

Group 3 Project Description

A marketplace for second-hand buying and selling specifically for college students.

1. Introduction

1.1 App Introduction

Our newest development is an app that allows college students to get access to the stuff they need and sell the stuff they no longer need. Our app plans for every university to have their own subcommunity within the app allowing students when they download the app to register within their own college. The app also has an added feature if an object you are looking for is not in the app, it can reroute you to craigslist or ebay items near you. In our app, we want to maintain safe measures which is why we plan to implement a verification system through college emails and IDs ensuring that everyone who is selling or buying on the app is a college student with a .edu account. We plan to include a rating system and a chat system so that buyers and sellers know who they are talking to and their reputation.

1.2 App Scope

The app will function similarly to other market apps, where there will be a main page, featuring general purchases (such as writing utensils), recent additions, and items catered towards you based on previous purchases and searches. A messaging/middleman system may also be implemented to speed up user interactions. Other pages will include necessities, such as a cart and an effective search tool, with precise filters. The search tool will also show results from ebay, craigslist, etc, by matching markers, such as item name and what function the item serves to do.

1.3 Definitions

Since the app is designed with college students in mind, it would include things such as:

1. User Account- The main user account
2. Username/Email/Phone Number - Primary Identification
3. Password - For verification
4. Address - Where the user resides
5. School - The user's university
6. Catalog - page displaying items based on filters, location, etc

7. Scam prevention tactics - a messaging system to directly talk to the seller with the ability to use a trustworthy middleman to avoid scams and being able to rate sellers/buyers to see who you can purchase/sell to with no worry.

1.5 Overview

Every year college students move out of their dorms / apartments / place of living, and many items that are still functional are just thrown out. With our app students will be able to both donate and sell their items in a central marketplace to other students and faculty around campus.

2. Overall Description

2.1 Product Perspective

The Student U Market Place is intended for Students at Universities / Colleges so it minimizes waste during move out periods. Our typical user is a college student who is looking to get rid of the items they don't need, but at the same time helping them find buyers who are willing to pay them for it. It will act like an online yard sale. On the other hand, it will help buyers who are also college students, find items for cheaper rates than other platforms.

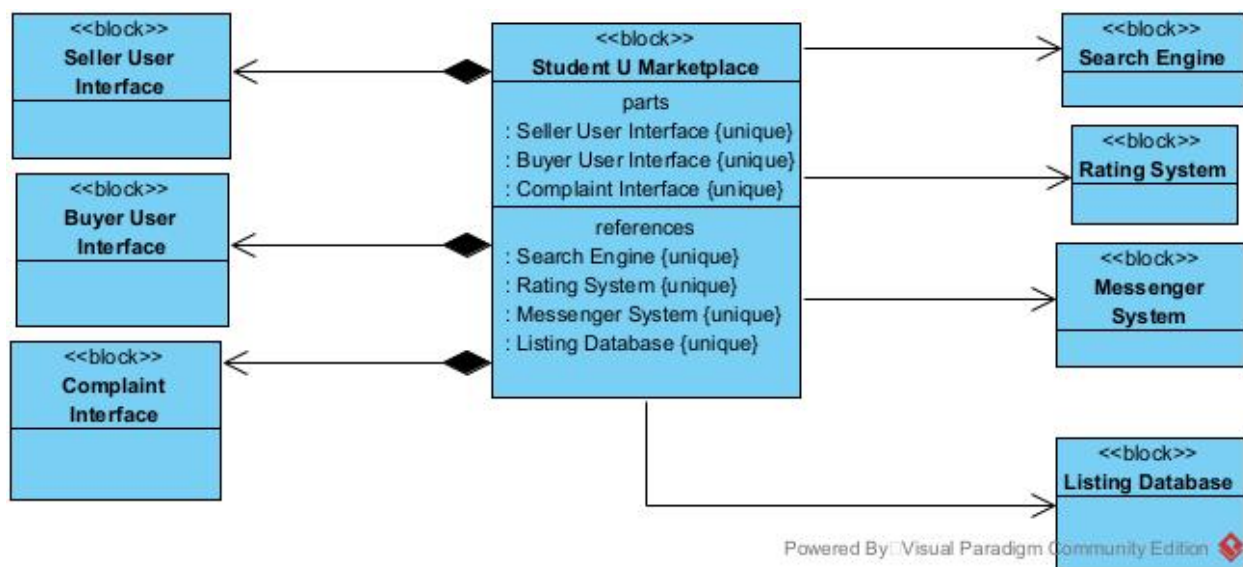
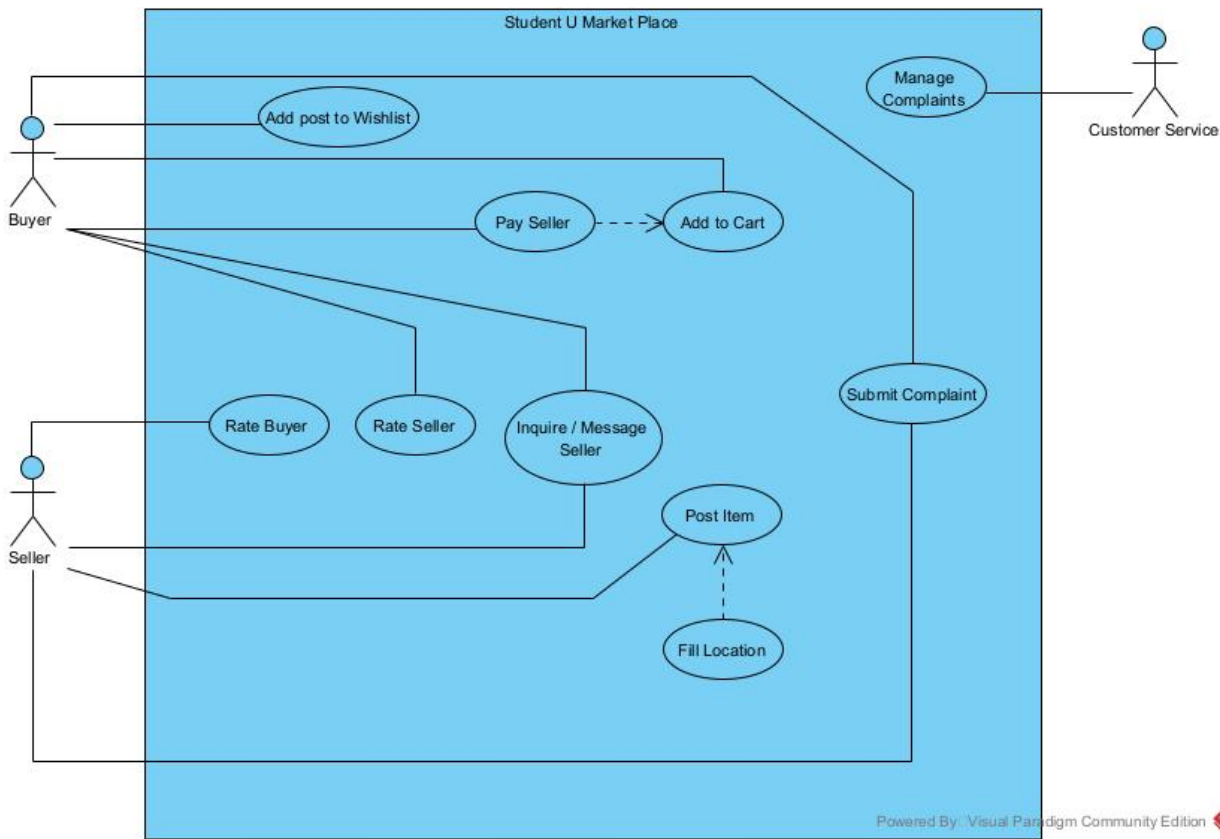


Figure 1 Student U Marketplace Block Definition Diagram

2.2 Product Functions

The following use case diagram depicts the users of the system, and the intended way in which they will interact with the system.



2.3 Use Cases

2.3.1 Add to Wishlist

Intent	This use case allows college students to add items they are interested in to their wishlist, making it easier for them to keep track of items they may want to purchase or trade in the future..
Scope	College Student Marketplace

Primary Actor	College Student
Secondary Actors	None
Preconditions	<ul style="list-style-type: none"> • The user is logged into their college student marketplace account. • The user is browsing or viewing an item in the marketplace that they wish to add to their wishlist.
Trigger	The user selects the "Add to Wishlist" button or option while viewing an item.
Success Post Condition	<ul style="list-style-type: none"> • The selected item is successfully added to the user's wishlist. • The user can view and manage their wishlist items.
Failed Post Condition	The item cannot be added to the user's wishlist due to technical issues or if the item is no longer available in the marketplace

Sunny Day Scenario

Step	Action
Start	This scenario begins when the user is logged into their college student marketplace account and is browsing or viewing an item they wish to add to their wishlist.

1	The user selects the "Add to Wishlist" button or option while viewing the item.
2	The system successfully adds the selected item to the user's wishlist.
3	The user can now view and manage their wishlist items.
4	This scenario ends with the user successfully adding the item to their wishlist.

Rainy Day Scenario

Step	Action
Start	This scenario begins when the user is logged into their college student marketplace account and is browsing or viewing an item they wish to add to their wishlist.
1	The user selects the "Add to Wishlist" button or option while viewing the item.

2	The system encounters technical issues while trying to add the item to the user's wishlist.
3	The system informs the user that the item could not be added to their wishlist due to technical problems.
4	The user may need to retry or contact support for assistance.
5	This scenario ends with the user unable to add the item to their wishlist due to technical issues.

2.3.2 Add to Cart

Intent	The intent is to allow college students to add products to their shopping cart in the College Student Marketplace.
Scope	College Student Marketplace
Primary Actor	College Student
Secondary Actors	None
Preconditions	<ul style="list-style-type: none"> • The College Student Marketplace application shall be accessible and operational. • The College Student shall be logged in to their account.

Trigger	The College Student selects a product they wish to add to their shopping cart.
Success Post Condition	The selected product is successfully added to the College Student's shopping cart. The College Student can continue shopping or proceed to checkout.
Failed Post Condition	The product is not added to the shopping cart, and the College Student is informed of the failure. The College Student may need to take corrective action or contact support for assistance.

Sunny Day Scenario

Step	Action
Start	This scenario begins when the College Student is logged into their college student marketplace account and wants to add a product to their shopping cart.
1	The College Student selects a product they wish to add to their shopping cart.
2	The system successfully adds the selected product to the College Student's shopping cart.

3	The College Student can continue shopping or proceed to checkout.
4	This scenario ends with the College Student successfully adding the product to their shopping cart.

Rainy Day Scenario

Step	Action
Start	This scenario begins when the College Student is logged into their college student marketplace account and wants to add a product to their shopping cart.
1	The College Student selects a product they wish to add to their shopping cart.
2	The system encounters an issue and is unable to add the product to the shopping cart.
3	The system informs the College Student of the failure to add the product to the cart.
4	The College Student may need to take corrective action, such as checking their internet connection, or contacting support for assistance.

5	This scenario ends with the College Student unable to add the product to their shopping cart due to technical issues.
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2.3.3 Pay Seller

Intent	This use case allows the buyer to transfer funds from their account to that of the seller's to complete the monetary part of a transaction
Scope	College Student Marketplace
Primary Actor	Buyer
Secondary Actors	Seller
Preconditions	Both the buyer and seller are logged in to their accounts. This allows the application to know who to take and who to give the money to The buyer is purchasing an item
Trigger	The user presses a button to confirm a purchase
Success Post Condition	The item purchased is removed from the listed available items The buyer loses money in their account while the seller sees an increase in funds The item then goes through required processes to get it to the buyer The buyer has the ability to modify their completed order, such as canceling or editing it.
Failed Post Condition	The item is no longer available so the buyer cannot complete the purchase, meaning the transfer of money should not go through. Technical issues can affect the transfer of funds.

Sunny Day Scenario

Step	Action
Start	The scenario begins with the user logged into their account and wishes to pay the seller to complete the transaction.
1	The user selects either a single item or their whole cart.
2	The system requests the user to add details, such as their payment method and location.
3	The user presses the confirm button to authorize and complete their transaction.
4	The scenario ends with the transaction being finalized and money from the buyer's account is sent to the seller's account.

Rainy Day Scenario

Step	Action
Start	The scenario begins with the user logged into their account and wishes to pay the seller to complete the transaction.
1	The user selects either a single item or their whole cart.
2	The system requests the user to add relevant information, such as location and payment method.
3	The user presses the confirmation button to authorize and complete the purchase.
4	The system encounters an issue with completing the payment, which causes the purchase to fail.
5	The user may take corrective steps, such as improving their internet connection, restarting the app, or checking their payment method's balance.
6	The scenario ends with the transaction failing to proceed, meaning no money is transferred between the accounts.

2.3.4 Inquire/Message Seller

Intent	This use case allows users to communicate with sellers within the application
Scope	College Student Marketplace
Primary Actor	Buyer
Secondary Actors	Seller
Preconditions	All involved parties are logged on to the application to protect privacy. One recipient is the seller (Buyers talking solely to other buyers should not occur).
Trigger	<p>There's a messaging button on item information pages that sends you to a message center, where a message inquiry with a summarized item inquiry is already attached,</p> <p>There's a button to enter the message center in the menu of the app so you can contact a seller without needing to find an item first. The message center would also allow you to see and interact with previous conversations. so you can select a past interaction to talk.</p>
Success Post Condition	<p>The messaging tab is opened so the user can send messages and interact with the seller.</p> <p>The user can see all their conversations and enter previous chats for continued interaction.</p>
Failed Post Condition	The messaging center fails to open and shows an error message.

Sunny Day Scenario - Inquire/Message Seller

Step	Action
Start	The Scenario begins when the user is logged into their account and on any tab, excluding the confirm purchase menu.
1	If the messaging center is opened through the "inquire seller about this product" button, the user can automatically send messages. If opened from the overlay, the user can view a list of their conversations and enter one to interact.

2	The user either opens the messaging center by pressing a button fixed to an overlaying UI, or the “inquire seller about this product” button in item descriptions.
3	The scenario ends with the user able to send messages and receive messages from the seller.

Rainy Day Scenario - Inquire/Message Seller

Step	Action
Start	The Scenario begins when the user is logged into their account and on any tab, excluding the confirm purchase menu.
1	The user either opens the messaging center by pressing a button fixed to an overlaying UI.
2	When attempting to enter a conversation and send messages, the system encounters an error.
3	The user may take corrective measures, such as fixing their internet connection or restarting the application.
4	The scenario ends with the user unable to send and receive messages due to technical issues.

2.3.5 Post Item

Intent	Seller shall be able to post a listing of a product they want to sell along with the description of the product, how much it cost, and a photo(s) of the product
Scope	Student U Marketplace
Primary Actor	Seller
Secondary Actors	Buyer and Customer Service
Preconditions	Seller has something to sell
Trigger	User clicks on post item
Success Post Condition	Item gets posted onto marketplace, and buyers can browse, add to wishlist or buy the product
Failed Post	Item doesn't get posted

Condition	
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Sunny Day Scenario

Step	Action
Start	This Scenario Begins with the seller having a product that they want to sell
1	The User logs into their account or registers using the credentials that have provided
2	The User taps or clicks on a button that says "post listing" or "post item" that will bring them to the Seller User interface
3	The seller fills out the required fields; item name, description, location, pictures, etc
4	The user then taps or clicks on a button "confirm listing"
5	This use case ends when after the confirmation message pops up that the post was successful, and is now able to be seen on the Student U Marketplace

Rainy Day Scenario

Step	Action
Start	This Scenario Begins and ends with the user not having anything to sell

2.3.6 Fill Location

Intent	An addition to the Seller's post when they list a product they can add in their relative location so the potential buyers know how far away they are
Scope	Student U MarketPlace
Primary Actor	Seller
Secondary Actors	Buyer and Customer Service
Preconditions	Seller must have post
Trigger	Seller Posting item
Success Post	Seller successfully posted an item with the relative location

Condition	
Failed Post Condition	Seller only post the item or not at all

Sunny Day Scenario

Step	Action
Start	This Scenario begins with the user logging into their Student U Marketplace account
1	The Seller selects the option create a new product listing
2	The Seller provides all the necessary information about product, including a title, description, price, etc
3	After entering the product details, the Seller is prompted to add their relative location. They select the "Add Relative Location" option
4	The system requests the Seller to provide their location. The Seller enters the information, which could be a city, neighborhood, or any other suitable location detail.
5	The Seller confirms the relative location they provided
6	The system validates the listing information, including the relative location
7	this scenario ends If the validation is successful, the seller's product listing is successfully posted with the relative location

Rainy Day Scenario

Step	Action
Start	This scenario starts with the Seller logging into their Student U Marketplace account.
1	The Seller selects the option to create a new product listing.
2	The Seller provides all the necessary information about the product, including a title, description, price, and any other relevant details.
3	After entering the product details, the Seller is prompted to add their relative location. They select the "Add Relative Location"

	option.
4	The Seller encounters technical difficulties with the system, and they are unable to enter the relative location.
5	The system displays an error message, indicating that the relative location could not be added at this time due to technical issues.
6	The Seller tries to refresh the page and make several more attempts to add the relative location, but the issue persists.
7	Frustrated and unable to proceed, the Seller decides to proceed without specifying the relative location.
8	The Seller's product listing is posted without the relative location information.
9	The product listing becomes visible to potential buyers on the Student U Marketplace, but it lacks the location context.
10	Buyers who browse the marketplace might find it less informative and may not have a clear idea of the Seller's location.
11	A Buyer interested in the product contacts the Seller and asks about their location.
12	The Seller responds with their location details in a separate message.
13	If the Buyer experiences any issues or misunderstandings due to the missing location information, they can contact Customer Service for assistance.

2.3.7 Manage Complaints

Intent	This is for the customer service agents in order to manage complaint request from users (buyers and sellers) about transactions made on the Student U Marketplace
Scope	Student U MarketPlace
Primary Actor	Customer Service
Secondary Actors	Buyer and Seller
Preconditions	Users have submitted a complaint

Trigger	User(buyer or seller) contacts customer service by putting in a complaint request
Success Post Condition	Buyer or Seller is able to resolve any issue regarding anything on the marketplace
Failed Post Condition	Buyer or Seller isn't able to contact customer service

Sunny Day Scenario

Step	Action
start	This scenario beings with a seller encountering the issue that their shipment from a buyer was not received
1	The User logs into their Student U Marketplace account
2	The User navigates to the "Customer Service" section or a dedicated "Contact Us" feature, where they can submit a complaint request
3	the user provides details of their issue regarding the missing package
4	the user submits the complaint request
5	customer service receives the complaint request in their system
6	a customer service representative reviews the complaint and assesses its nature and severity
7	the customer service representative contacts the seller stating the issue, and resolution
8	the customer service representative also contacts the buyer stating the issue is undergoing resolution
9	the buyer has stated that the package has not shipped yet due to personal matters and will send out the package asap
10	this scenario ends with customer service representative closing the complaint request

Rainy Day Scenario

Step	Action
start	This scenario begins with a seller encountering the issue that

	their shipment has yet to arrive
1	The user logs into their Student U Marketplace account
2	the User navigates to the "Customer Service" section where they can submit a complaint request
3	Though this scenario ends with the buyer unsuccessfully entering the complaints User interface because there was an error and an error message pops up

2.3.8 Review Buyer

Intent	The intent of this use case is to provide feedback and a rating system for a buyer based on their experience during transactions held within the scope of the application
Scope	Student U Marketplace
Primary Actor	College Student Users (Seller)
Secondary Actors	College Student Users (Buyer)
Preconditions	Seller has logged in and Transaction has been completed
Trigger	Seller selects the "Review Buyer" option on the "Completed Transactions" section
Success Post Condition	Review and rating for the Buyer is saved and adjusts average rating Confirmation Message is present when Seller submits review
Failed Post Condition	System is unable to save the review and an error message is displayed to Seller to prompt them to try again later.

Sunny Day Scenario

Step	Action
Start	Seller completes transaction with Buyer

Step 1	Seller goes to “Completed Transactions” section in the app
Step 2	Seller selects the recent transaction and notices the name of the Buyer
Step 3	Seller selects the recognized Buyer and clicks on “Review Buyer” option
Step 4	System shows a 5-star rating system and a short comment section
Step 5	Seller selects 5 stars and writes an excellent review
Step 6	Seller clicks “Submit Review.”
Step 6	System saves the response and gives a confirmation message stating “Thank you for reviewing Jane Doe”
End	Buyer’s profile is updated with new review, and the average rating changes if applicable

Rainy Day Scenario

Step	Action
Start	Seller completes transaction with Buyer
Step 1	Seller goes to “Completed Transactions” section in the app
Step 2	Seller selects the recent transaction and notices the name of the Buyer
Step 3	Seller selects the recognized Buyer and clicks on “Review Buyer” option
Step 4	System shows a 5-star rating system and a short comment section
Step 5	Seller rates the transaction a 1 star and gives a terrible rating
Step 6	Seller tries to submit review
Step 7	System displays an error message stating “We are unable to process your input. Please try again later!”
End	Seller gets frustrated closes the app and decides to not use the app again since it is unreliable

2.3.9 Review Seller

Intent	The intent of this use case is to provide feedback and a rating system for a seller based on their experience during transactions in the scope of the application.
Scope	Student U Marketplace
Primary Actor	College Student Users (Seller)
Secondary Actors	College Student Users (Buyer)
Preconditions	Buyer has logged in and transaction has been completed
Trigger	Seller selects the “Review Buyer” option on the “Completed Transactions” section
Success Post Condition	Review and rating for the Seller is saved and adjusts average rating Confirmation Message is present when Buyer submits review
Failed Post Condition	System is unable to save the review and an error message is displayed to the Buyer to prompt them to try again later.

Sunny Day Scenario

Step	Action
Start	Buyer completes transaction with Seller
Step 1	Buyer goes to “Completed Transactions” section in the app
Step 2	Buyer selects the recognized Seller and clicks on “Review Seller” option
Step 3	System shows a 5-star rating system and a short comment section
Step 4	Buyer selects 5 stars and writes an excellent review
Step 5	Buyer clicks “Submit Review.”
Step 6	System saves the response and displays a confirmation message

	stating "Thank you for reviewing Jane Doe!"
End	Seller's profile is updated with the new review, and the average rating changes if applicable

Rainy Day Scenario

Step	Action
Start	Buyer completes transaction with Seller
Step 1	Buyer goes to "Completed Transactions" section in the app
Step 2	Buyer selects the recognized Seller and clicks on "Review Seller" option
Step 3	System shows a 5-star rating system and a short comment section
Step 4	Buyer selects 1 star and writes a terrible review
Step 5	Buyer clicks "Submit Review"
Step 6	System unexpectedly crashes and Buyer closes the app
End	Buyer finds that the review was not saved and needs to restart the whole process

3. Specific Requirements

3.3 System Features

3.3.1 The system software supports the Use Cases Described in the Figure above,

3.3.1.1 Add to Wishlist

3.3.1.1.1 Introduction/Purpose of Feature

Helps user add an item to the wishlist

3.3.1.1.2 Stimulus/Response Sequence

3.3.1.1.3 Associated Function Requirements

3.3.1.1.3.1. The system shall display an "Add to Wishlist" button or option next to each item in the marketplace.

3.3.1.1.3.2. When the user selects the "Add to Wishlist" option, the system shall add the item to the user's wishlist.

3.3.1.1.3.3. The system shall provide a wishlist management interface for the user to view, edit, and remove items from their wishlist.

3.3.1.1.3.4 The system shall maintain the wishlist across user sessions, ensuring that items remain in the wishlist until removed by the user.

3.3.1.1.3.5. The system shall send a confirmation message to the user upon successful addition to the wishlist.

3.3.1.1.4 Associated Non-Functional Requirements:

3.3.1.1.4.1 Performance: The system shall respond to the "Add to Wishlist" action within a reasonable time to provide a smooth user experience.

3.3.1.1.4.2. Security: User data, including wishlist items, shall be securely stored and transmitted.

3.3.1.1.4.3. The system shall implement user authentication to protect the user's wishlist from unauthorized access.

3.3.1.1.4.4 Usability: The user interface shall be intuitive and user-friendly, ensuring that users can easily add and manage items in their wishlist.

3.3.1.1.4.5. Scalability: The system shall be designed to handle a growing number of wishlist items and users as the marketplace expands.

3.3.1.1.4.6. Availability: The "Add to Wishlist" feature shall be available 24/7 with minimal downtime for maintenance.

3.3.1.1.4.7. Reliability: The system shall reliably add items to the user's wishlist and maintain the wishlist accurately.

3.3.1.1.4.8. Error Handling and Logging: The system shall log errors and exceptions for debugging and monitoring purposes.

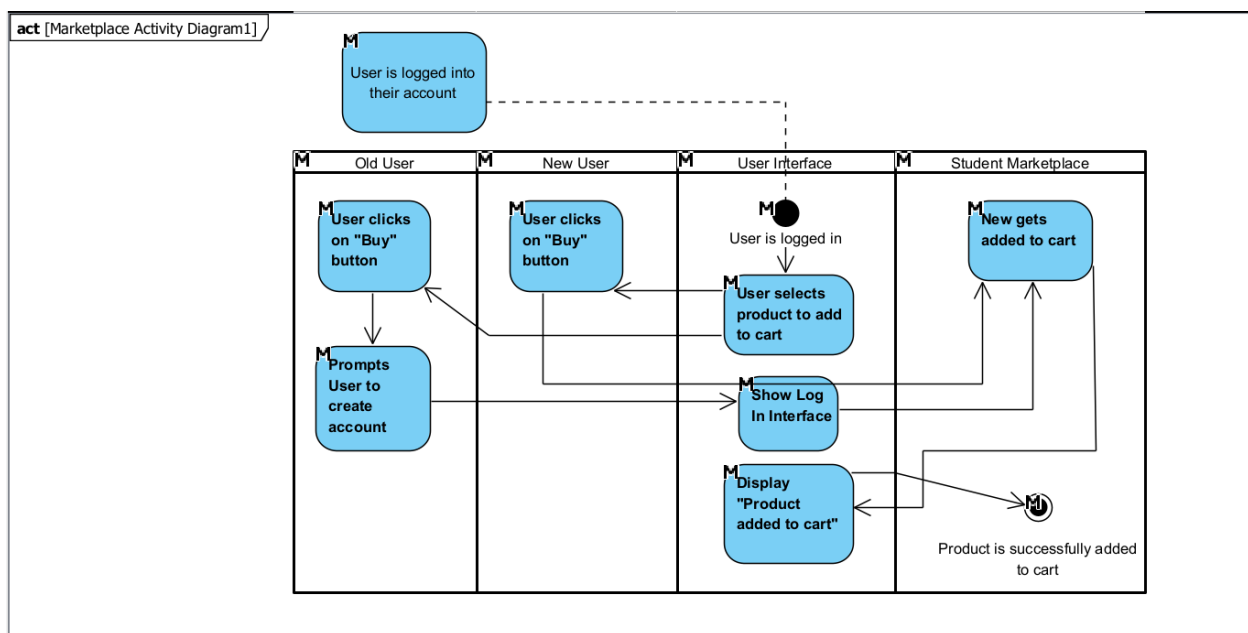
3.3.1.1.4.9. User-friendly error messages shall be provided if the addition to the wishlist fails due to technical issues or unavailability of the item in the marketplace.

3.3.1.2 Add to Cart

3.3.1.2.1 Introduction/Purpose of Feature

Helps user add an item to the Shopping Cart

3.3.1.2.2 Stimulus/Response Sequence



3.3.1.2.3 Associated Function Requirements

3.3.1.2.3.1 The system shall display a list of available products in the College Student Marketplace.

3.3.1.2.3.2 The system shall provide an "Add to Cart" button or icon next to each product listed.

3.3.1.2.3.3 The College Student shall be able to click the "Add to Cart" button to add the selected product to their cart.

3.3.1.2.3.4 The system shall maintain the contents of the College Student's shopping cart as they navigate the application.

3.3.1.2.3.5 The system shall display the current contents of the College Student's shopping cart, including product names, quantities, and total cost.

3.3.1.2.3.6 The system shall allow the College Student to modify the quantity of products in the shopping cart.

3.3.1.2.3.7 The system shall allow the College Student to remove products from the shopping cart.

3.3.1.2.3.8 The system shall update the total cost of the shopping cart when products are added, modified, or removed.

3.3.1.2.3.9 The system shall ensure that the College Student's shopping cart is persisted between sessions, allowing the student to access it at a later time.

3.3.1.2.3 Associated Non-Functional Requirements

3.3.1.2.3.1 Usability: All user interface elements related to the "Add to Cart" functionality shall be intuitive and easy to use.

3.3.1.2.3.2 Performance: The "Add to Cart" action shall have low latency, responding within 2 seconds of user interaction.

3.3.1.2.3.3 Security: The system shall ensure the privacy and security of the College Student's personal and payment information.

3.3.1.2.3.4 Scalability: The system shall handle a high volume of College Student interactions, including adding products to the cart, without degradation in performance.

3.3.1.2.3.5 Availability: The "Add to Cart" feature shall be available 24/7 with minimal downtime for maintenance or updates.

3.3.1.2.3.6 Error Handling: The system shall provide clear and helpful error messages to College Students in case of a failure to add a product to the cart.

3.3.1.2.3.7 Auditability: The system shall log all "Add to Cart" transactions for security and troubleshooting purposes.

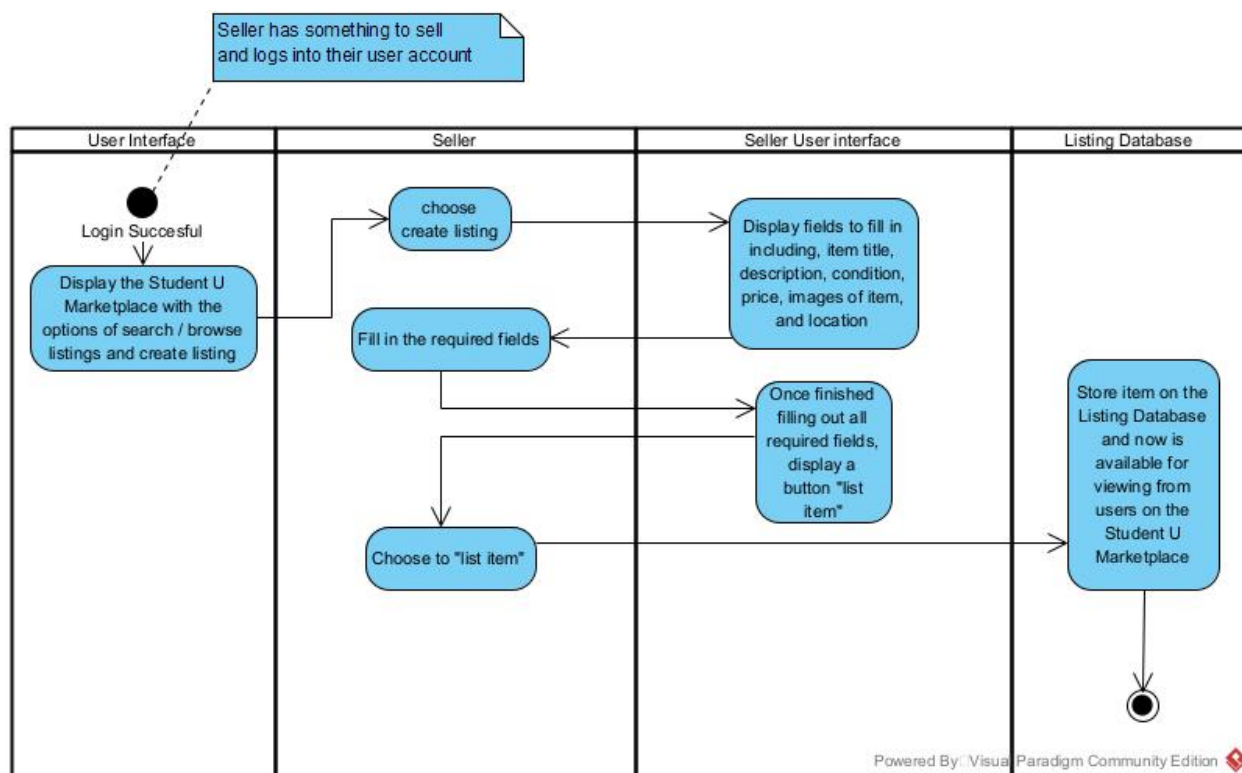
3.3.1.2.3.8 Compliance: The "Add to Cart" functionality shall comply with relevant laws and regulations related to e-commerce and personal data protection.

3.3.1.3 Post Item

3.3.1.3.1 Introduction/Purpose of Feature

This feature will allow the seller to post the item they are trying to sell onto the Student U MarketPlace so buyers are able to browse, add post to wishlist, and potentially buy the product that the seller has posted.

3.3.1.3.2 Stimulus/Response Sequence



3.3.1.3.3 Associated Function Requirements

- 3.3.1.3.3.1 Sellers shall create an account and log in to post Items. Authentication methods should include email/password.
- 3.3.1.3.3.3 Sellers can create new listings for items they want to sell with fields for the item title, description, category(clothing, furniture,etc), price, and condition should be included.
- 3.3.1.3.3.3 Seller shall be able to upload images of the item, with options for multiple images.

- 3.3.1.3.3.4 Seller can specify shipping or in person pick up options
- 3.3.1.3.3.5 Seller shall be able to specify the item's availability; "Available", "Processing", "Sold". After the item has sold, the item shall be removed from the marketplace
- 3.3.1.3.3.6 Seller shall be able to view, edit, and delete their existing listings
- 3.3.1.3.3.7 Once the seller posted the item, the listing shall be added to the marketplace and easily searchable / discoverable by potential buyers
- 3.3.1.3.3.8 The post shall have a button in order for buyers to communicate with the seller for inquires or offers
- 3.3.1.3.3.9 Users / Buyers shall be able to report suspicious inappropriate listings. Implement content moderation to ensure compliance with platform rules and guidelines
- 3.3.1.3.3.10 The platform shall ensure the posting process is user-friendly and responsive on mobile and stationary devices through a dedicated app or a mobile web interface

3.3.1.4 Fill Location

3.3.1.4.1 Introduction/Purpose of Feature

This feature is an addition to the existing post listing where it allows the user (Buyer or Seller) to fill in their location. For the buyer can search within a certain radius of their location while the buyer is able to post where their product is located.

3.3.1.4.2 Stimulus/Response Sequence

3.3.1.4.3 Associated Function Requirements

- 3.3.1.4.3.1 The platform shall provide an autocomplete feature to help users easily input their location
- 3.3.1.4.3.2 the platform shall use geospatial data to suggest locations as users type, making it more convenient to select the correct location. Provide an option to manually override the detected location if necessary
- 3.3.1.4.3.3 The platform shall validate the location input to ensure it corresponds to a real, existing location, and provide error messages and suggestions if the entered location is ambiguous or does not exist
- 3.3.1.4.3.4 The platform shall display a map with a marker

indicating the specified location on the listing page and allow users to interact with the map to adjust the location visually if needed

3.3.1.4.3.5 When seller provides the location, the platform shall not show pinpoint address of the user for location privacy, instead display general area

3.3.1.4.3.6 The platform shall store users' location history to facilitate the reuse of previously entered locations, reducing data entry effort

3.3.1.4.3.7 On the marketplace platform, it shall integrate location-based services or features, such as showing nearby listings or based on the users specified location and range

3.3.1.5 Manage Complaints

3.3.1.5.1 Introduction/Purpose of Feature

This feature will allow customer service agents to manage submitted complaints that the users (buyers and sellers) have sent for resolution of their issues.

3.3.1.5.2 Stimulus/Response Sequence

3.3.1.5.3 Associated Function Requirements

3.3.1.5.3.1 Users, including customers and customer service agents must register and authenticate to access the complaint management system. Only customer service agents shall be able to access the system.

3.3.1.5.3.2 Users (Buyers and Sellers) shall be able to submit complaints via a user-friendly interface which includes fields for the complaint description, category, severity, and any relevant attachments

3.3.1.5.3.3 The system shall provide each complaint a unique tracking number for reference so users can track the status and progress of their submitted complaints

3.3.1.5.3.4 The system shall assign complaints to relevant support agents (customer service agents) based on category and workload

3.3.1.5.3.5 The system shall define user roles, such as customers, and support agents giving them different permissions to access certain databases for privacy restrictions

3.3.1.6 Inquire/Message Seller

3.3.1.6.1 Introduction/Purpose of Feature

This feature allows the user to message sellers for purposes such as price bargaining and picking a location.

3.3.1.6.2 Stimulus/Response Sequence

3.3.1.6.3 Associated Function Requirements

3.3.1.6.3.1

The system shall display a button to enter the messaging center in an overlaying tab and a “Inquire seller about this product” button in item descriptions.

3.3.1.6.3.2

In the messaging center, the system shall send messages based on inputs from the user, as well as display messages sent to the user by others.

3.3.1.6.3.3

The system shall be able to record conversation data and allow the user to enter into logged conversations to continue communications.

3.3.1.6.3.4

If entering the messaging center via an item description, the system shall automatically fill out basic details, such as the name of the product in question and listed price.

3.3.1.6.4 Associated Non-Functional Requirements

3.3.1.6.4.1

Usability: All user interfaces relating the the “Inquire/Message Seller” function shall be both clean and easy to use.

3.3.1.6.4.2

Performance: Switching between conversations and opening the message center itself shall be fluid, with miniscule to no delay. If maintenance occurs, logged conversations shall be saved.

3.3.1.6.4.3

Security: All messages shall be encrypted for data privacy.

3.3.1.6.4.4

Scalability: The system shall be able to handle large amounts of messages being sent at the same time, with little to no increases in send/receive time.

3.3.1.6.4.5

Availability: The ability to send and receive messages shall be functional 24/7, with minimal downtime needed for

maintenance.

3.3.1.6.4.6

Error Handling: The system shall show the user if a message hasn't been sent. If a message has been successfully sent, but the receiver has not received it, the message will be automatically resent until it's successfully received, a custom picked time frame passes, or the sender cancels it.

3.3.1.6.4.7

Audibility: The system shall log all conversations locally and on the main server, automatically deleting them if the user wishes to have them deleted. This is for both records and data privacy.

3.3.1.6.4.8

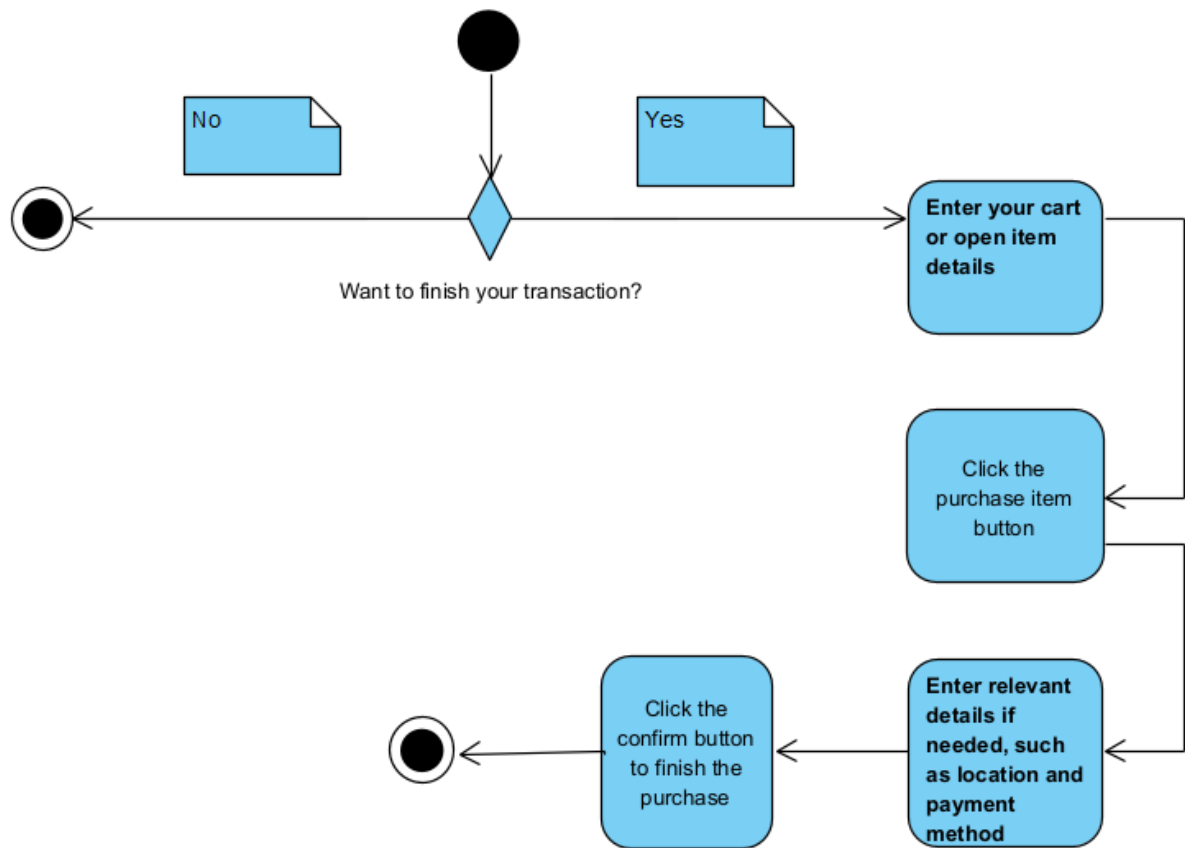
Compliance: The "Inquire/Message Seller" function shall comply with relevant laws and regulations related to data privacy and electronic communications.

3.3.1.7 Pay Seller

3.3.1.7.1 Introduction/Purpose of Feature

This feature allows the buyer to transfer funds from their account to that of the seller's in order to complete a transaction.

3.3.1.7.2 Stimulus/Response Sequence



3.3.1.7.3 Associated Function Requirements

3.3.1.7.3.1

The system shall take funds from the buyer's account and transfer it to the seller's account upon the user pressing the confirm purchase button.

3.3.1.7.3.2

The system shall send a confirmation message via text, email, application mailbox, (or) etc upon a successful purchase.

3.3.1.7.3.3

If the transaction fails, the system shall halt the process of transferring money. If the money has already been moved, the system shall automatically refund the paid amount.

3.3.1.7.3.4

The system shall produce a tab when prompted, allowing the user to add/edit their payment method, location, order, and see the final overall cost (and a cost breakdown).

3.3.1.7.4 Associated Non-Functional Requirements

3.3.1.7.4.1

Usability: The user interface shall be simple and user-friendly, so users can easily modify and see important information, such as total price or changing payment methods.

3.3.1.7.4.2

Performance: The time it takes to authorize payment and transfer funds shall be miniscule, avoiding long wait-times for the user.

3.3.1.7.4.3

Security: The system shall ensure both account security and encrypted payment methods.

3.3.1.7.4.4

Scalability: The system shall be able to handle a large number of transactions at the same time, without causing major lag or a decrease in data security.

3.3.1.7.4.5

Availability: The ability to pay sellers shall be available 24/7 with minimal downtime for maintenance.

3.3.1.7.4.6

Error Handling: The system shall be able to inform the user that a transaction failed while at the same time, not moving funds from the buyer to the seller. If the funds have already been transferred, the system shall be able to automatically refund it.

3.3.1.7.4.7

Auditability: The system shall automatically record all transactions done for recording and accountability purposes.

3.3.1.7.4.8

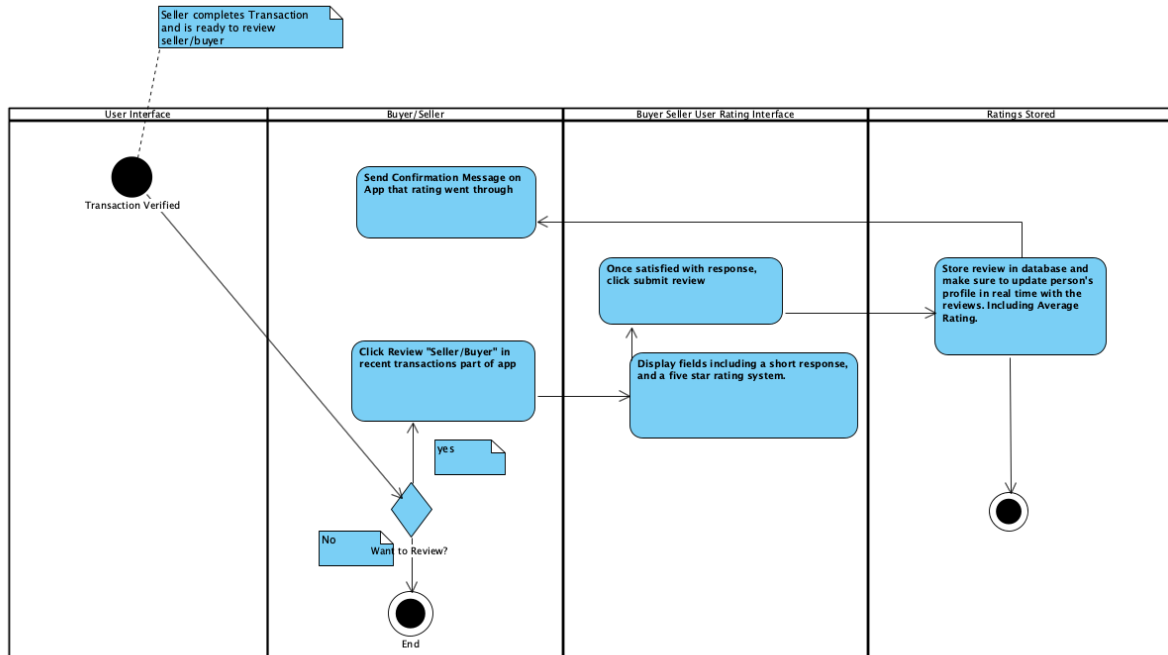
Compliance: The “pay seller” function shall comply with all applicable laws and regulations related to e-commerce and data protection.

3.3.1.8 Review Seller

3.3.1.8.1 Introduction/Purpose of Feature

The intent of this feature is to provide feedback and a rating system for a seller based on their experience during transactions in the scope of the application.

3.3.1.8.2 Stimulus/Response Scenario



3.3.1.8.3 Associated Function Requirements

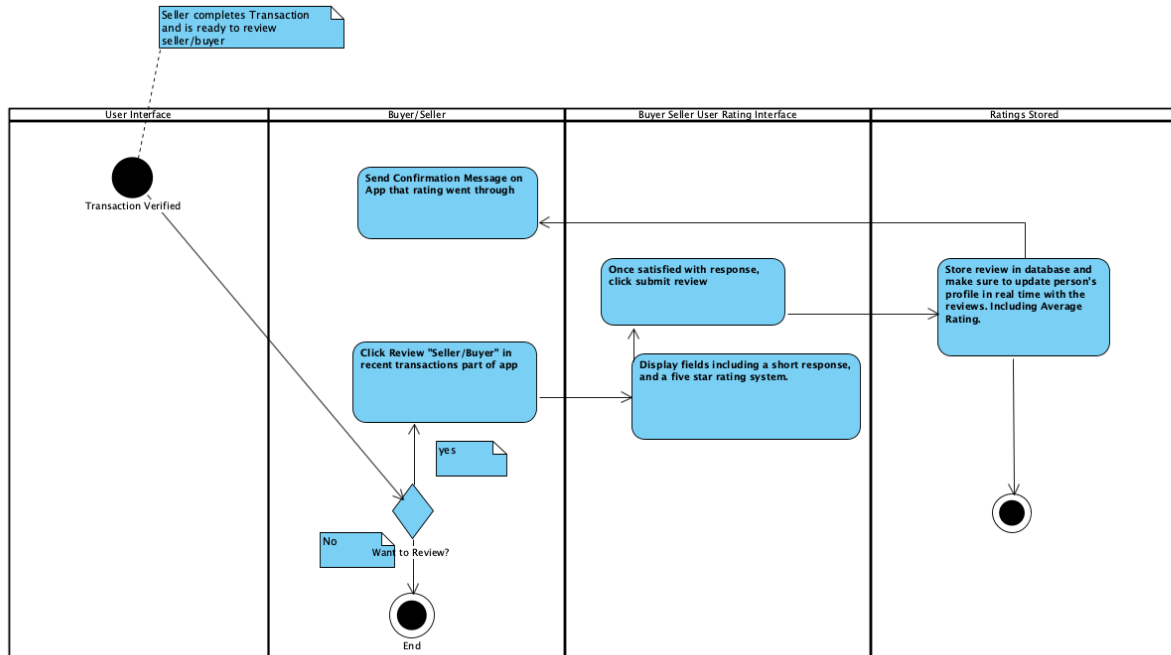
- 3.3.1.8.3.1 The system shall have a completed transactions section in the app to view all past orders
- 3.3.1.8.3.2 The system shall compute and update the Sellers rating in real time on the buyer's profile
- 3.3.1.8.3.3 The system shall have a "Review Seller" button
- 3.3.1.8.3.4 The system shall have an interface with options to rate the buyer with a 5-star rating system and a section to leave feedback/comments
- 3.3.1.8.3.5 The system shall have an error handling system so that when the review can not be saved or processed that it informs the Buyer
- 3.3.1.8.3.6 The system shall display a confirmation message when the seller submits their review
- 3.3.1.7.3.7 The system shall validate that the transaction with the buyer has been completed

3.3.1.9 Review Buyer

3.3.1.9.1 Introduction/Purpose of Feature

The intent of this feature is to provide feedback and a rating system for a Buyer based on their experience during transactions in the scope of the application.

3.3.1.9.2 Stimulus/ Response Sequence



3.3.1.9.3 Associated Function Requirements

- 3.3.1.9.3.1 The system shall have a completed transactions section in the app to view all past orders
- 3.3.1.9.3.2 The system shall compute and update the buyers rating in real time on the buyer's profile
- 3.3.1.9.3.3 The system shall have a "Review Buyer" button
- 3.3.1.9.3.4 The system shall have an interface with options to rate the buyer with a 5-star rating system and a section to leave feedback/comments
- 3.3.1.9.3.5 The system shall have an error handling system so that when the review can not be saved or processed that it informs the Seller
- 3.3.1.9.3.6 The system shall display a confirmation message when the seller submits their review
- 3.3.1.9.3.7 The system shall validate that the transaction with the buyer has been completed