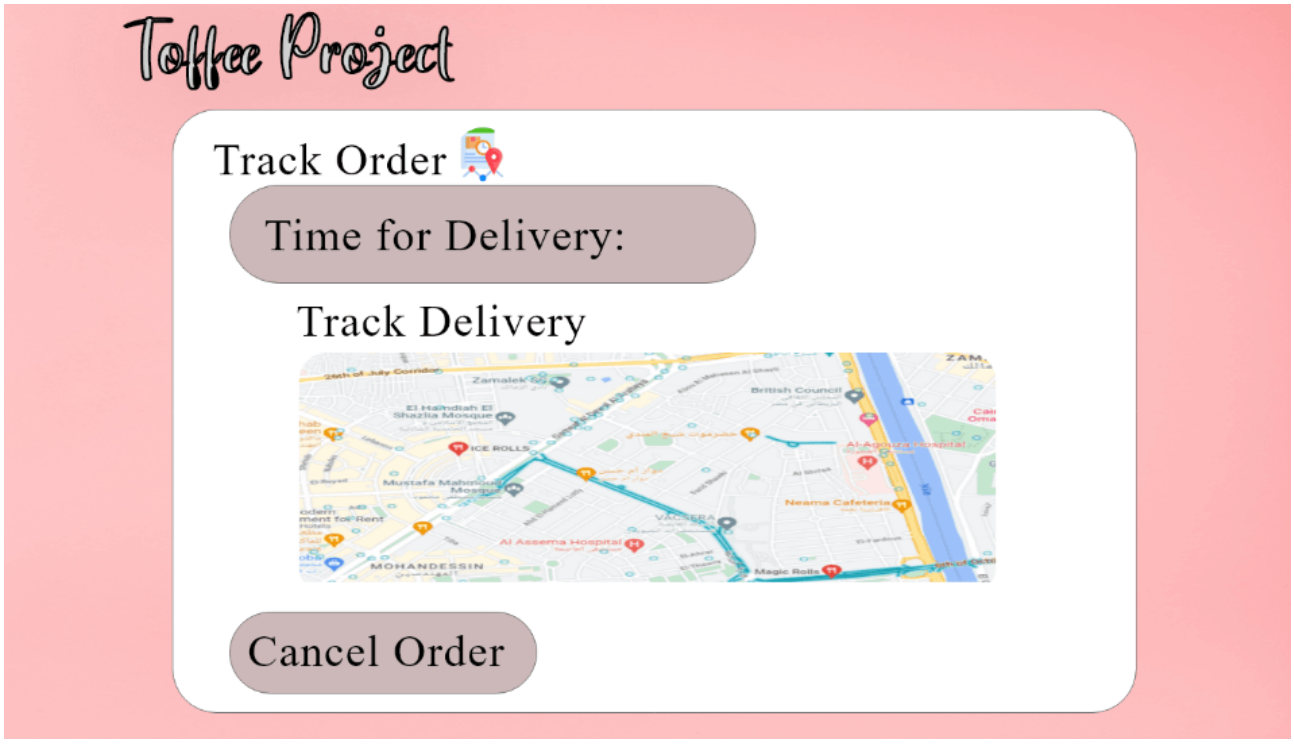
Exceptional Scenario 1

Actor Action	System Response

Software Requirements Specifications

1-User clicks cancel order	
	2- System verifies that 24 hours have passed 3- System displays an error message “You can’t cancel the order after 24 hours! ”

Screen Design



User Story #28

Software Requirements Specifications

User Story ID	US #28
User Story Name	Get Vouchers
Actors	Customer
Description	**As** a customer **I like** to be able to buy vouchers **So,** I can use it or send it as a gift
Pre condition	To be logged in
Post condition	
Acceptance Criteria	**Given that** I am logged in and in the main page **When** I click get vouchers **Then** the system displays a list of available vouchers and their expiration dates.

Scenarios

Normal Scenario

Actor Action	System Response

Software Requirements Specifications

1-User clicks get vouchers	
	2- System displays available vouchers
3-User selects desired voucher	
	4-System redirects user to checkout page
5-User completes payment	
	6-System displays confirmation message 7-System updates user's vouchers.

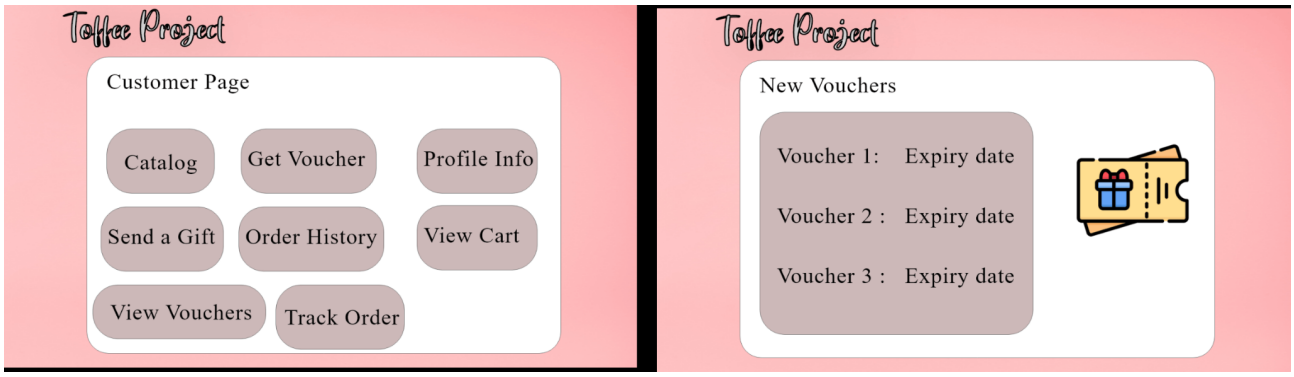
Exceptional Scenario 1

Actor Action	System Response
1-User clicks get vouchers	
	2- System displays available vouchers
3-User selects desired voucher	

Software Requirements Specifications

	4-System redirects user to checkout page
5-User does not go through with payment	
	6-System displays an error message.

Screen Design



Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Voucher	Text < 15 characters	Structured text
Expiry date	Date < 15 Characters	DD/MM/YY format

Software Requirements Specifications

User Story #29

User Story ID	US #29
User Story Name	View Vouchers
Actors	Customer
Description	**As** a customer **I like** to be able to view vouchers **So,** I can use it or send it as a gift
Pre condition	To be logged in
Post condition	
Acceptance Criteria	**Given that** I am logged in and in the main page **When** I click view vouchers **Then** the system displays a list of available vouchers and their expiration dates.

Scenarios

Normal Scenario

Actor Action	System Response

Software Requirements Specifications

1-User clicks view vouchers	
	2- System displays available vouchers

No Exceptional Scenarios

Screen Design

Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Voucher	Text < 15 characters	Structured text
Expiry date	Date < 15 Characters	DD/MM/YY format

User Story #30

User Story ID	US #30

Software Requirements Specifications

User Story Name	Apply Vouchers
Actors	Customer
Description	**As** a customer **I like** to be able to apply vouchers **So,** it reduces my total check price.
Pre condition	To be logged in/ Placing an order
Post condition	
Acceptance Criteria	**Given that** I am on the go check page. **When** I click apply vouchers **Then** the system deducts from the total price to be paid

Scenarios

Normal Scenario

Actor Action	System Response
1-User clicks enters voucher's code	

Software Requirements Specifications

	2- System verifies the voucher and its expiration date. 3- System applies the voucher and displays the updated price after the discount.

Exceptional Scenario 1

Actor Action	System Response
1-User enters voucher's code	
	2- System verifies the voucher and its expiration date. 3- system displays an error messsage "Voucher Expired!"

Exceptional Scenario 2

Actor Action	System Response
1-User enters voucher's code	

Software Requirements Specifications

	2- System verifies the voucher and its expiration date. 3- System adds an additional voucher with the remaining amount in case the final price is less than the voucher's one. 4- System notifies user of the added voucher. 5-System displays the updated receipt.

Screen Design

Software Requirements Specifications

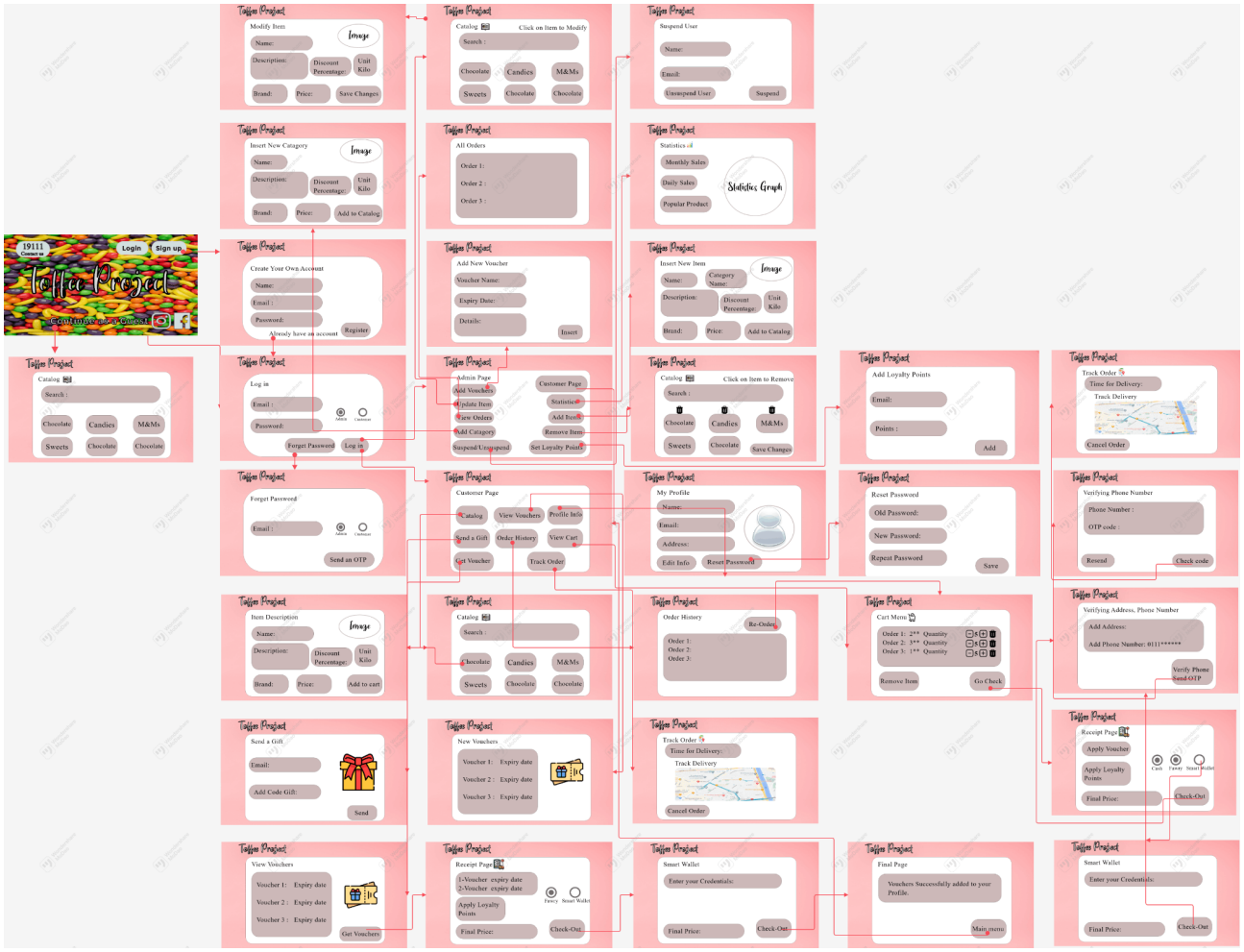
Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule
Voucher	Text < 15 characters	Structured text
Price	Numeric digits	Number greater than 1

CS251: Phase 1 – MRM
Project: Toffee

Software Requirements Specifications

System Navigation Map



➢ **Kindly Zoom in for details.**

Tools

- **Visual Paradigm**
- **Adobe Xd**
- **Mock It**
- **Flat Icon**

CS251: Phase 1 – MRM
Project: Toffee

Software Requirements Specifications

- **Unsplash**

Ownership Report

Student	Items he/she created
Mohamed Essam Mahmoud Osman (20210346)	-Use Case Model, Non-Functional Requirements, System Navigation Map. -Wrote Software Scope,Definitions, acronyms, and abbreviations. -Enriched User Story.
Maya Ayman Zain El-Din (20210508)	-Wrote Software Purpose,Document Scope ,and Audience, System Navigation Map. -Functional Requirements, Use Case Model. -Enriched User Story
Rawan AbdelRahman Younis Mohamed (20210524)	-Functional Requirements, Use Case Model. -System Navigation Map. -Enriched User Story.