Vanier College Faculty of Science and Technology System Development 420-436-VA

Deliverable 03

Orange Team

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In collaboration with @leens_touch on Instagram

We, the Orange Team, certify that this assignment is our own work

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Executive Overview

This document highlights important documentation in relation to the website that will be constructed over the next few weeks.

The document begins with an overview of who our client is. Leen Antoun, the owner of the small business @Leens_Touch on Instagram is a hard-working, growth-oriented University student who sells customized, hand-made accessories to a mostly female audience as a side income. She currently uses excel sheets and the Instagram platform to manage her inventory and run her business.

The business problems of our clients remain the same, but we have found solutions for her issue with the limited way she may post her products on Instagram, the website's layout and easily fillable forms to upload new products will help her work faster, more effectively and with more ease. For her second issue, which is receiving payments by cash or not at all after she had already done the work, the website we are creating demands payment upon placing the order, by paypal or by card, therefore our client shall always receive her payments electronically before spending time and money on the products. The third issue we are fixing for our client with this website is that of inventory management. Instead of our client storing all her transactions and inventory through excel sheets, it will be done through the integrated database within the web application. Lastly, our client's issue with not being able to send promotions to her customers is fixed by having a consent/non consent button to receive promotional emails as well as a feature for her to see who she may send them to.

Following the business problems, this document discusses the processes that client-side, server-side and admin have to follow in order to run the business smoothly. It describes how a client may add items to their cart and go through the checkout process which then updates the database and allows the seller to view, fulfill and mark the order as shipped. It also describes the two ways that a customer may contact the seller and how the seller may send promotional emails to her clients.

After these processes, there are multiple appendices that contain important documentation for the coding portion of this project. Appendix 1 contains the use case system diagram of the entire system. Appendix 2 has all of the use case templates, followed by Appendix 3 which contains our UML diagrams, which are activity and sequence diagrams. Appendix 4 contains the class diagram and state chart diagram for the entire system followed by the final appendix, Appendix 5, which contains copies of forms and other documents used by our client. Appendix 5 is empty due to our client not wanting to dish out sensitive information about her small business.

Summary of the Client

Leen Antoun is a University student who has a part-time job and owns the small business known as @Leens_Touch on Instagram. She owns this small business as a side income since she already has a job and she created this business because her entourage had previously encouraged her to start selling the handmade accessories that she was wearing. Her small business is a small gift shop where every accessory is handmade and customizable. Her products mostly target the female audience.

Our client is growth-oriented and she values the effects of digital marketing and clearly understands that platforms such as Instagram can provide her good leverage but have their limitations when it comes to selling a product. She uses excel sheets to keep track and organize her incomes and expenses when managing her business, which is good, but not enough for her. Mrs. Antoun's computer knowledge is limited to basic skills such as browsing, MS Office, and other average user applications and capabilities. Given her experience with the MS Office suite and her desire to learn, she will be able to manage her web application with the proper guidance and documentation.

Business Problem

Now that we have finished the UML diagram, the Use Case Templates, The Flow Chart as well as the Class Diagram, we can better understand the precise business problems our client has. These will be described below.

The first business problem we can deal with is the limited ways our client may display her products on her current platform, Instagram. Instagram, albeit being a great marketing strategy, is not a platform made for selling products, therefore the item descriptions, prices, quantity in stock, and other important information that should be displayed when posting an item for sale need to be rewritten on every post. Leen Antoun has multiple variations of each and every product because they are customizable and simply does not have time or the resources to post every single one of those and rewrite the description every time. With a website, she would be able to post one listing for all of the variations available.

Another business problem that the Orange Team is fixing for our client is her payment methods. The owner of @Leens_Touch on Instagram no longer wants to receive cash payments and no longer wishes to receive payment after the product is done. The reason for this is that, sometimes, customers only pay a partial amount of the total price or simply refuse to pay and no longer want the item after our client has already spent time and money on creating the product for her customers. With the website we are offering her, customers must pay her while placing the order, therefore our client will get paid before having to buy materials and spend time making the order.

A third issue we are fixing for our client is that of inventory management: our client currently uses excel sheets to manage money spent, money received, supplies stock and other important information about her small business. The website we are creating for our customer will have a semi-automated, if not fully automated, database system. This will allow our client to spend less time manually counting and updating her inventory and managing money flow as she will already have all of the information necessary in her website on the admin side.

Finally, the last business problem that our website will solve for our customer is the lack of advertisement and promotional offers. Currently the way our client operates makes it impossible for her to be able to offer promotional discounts to her clients unless she personally reaches out to each and every one of them. The website will resolve this issue by allowing customers, upon signup, to opt in or out of receiving promotional emails from our client, Leen Antoun.

Narrative Description of the Present Information System

Customers of Leen's Touch will soon have access to a website, instead of her Instagram profile. This means that, instead of visiting social media, our client's customers will be able to visit an actual website where they will land on the homepage when reaching the website. The homepage will have beautiful displays of Leen Antoun's work and a navigation bar allowing the customers to access multiple categories of products. On the top right-hand side of the webpage, clients will have a signup/sign in button which allows them to create an account or login to their account. Having an account is necessary to finish checking out and buying products, therefore it is a recommended process for customers to complete.

When customers navigate through the catalog they can see each and every product that is offered by the admin. When one of those products is clicked, the more detailed information is displayed on the website, such as an enlarged image, the name and full description of the item, its price, quantities available, as well as various customizable options such as color, size, and more.

To complete a purchase, first a customer needs to add at least one item to their cart by clicking the "add item to cart" button when an item is displayed on their screen. Then, the customer may navigate to their cart by clicking on the cart icon in the top of their screen, there they will find a list of all items in their cart and they may manage their cart by removing items. Once the customer is satisfied with the entirety of their cart, they may click on one of two checkout options: checkout with Paypal or checkout with a debit/credit card. If the client is not logged into their customer account, or simply does not have one, that person will be redirected to the signup/signin page. Once through the process of being logged in, the customer may proceed by entering their billing and shipping information, the customer is redirected towards the website to complete their purchase and confirm once again that they are buying the item.

Once a purchase is completed client-side, the admin now has orders to manage and fulfill. The admin may navigate to the order managing page and view a detailed list of orders. They click on shipped when it's sent out, but need to email the client with their shipping tracking if paid for, or click on the order to view the details of the items ordered.

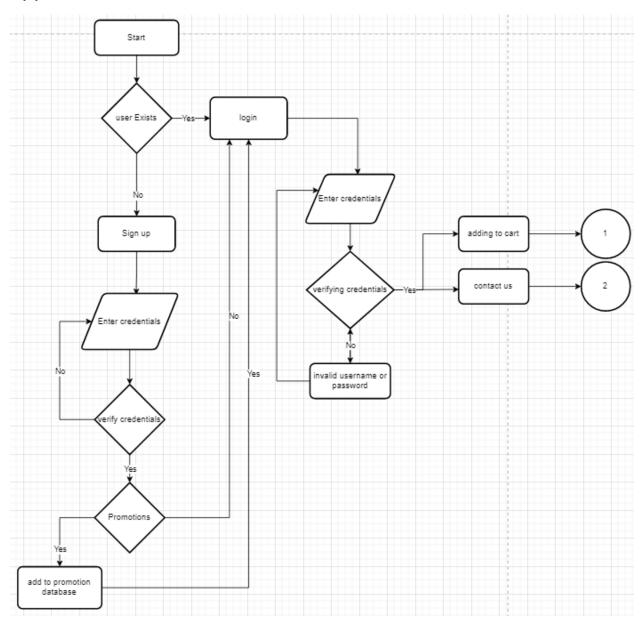
In addition to the order management, the admin has access to the product management. Our client may add, edit or remove products easily by filling or editing a form as well as simply clicking the remove button.

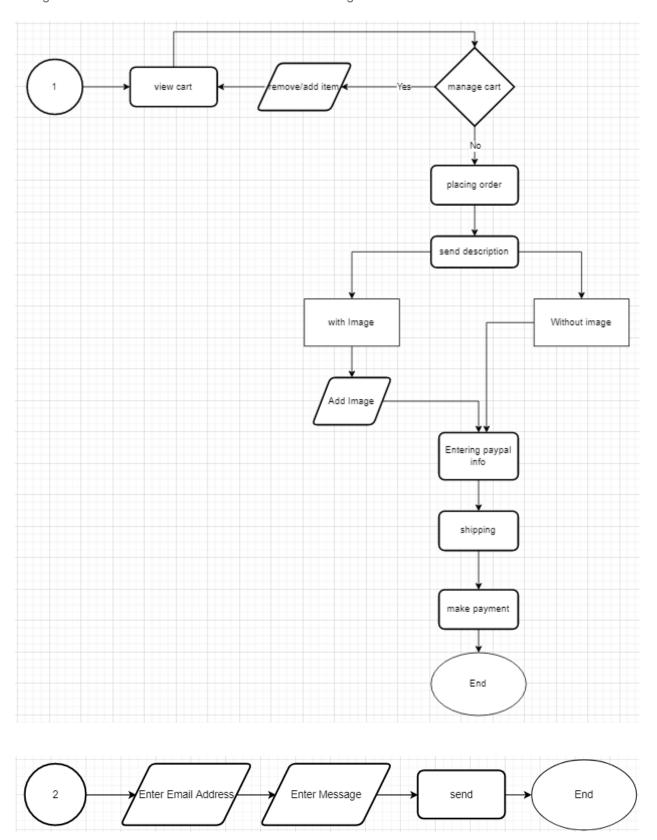
Finally, as per good customer service, customers should be able to view what the website and owner are about as well as contact the owner of the small business if they

have inquiries or issues. Leen's Touch offers this on their "About Us" and "Contact Us" page. The first of two pages states a little bit about Mrs Antoun and her business. The second of two, "Contact Us", displays a form where users, customers or not, may fill out their email details and then write a message. That message will be sent to our admin. This page also has alternatives for contacting the admin, such as her social media.

Appendixes

Appendix 1





Appendix 2

Use Case ID	LT-CreateUser		
Use Case Name	Creating User		
Created By:	Christina Kallas	Last Updated By:	N/A
Date Created:	01/03/22	Last Revision Date:	N/A
Actors:	Customers of Lee Database, Admin	n's Touch (Primary) (Secondary)	
Description:	This use case add	ls a new customer to the	e database
Trigger:	Customer fills out	sign-up form	
Preconditions:	1- Customer lands	on the website OR tries	s to checkout
PostConditions	Customer's information is saved in the system Customer can login		
Normal Flow	1. Customer fills out the sign-up form 2. The system asks the customer if they want to receive promotions -> SendingPromotional Emails (Extend LT-Promo) 3. System checks if password verification passes 4. System adds the customer's information to the database		
Alternative Flows	N/A		
Exceptions:	3a. If password fail checks 1. System displays message 2. Makes customer restart without signing them up or adding them to the database		
Includes:	LT-Promo		
Frequency of Use:	On demand		
Special Requirements:	N/A		
Assumptions:	Customer is able to fill up the sign-up form		
Notes and Issues:	N/A		

Use Case ID	LT-Login		
Use Case Name	Login		
Created By:	Christina Kallas	Last Updated By:	N/A
Date Created:	01/03/22	Last Revision Date:	N/A
Actors:	Customer of Leen Database (Second	's Touch (Primary) dary)	
Description:	This use case allo	ws a returning custome	to login to their account
Trigger:	Customer fills out	the login form	
Preconditions:	1- The customer h 2- The customer is	as a valid account s not logged in	
PostConditions	The customer is logged into their account The customer can checkout		
Normal Flow	System requires user's email and password Customer fills out the login form System authenticates the login		
Alternative Flows	3a. If authentication fails but user DOES NOT have an account 1. System asks user if they want to create an account -> Creating User (Extend LT-CreateUser)		
Exceptions:	3a. If authentication fails AND user has an account 1. System displays a message 2. Restarts from step 1 without being logged in		
Includes:	LT-CreateUser		
Frequency of Use:	On demand		
Special Requirements:	N/A		
Assumptions:	Customer has an account Customer is able to fill out the sign-in form		
Notes and Issues:	N/A		

Use Case ID	LT-Promo			
Use Case Name	Sending Promotional Emails			
Created By:	Christina Kallas Last Updated By: N/A			
Date Created:	01/03/22	Last Revision Date:	N/A	
Actors:	Admin (Primary) Customer (Second	dary)		
Description:	This use case allo emails to the custo		osite to send promotional	
Trigger:	The admin wants customers	to send a promotional e	mail to the consenting	
Preconditions:	1- At least one cus emails	1- At least one customer has consented to receiving promotional emails		
PostConditions	1- One or multiple customers consent to receiving promotional emails -> Creating User (Extend LT-CreateUser) 2- The consenting customers receive a promotional email 3- The consenting customers can use promotional codes			
Normal Flow	Admin checks database for consenting customers Admin sends out promotional emails to those customers			
Alternative Flows	N/A			
Exceptions:	N/A			
Includes:	LT-CreateUser			
Frequency of Use:	On Demand			
Special Requirements:	At least one customer has consented to receiving promotional emails			
Assumptions:	The admin wants to send a promotional email The admin is able to send a promotional email			
Notes and Issues:	N/A			

Use Case ID	LT-Contact			
Use Case Name	Sending Emails to the Admin			
Created By:	Christina Kallas	Christina Kallas Last Updated By: N/A		
Date Created:	01/03/22	Last Revision Date:	N/A	
Actors:	Customer (Primar Admin (Secondary	• •		
Description:	This use case allo the admin of the w		omers to send an email to	
Trigger:	The customer war	nts to contact the admin		
Preconditions:	1- The customer is	s logged into their accou	ınt	
PostConditions	1- The admin rece	ives an email from the o	customer	
Normal Flow	The customer navigates to the "Contact Us" page of the website The system presents a form asking the customer for their email, their name, their message The customer fills out the form with their email The system authenticates the email The email is sent to the admin			
Alternative Flows	If the customer does not want to fill the form The customer sees other ways to contact the admin at the bottom of the page The customer personally contacts the admin			
Exceptions:	4a. If the authentication fails 1. The system displays a message stating the email is not the same as the one used to login 2. The system requires the user to start over without sending the email to the admin			
Includes:	LT-CreateUser			
Frequency of Use:	On Demand			
Special Requirements:	N/A			
Assumptions:	The customer is able to fill out the contact form			
Notes and Issues:	N/A			

Use Case ID	LT-CheckoutWithPaypal		
Use Case Name	Checking out with Paypal		
Created By:	Christina Kallas Last Updated By: N/A		
Date Created:	01/03/22	Last Revision Date:	N/A
Actors:	Customer (Primar Database, Paypal	y) , Admin(Secondary)	
Description:	This use case allo and checkout	ws for a customer to buy	y the items in their cart
Trigger:	A customer wants	to buy items	
Preconditions:	1- The customer h	as items in their cart	
PostConditions	2- The admin will i	e cart are bought and pa receive the order now fulfill the order	iid for
Normal Flow	1- Assuming the customer is on the page with their cart, the customer clicks the "Proceed to Checkout with Paypal" button 2- The webpage redirects the customer to the Paypal's login page 3- The customer logs into their Paypal account 4- Paypal authenticates the login 5- Paypal ensures that the name, address, and preferred card are correct 6- The customer clicks on "continue" 7- The customer is redirected to Leen's Touch website to finish the transaction 8- The customer clicks on "submit order" 9- A popup message confirms the order was placed 10- The admin receives the money and order details		
Alternative Flows	 1a- If the user is not logged in and does not have an account 1. The user must create an account -> Creating User (Extend LT-CreateUser) 2. Proceed normally to step 2 1b- If the user is not logged in and has an account 1. The user must log into their account -> Login (Extend LT-Login) 3a- If the user does not have a paypal account 1. The customer shall make a paypal account 2. Proceed with step 4 4a- If the login fails 1. The website will display a message and not allow the login to happen 2. The customer will have to enter proper credentials 3. Proceed normally with step 5 		

	5a- If the name and address are incorrect 1. The user clicks "add a shipping address" 2. The user enters the correct shipping information 3. Proceed normally with step 6 5b- If the card being used is incorrect 1. The user clicks "add a debit or credit card" 2. The user adds the correct billing information 3. Proceed normally with step 6		
Exceptions:	N/A		
Includes:	LT-Login LT-CreateUser		
Frequency of Use:	On demand		
Special Requirements:	Customer must have an account with Paypal		
Assumptions:	Customer has an account with Paypal Customer is able to buy from the Admin Customer already has a cart full of items they want to buy		
Notes and Issues:	N/A		

Use Case ID	LT-CheckoutWithCard		
Use Case Name	Checking out with a card		
Created By:	Christina Kallas Last Updated By: N/A		
Date Created:	02/03/22	Last Revision Date:	N/A
Actors:	Customer (Primar Database, Bank, A	• •	
Description:	This use case allo and checkout	ws for a customer to buy	y the items in their cart
Trigger:	A customer wants	to buy items	
Preconditions:	1- The customer h	as items in their cart	
PostConditions	2- The admin will i	e cart are bought and pa receive the order now fulfill the order	id for
Normal Flow	1- Assuming the customer is on the page with their cart, the customer clicks the "Proceed to Checkout with a Credit or Debit card" button 2- The webpage redirects the customer to the checkout page 3- The customer must enter their billing and shipping information 4- The customer clicks on "continue" 5- The customer is redirected to Leen's Touch website to finish the transaction 6- The customer clicks on "submit order" 7- A popup message confirms the order was placed 8- The admin receives the money and order details		
Alternative Flows	1a- If the user is not logged in and does not have an account 1. The user must create an account -> Creating User (Extend LT-CreateUser) 2. Proceed normally to step 2 1b- If the user is not logged in and has an account 1. The user must log into their account -> Login (Extend LT-Login)		
Exceptions:	N/A		
Includes:	LT-Login LT-CreateUser		
Frequency of Use:	On demand		

Special Requirements:	Customer must have a credit or debit card		
Assumptions:	Customer has a credit or debit card Customer is able to buy from the Admin Customer already has a cart full of items they want to buy		
Notes and Issues:	N/A		

Use Case ID	LT-AddProduct		
Use Case Name	Adding a Product		
Created By:	Christina Kallas Last Updated By: N/A		
Date Created:	02/03/22	Last Revision Date:	N/A
Actors:	Admin (Primary) Database (Seconda	ry)	
Description:	This use case allow	s for the admin to add a pr	oduct for sale
Trigger:	A new product is av	ailable for sale	
Preconditions:	N/A		
PostConditions		ded to the website for sale oducts will be updated with	
Normal Flow	1- The admin goes into the admin control page 2- The button "add product" is clicked 3- An empty form is displayed on the screen 4- The admin is required to upload a picture of the product,the product ID, the name, price, description, and quantity available of the specified product 5- The admin clicks on "post new product to website" button		
Alternative Flows	 5a- If any of the information was not added into the form 1. The web app displays a message 2. The admin is required to redo this step without the product being posted to the website 3. Continue normally to step 5 5b- If the admin no longer wishes to post a new product for sale 1. The admin clicks on "cancel upload" 2. The web app brings the admin back to the control page without uploading the new product 		
Exceptions:	5b		
Includes:	N/A		
Frequency of Use:	On demand		
Special Requirements:	N/A		
Assumptions:	The admin can fill out the form The admin is logged in with their administrative credentials		
Notes and Issues:	N/A		

Use Case ID	LT-UpdateProduct		
Use Case Name	Updating a Product		
Created By:	Christina Kallas Last Updated By: N/A		
Date Created:	02/03/22	Last Revision Date:	N/A
Actors:	Admin (Primary) Database (Second	dary)	
Description:	This use case allo	ws for the admin to edit	a product for sale
Trigger:	A product is chang	ged slightly and needs a	n edit on the website
Preconditions:	The product is liste	ed with certain information	on
PostConditions	The product is listed. The database is u	ed with different informa pdated	tion
Normal Flow	 1- The admin goes into the admin control page 2- The "Update Product" button is clicked 3- The product that is to be updated is clicked 4- A form that is pre-filled with the product's details is displayed on the screen 5- The admin must change the uploaded picture of the product, the name, price, or description of the specified product 6- The admin clicks on "update product" button 		
Alternative Flows	6a- If any of the information was removed and not added back into the form 1. The web app displays a message 2. The admin is required to redo this step without the product being posted to the website 3. Continue normally to step 5 6b - If the admin no longer wishes to update the product 1. The admin clicks "cancel product"		
Exceptions:	6b		
Includes:	N/A		
Frequency of Use:	On Demand		
Special Requirements:	N/A		
Assumptions:	The admin can fill out the form The admin is logged in with their administrative credentials		
Notes and Issues:	N/A		

Use Case ID	LT-RemoveProduct		
Use Case Name	Remove Product		
Created By:	Christina Kallas	Last Updated By:	N/A
Date Created:	02/03/22	Last Revision Date:	N/A
Actors:	Admin (Primary) Database (Secondary)		
Description:	This use case allows the admin to remove a product for sale		
Trigger:	A product is no longer offered to buy		
Preconditions:	A product is listed on the website		
PostConditions	The specified product is no longer listed on the website The database is updated		
Normal Flow	1- The admin goes into the admin control page 2- The admin clicks on "Remove a Product" 3- The product that is to be removed is clicked on and highlighted 4- A confirmation appears on the screen 5- The admin clicks "I am sure I want to delete this product" 6- A message of successful removal is displayed		
Alternative Flows	5a- If the admin no longer wishes to remove the listing 1. The admin clicks "keep product" 2. The product remains on the page and no product is removed from the website		
Exceptions:	5a		
Includes:	N/A		
Frequency of Use:	On Demand		
Special Requirements:	N/A		
Assumptions:	The admin is logged in with their administrative credentials		
Notes and Issues:	N/A		

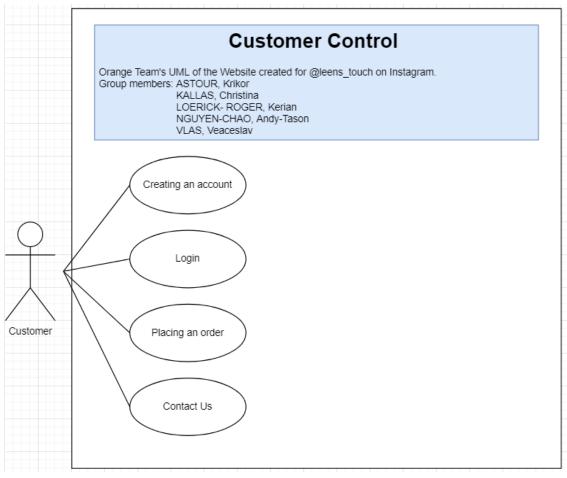
Use Case ID	LT-ManageOrders		
Use Case Name	Managing Orders		
Created By:	Christina Kallas	Last Updated By:	N/A
Date Created:	02/03/22	Last Revision Date:	N/A
Actors:	Admin (Primary) Database (Secondary)		
Description:	This use case allows the admin to view and manage all orders		
Trigger:	The admin would like to view or manage the orders that have come in		
Preconditions:	The admin has orders they have not reviewed/fulfilled yet		
PostConditions	The admin has the information they need about orders and has managed them The database is updated		
Normal Flow	1- The admin navigates to their admin control page 2- The admin must click on the "view orders" button 3- The admin can now view all of their orders in list form 4- To view details and manage an order, the admin may click on the order 5- A page with all the order details is displayed 6- The admin may mark the order as being worked on or in transit		
Alternative Flows	4a- If the customer paid for tracking 1. The admin must email the customer with their tracking information		
Exceptions:	N/A		
Includes:	N/A		
Frequency of Use:	On Demand		
Special Requirements:	N/A		
Assumptions:	The admin is logged in through the admin credentials		
Notes and Issues:	N/A		

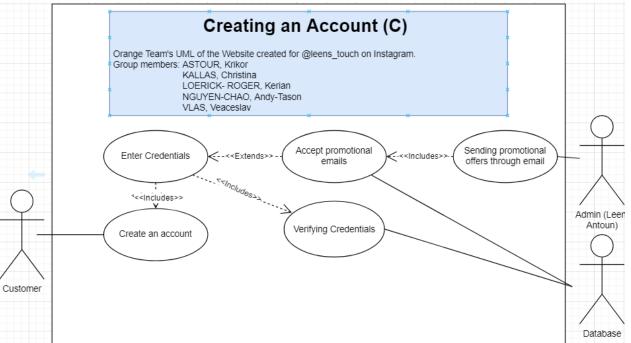
Use Case ID	LT-EditProfile		
Use Case Name	Editing CustomerProfile		
Created By:	Christina Kallas	Last Updated By:	N/A
Date Created:	03/03/22	Last Revision Date:	N/A
Actors:	Customer (Primary) Database (Secondary)		
Description:	This use case allows the user to edit the information on their profile, such as their address, payment information, name, etc		
Trigger:	The customer would like to change their information		
Preconditions:	The customer has information that is no longer accurate on their profile		
PostConditions	The customer now has newer, more accurate information in their profile The database is updated with the customer's new information		
Normal Flow	1- The customer navigates to the "My Profile" page 2- On the page, the customer clicks "Edit my Information" 3- An already filled out form is displayed 4- The customer may edit their information 5- The customer clicks "Save" 6- A confirmation is prompted from the website 7- The customer clicks "I confirm this information is correct" 8- The information is changed on the customer's profile		
Alternative Flows	7a- If the information is not correct 1. The customer clicks "Changes need to be made 2. Continue normally from step 3 7b- If the customer no longer wishes to update their profile 1. The customer clicks "cancel" 2. The changes are not updated and the customer is redirected to the "My Profile" page		
Exceptions:	7b		
Includes:	N/A		
Frequency of Use:	On Demand		
Special Requirements:	N/A		
Assumptions:	The customer is able to fill out the form		
Notes and Issues:	N/A		

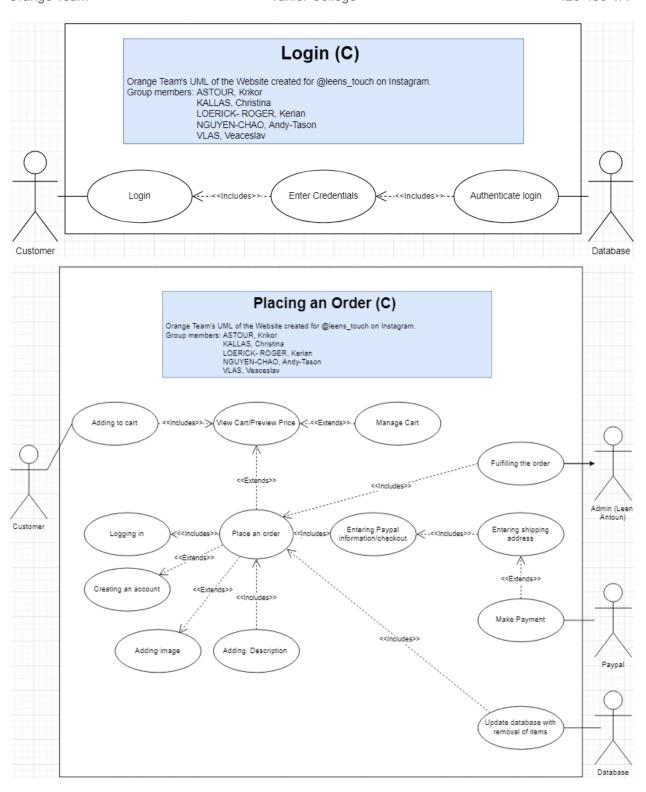
Use Case ID	LT-RemoveFromCart		
Use Case Name	Removing Item from Cart		
Created By:	Christina Kallas	Last Updated By:	N/A
Date Created:	03/03/22	Last Revision Date:	N/A
Actors:	Customer (Primary)		
Description:	This use case allows the user to remove an item from their cart before proceeding to checkout		
Trigger:	The customer would like to remove an item from their cart		
Preconditions:	The customer has items in their cart that they no longer would like to buy		
PostConditions	The specified item is no longer in their cart		
Normal Flow	1- The customer navigates to the "My cart" page 2- The customer clicks on an item in their cart which they no longer desire to buy 3- The customer clicks on "remove Item from cart" 5- A confirmation is prompted from the website 6- The customer clicks "I confirm I no longer want this item"		
Alternative Flows	6a- If the customer wants the item still 1. The customer clicks on "do not remove from cart" 2. The customer may carry on managing their cart while the item remains in it.		
Exceptions:	6a		
Includes:	N/A		
Frequency of Use:	On Demand		
Special Requirements:	N/A		
Assumptions:	The customer already has items in their carts		
Notes and Issues:	N/A		

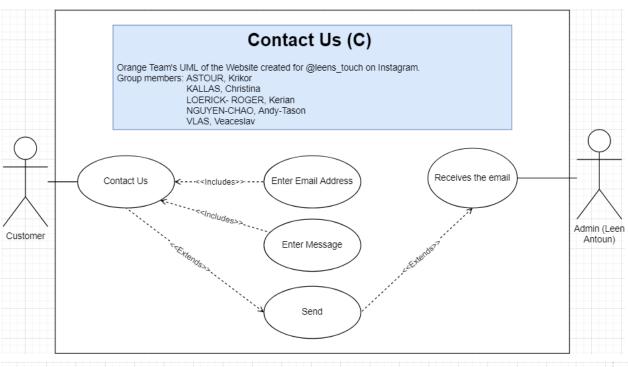
Use Case ID	LT-ViewPromos		
Use Case Name	View Customers who have promotions		
Created By:	Christina Kallas	Last Updated By:	N/A
Date Created:	03/03/22	Last Revision Date:	N/A
Actors:	Admin (Primary) Database (Secondary)		
Description:	This use case allows the admin view the database that holds whether or not a customer has accepted to receive promotional emails		
Trigger:	The admin wants to see who she can send promotional emails to		
Preconditions:	The admin does not know who she may or may not send emails to		
PostConditions	The admin now knows who she can send emails to		
Normal Flow	1- The admin must navigate to the admin control page 2- The admin clicks on the "View promotions" button 3- A table is displayed to the admin where the emails with the emails who have accepted the promotional emails		
Alternative Flows	N/A		
Exceptions:	N/A		
Includes:	N/A		
Frequency of Use:	On Demand		
Special Requirements:	N/A		
Assumptions:	The admin is logged in with their administrative credentials		
Notes and Issues:	N/A		

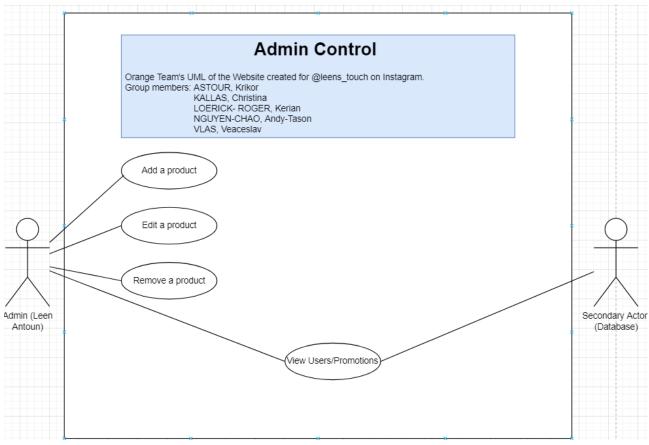
Appendix 3

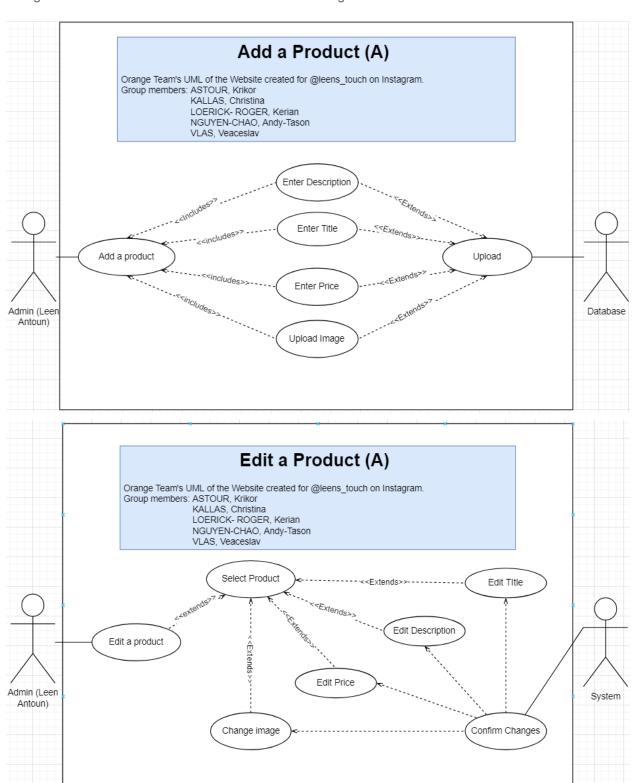


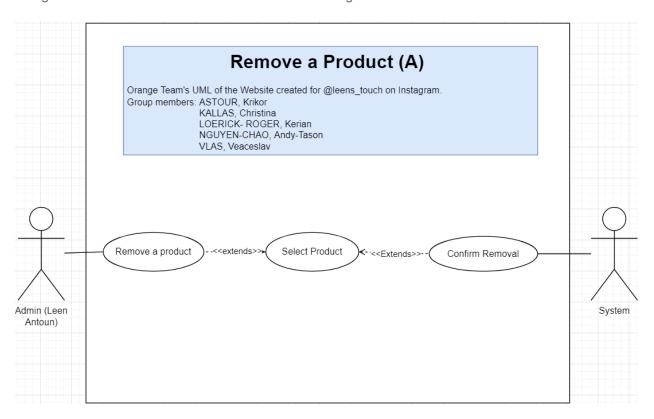




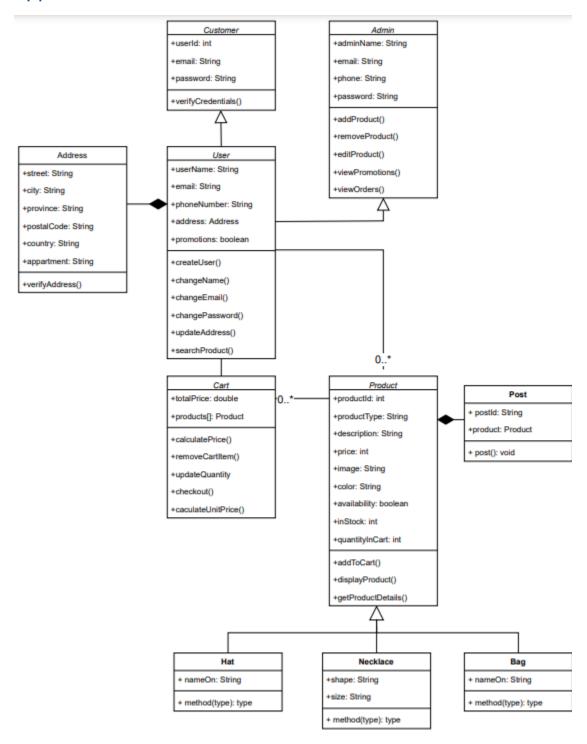








Appendix 4 and 5



Appendix 6

Our client does not feel comfortable sharing her excel files with us as it does contain sensitive information.

This appendix shall remain empty.

Work Cited