

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 be able to sign up and buy items. Until that website is made, the way the system works is described below.

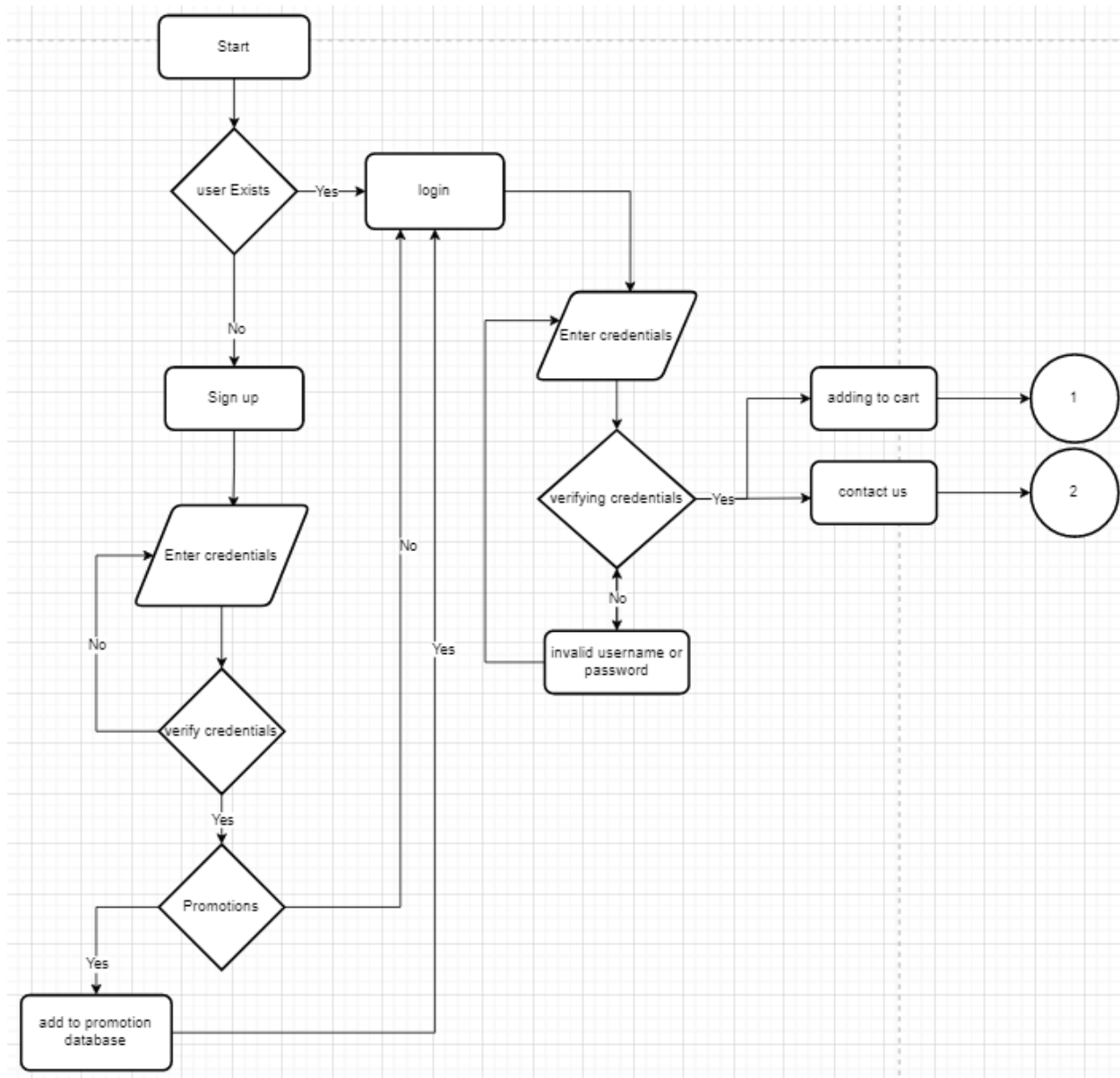
People who happen to stumble across @Leens_Touch on Instagram, or people who know the company and actively reach out to that page are greeted by pictures of our clients products. They may browse freely on her Instagram page, and, to buy an item, customers must send her a private message through Instagram and discuss with her how they want their item customized.

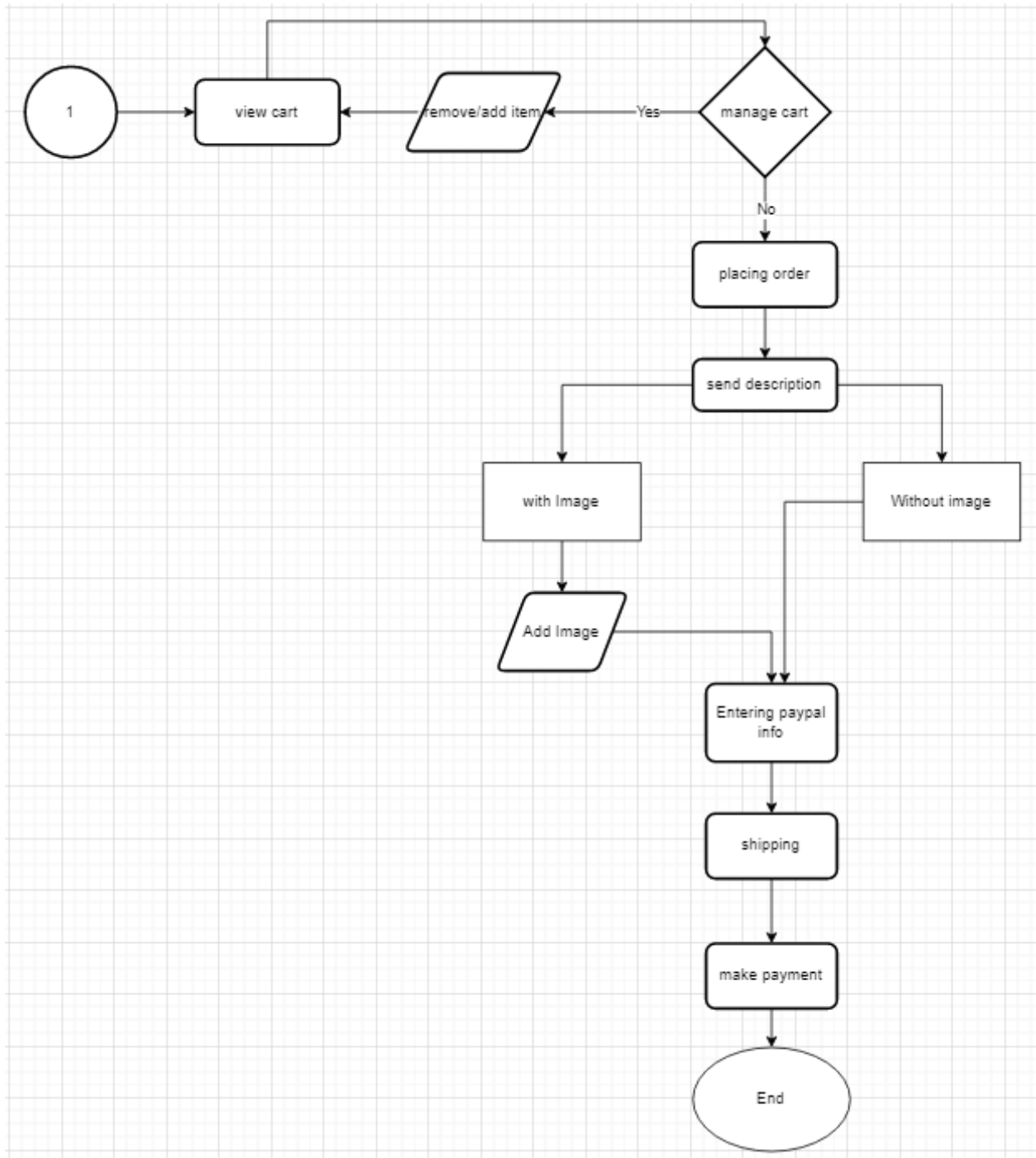
Following these discussions, our client works on the item and updates her inventory which is currently kept in excel sheets that she manually updates. Once her work on the item is done, she will either ask for a paypal invoice to get paid and send the item out by shipping, or she will hand deliver the item and receive cash payment.

Once paid, she updates a different excel sheet with her transactions, whether it be spending money on supplies for the items she worked on or receiving money from her clients.

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 Leen's Touch (Primary) Database, Admin (Secondary)		
Description:	This use case adds a new customer to the database		
Trigger:	Customer fills out sign-up form		
Preconditions:	1- Customer lands on the website OR tries to checkout		
PostConditions	1- Customer's information is saved in the system 2- 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's Touch (Primary) Database (Secondary)		
Description:	This use case allows a returning customer to login to their account		
Trigger:	Customer fills out the login form		
Preconditions:	1- The customer has a valid account 2- The customer is not logged in		
PostConditions	1- The customer is logged into their account 2- The customer can checkout		
Normal Flow	1. System requires user's email and password 2. Customer fills out the login form 3. 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 (Secondary)		
Description:	This use case allows the admin of the website to send promotional emails to the customer		
Trigger:	The admin wants to send a promotional email to the consenting customers		
Preconditions:	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	1. Admin checks database for consenting customers 2. 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	Last Updated By:	N/A
Date Created:	01/03/22	Last Revision Date:	N/A
Actors:	Customer (Primary) Admin (Secondary)		
Description:	This use case allows Leen's Touch's customers to send an email to the admin of the website		
Trigger:	The customer wants to contact the admin		
Preconditions:	1- The customer is logged into their account		
PostConditions	1- The admin receives an email from the customer		
Normal Flow	1. The customer navigates to the "Contact Us" page of the website 2. The system presents a form asking the customer for their email, their name, their message 3. The customer fills out the form with their email 4. The system authenticates the email 5. The email is sent to the admin		
Alternative Flows	2a. If the customer does not want to fill the form <ol style="list-style-type: none"> 1. The customer sees other ways to contact the admin at the bottom of the page 2. The customer personally contacts the admin 		
Exceptions:	4a. If the authentication fails <ol style="list-style-type: none"> 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 (Primary) Database, Paypal, Admin(Secondary)		
Description:	This use case allows for a customer to buy the items in their cart and checkout		
Trigger:	A customer wants to buy items		
Preconditions:	1- The customer has items in their cart		
PostConditions	1- The items in the cart are bought and paid for 2- The admin will receive the order 3- The admin can now fulfill the order		
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 <ol style="list-style-type: none"> The user must create an account -> Creating User (Extend LT-CreateUser) Proceed normally to step 2 1b- If the user is not logged in and has an account <ol style="list-style-type: none"> The user must log into their account -> Login (Extend LT-Login) 3a- If the user does not have a paypal account <ol style="list-style-type: none"> The customer shall make a paypal account Proceed with step 4 4a- If the login fails <ol style="list-style-type: none"> The website will display a message and not allow the login to happen The customer will have to enter proper credentials Proceed normally with step 5 		

	<p>5a- If the name and address are incorrect</p> <ol style="list-style-type: none">1. The user clicks “add a shipping address”2. The user enters the correct shipping information3. Proceed normally with step 6 <p>5b- If the card being used is incorrect</p> <ol style="list-style-type: none">1. The user clicks “add a debit or credit card”2. The user adds the correct billing information3. 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 (Primary) Database, Bank, Admin(Secondary)		
Description:	This use case allows for a customer to buy the items in their cart and checkout		
Trigger:	A customer wants to buy items		
Preconditions:	1- The customer has items in their cart		
PostConditions	1- The items in the cart are bought and paid for 2- The admin will receive the order 3- The admin can now fulfill the order		
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 (Secondary)		
Description:	This use case allows for the admin to add a product for sale		
Trigger:	A new product is available for sale		
Preconditions:	N/A		
PostConditions	A product will be added to the website for sale The database of products will be updated with a new product for sale		
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 <ol style="list-style-type: none"> 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 <ol style="list-style-type: none"> 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 (Secondary)		
Description:	This use case allows for the admin to edit a product for sale		
Trigger:	A product is changed slightly and needs an edit on the website		
Preconditions:	The product is listed with certain information		
PostConditions	The product is listed with different information The database is updated		
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 <ol style="list-style-type: none"> 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 <ol style="list-style-type: none"> 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 <ol style="list-style-type: none"> 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		

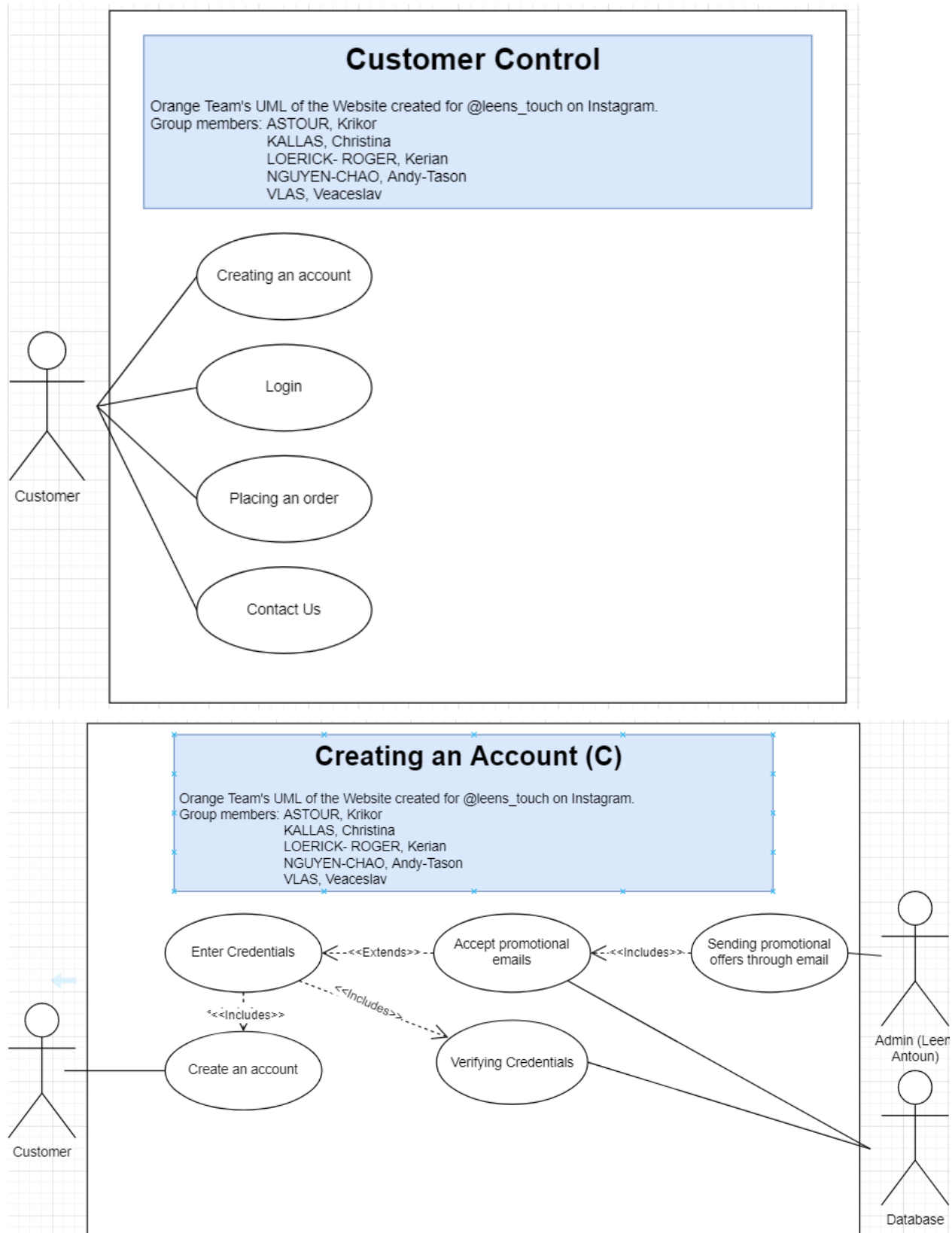
Use Case ID	LT-ManageOrders		
Use Case Name	Managing Orders		
Created By:	Christina Kallas	Last Updated By:	N/A
Date Created:	02/03/22	Last Revision Date:	N/A
Actors:	Admin (Primary) Database (Secondary)		
Description:	This use case allows the admin to view and manage all orders		
Trigger:	The admin 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		

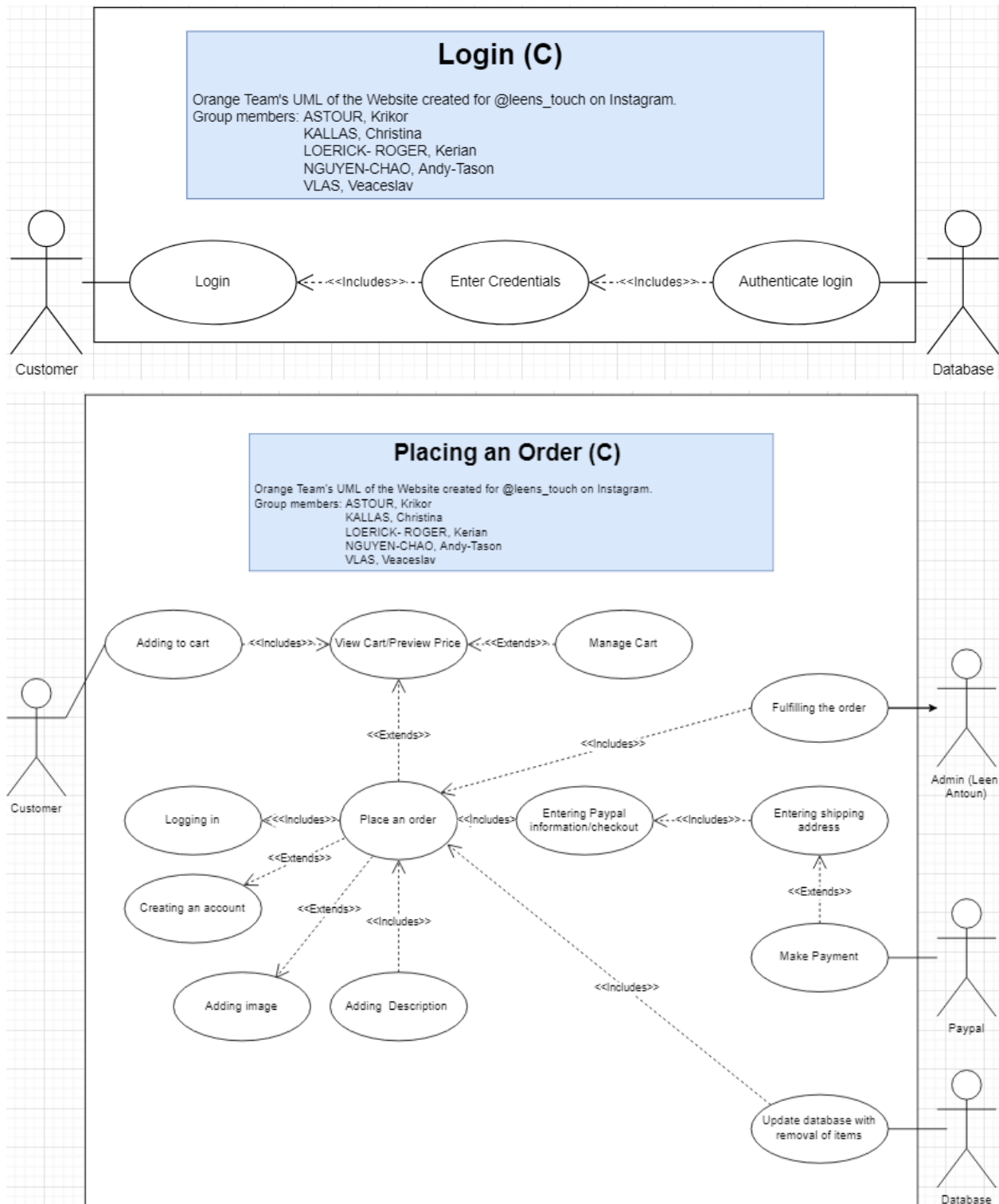
Use Case ID	LT-EditProfile		
Use Case Name	Editing CustomerProfile		
Created By:	Christina Kallas	Last Updated By:	N/A
Date Created:	03/03/22	Last Revision Date:	N/A
Actors:	Customer (Primary) Database (Secondary)		
Description:	This use case allows the user to edit the information on their profile, 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 <ol style="list-style-type: none"> 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 <ol style="list-style-type: none"> 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		

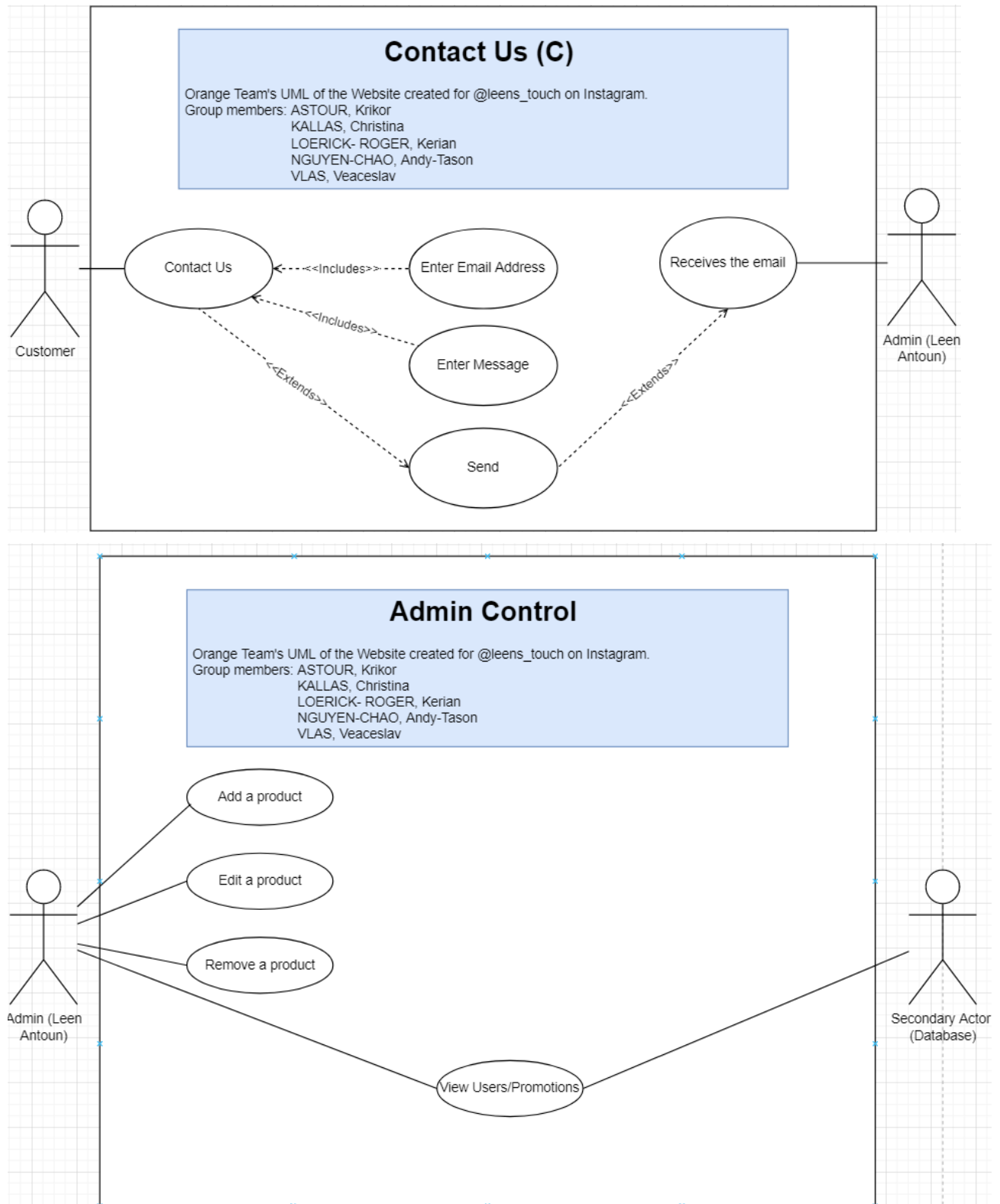
Use Case ID	LT-RemoveFromCart		
Use Case Name	Removing Item from Cart		
Created By:	Christina Kallas	Last Updated By:	N/A
Date Created:	03/03/22	Last Revision Date:	N/A
Actors:	Customer (Primary)		
Description:	This use case allows the user to remove an item from their cart before proceeding to checkout		
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 <ol style="list-style-type: none"> 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		

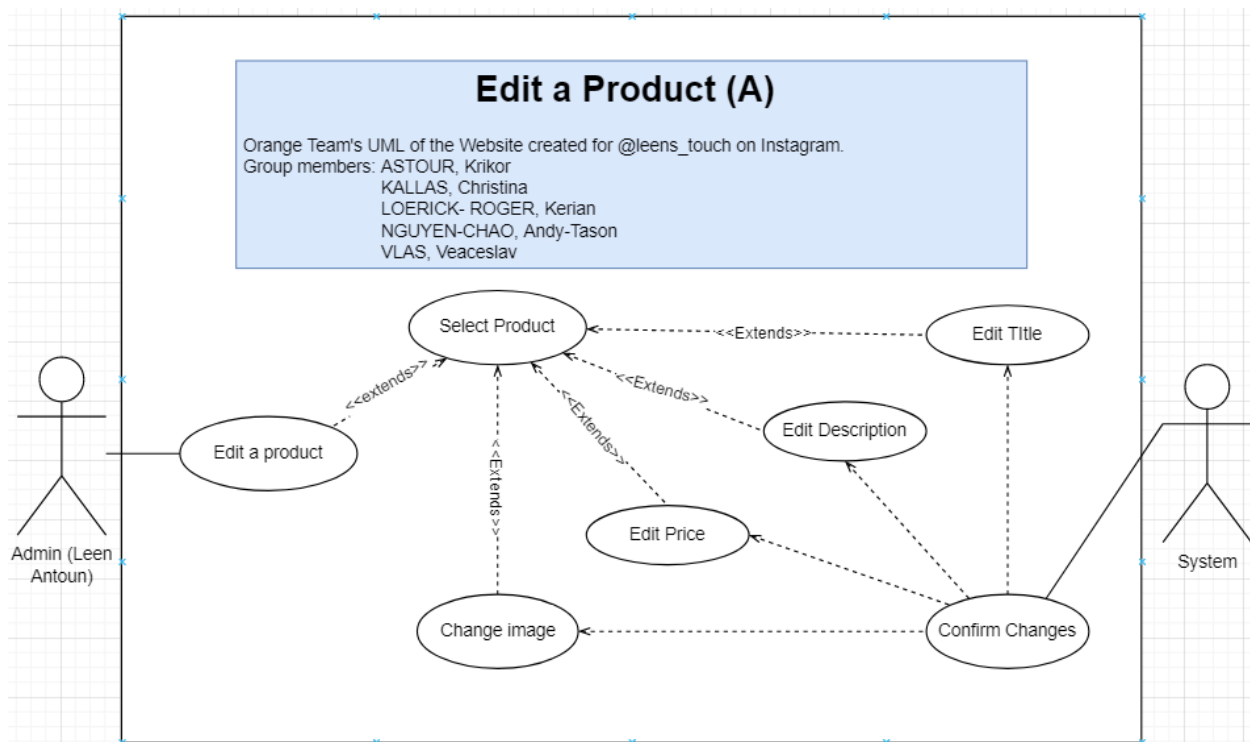
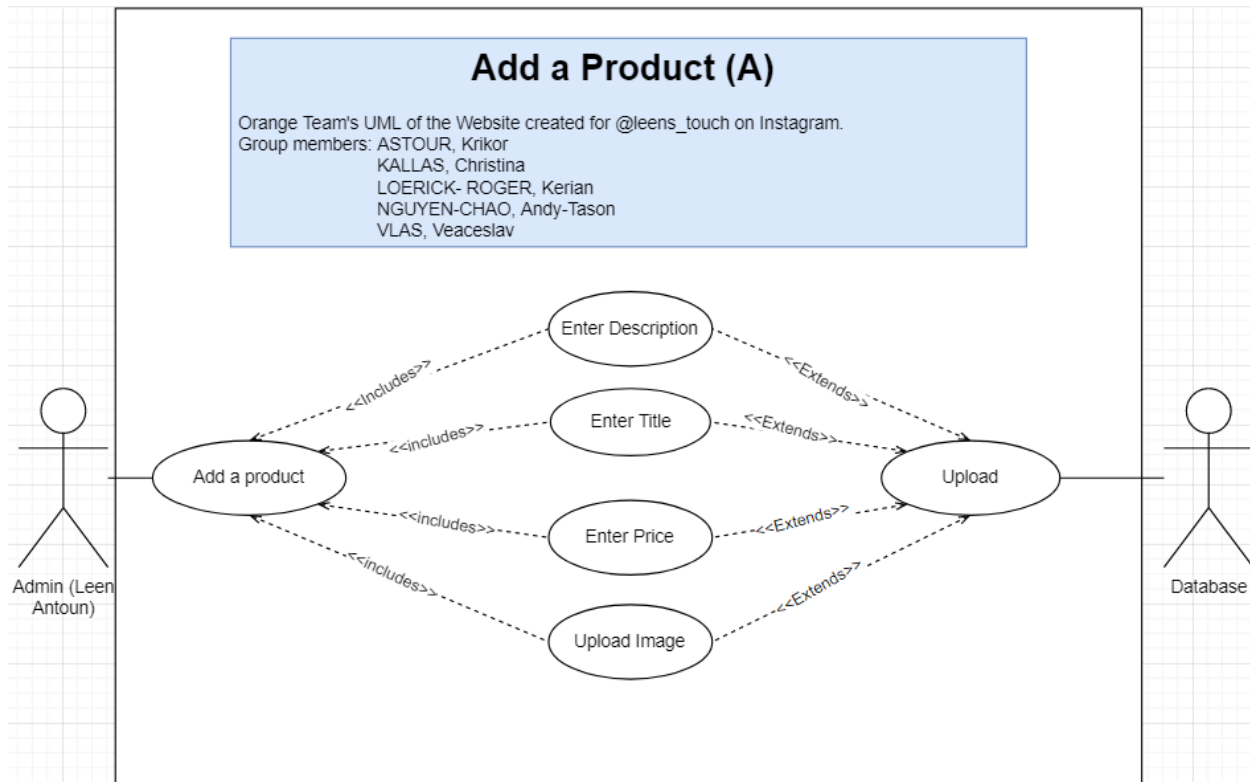
Use Case ID	LT-ViewPromos		
Use Case Name	View Customers who have promotions		
Created By:	Christina Kallas	Last Updated By:	N/A
Date Created:	03/03/22	Last Revision Date:	N/A
Actors:	Admin (Primary) Database (Secondary)		
Description:	This use case allows the admin view the database that holds whether 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		

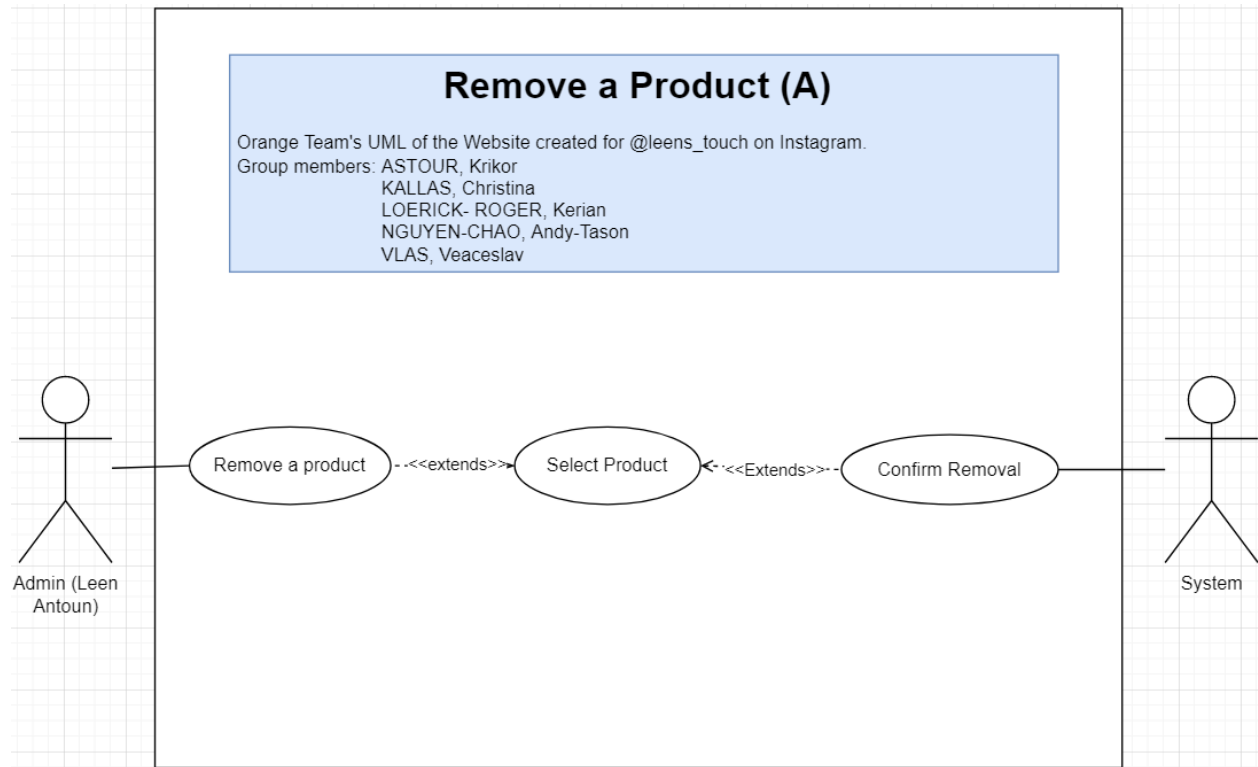
Appendix 3



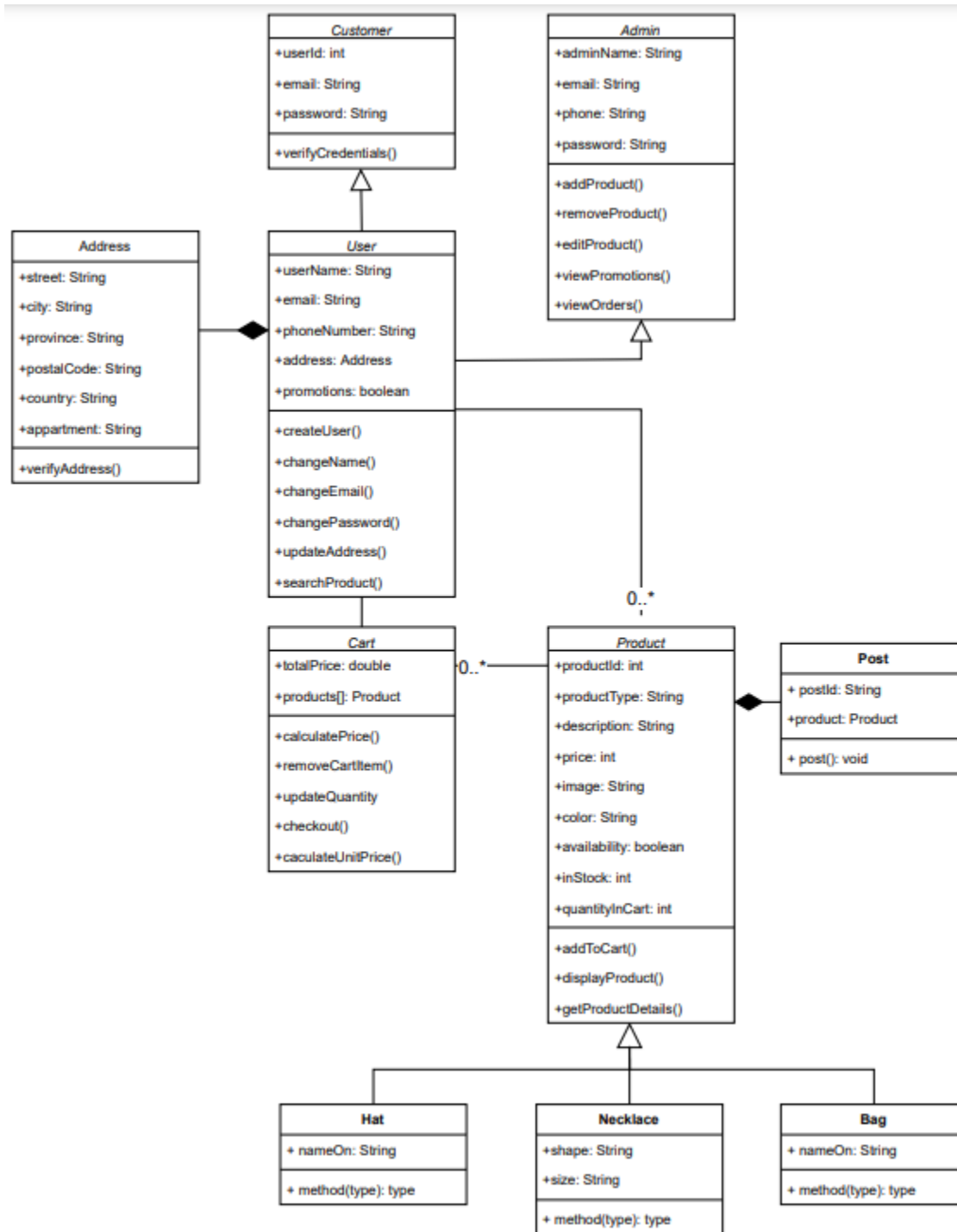








Appendix 4 and 5



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
