

Product Design Specification

Project Info

Team Name: Gladiators

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Project Title: E-commerce Website

Application Description

Market Space: This application is made for the e-commerce market space. Specifically for footwear. This is a space where buyers and sellers can interact. Buyers can navigate to different sections of the website and buy new, trendy products that they like. There are two different filters for Men's and Women's footwear. Sellers can add to the inventory by entering the needed product details.

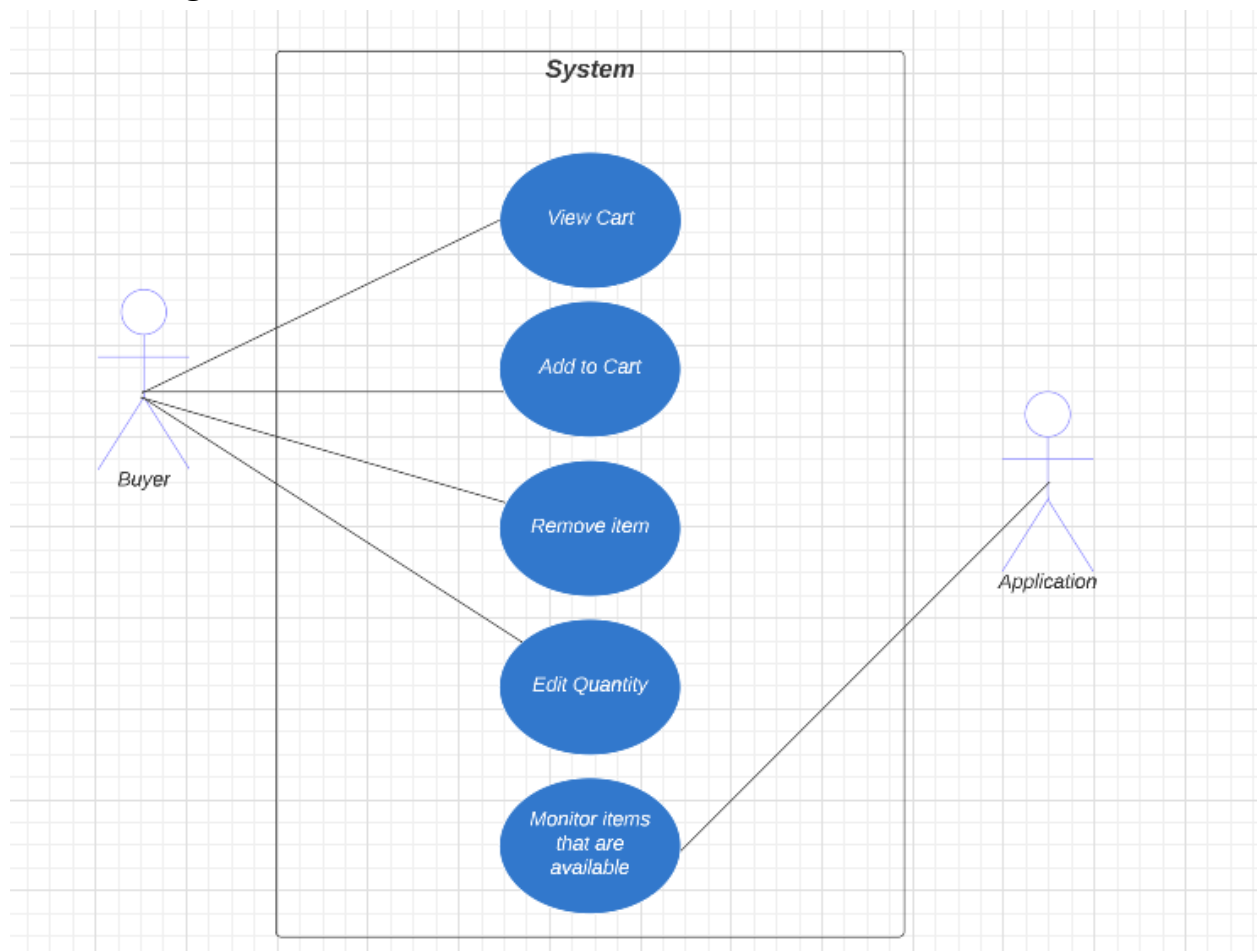
Features List:

1. Shopping Cart
2. Men's and Women's Section
3. Best Sellers in Footwear
4. Checkout and Payment
5. Order Summary
6. Seller Page
7. User Authentication

Feature-1: Shopping Cart

Description: When users like a product, they can choose to add that product to the shopping cart. They will be able to view how many items are in the shopping cart. Users can also view the items in their carts. They can add or remove items. They can also adjust the quantities of the items from the cart.

Use Case Diagram:



Use Case Scenario:

1. The user visits the home page of the e-commerce website
2. The user navigates to the Women's page using the navigation at the top or clicks on the Women's Collections image on the home page

3. The user scrolls through the products that are available. They click on one product they are interested in
4. The user adds the item to the shopping cart
5. The user views the shopping cart by clicking on the icon at the top right-hand side of the page.
6. The user adjusts the quantity of the product and changes it to 3.
7. The user buys the product

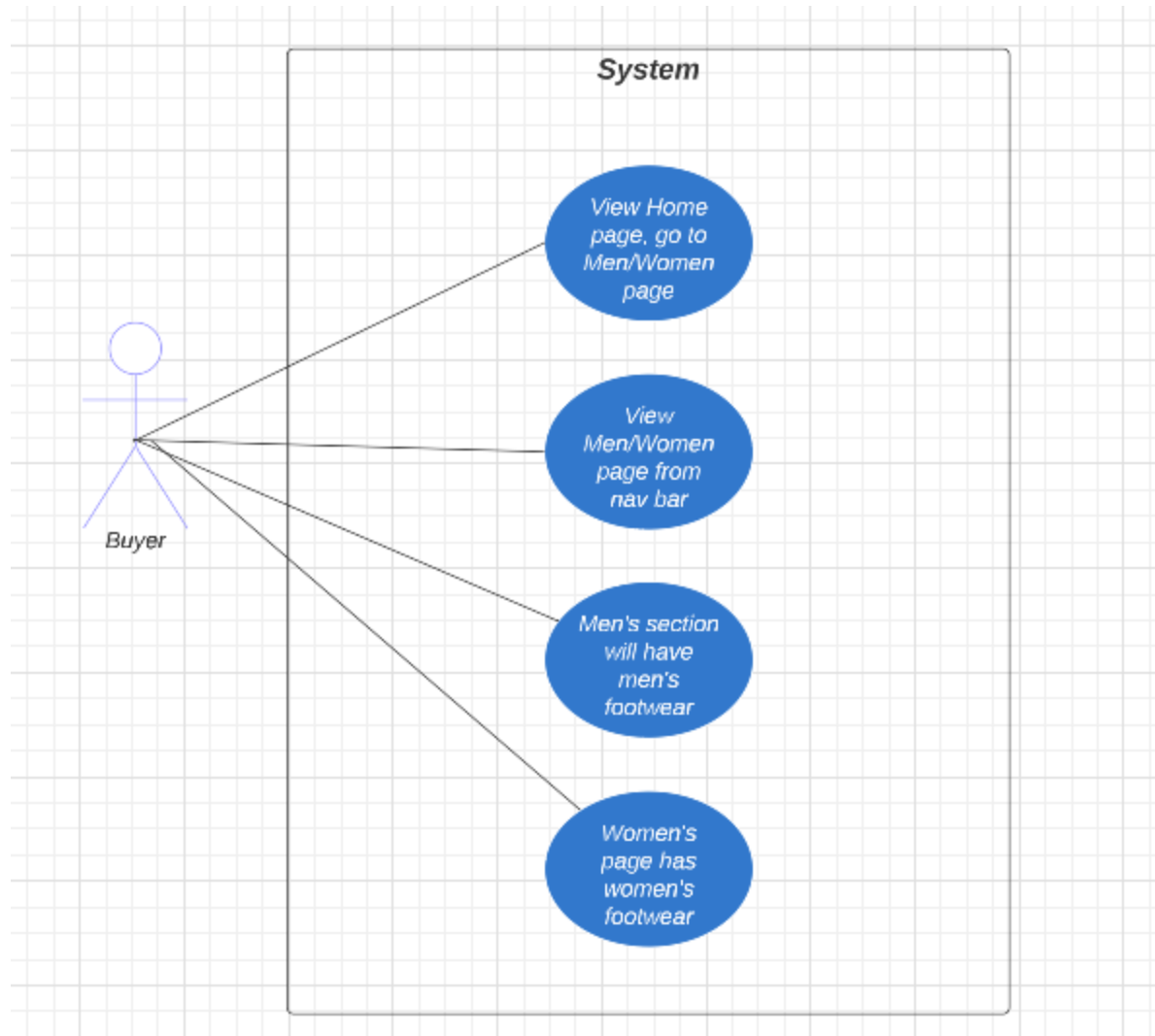
Testing Plan:

1. Does every page on the website have the shopping cart icon on the top right-hand corner? This icon should also display the number of items that are currently in the cart.
2. Once inside the cart, user should be able to view details of the product such as image, price, quantity, total price, and an option to remove the product from the cart.
3. Is the user able to see the outline of the three steps needed to finally check out the product? The user should currently be on the Shopping Cart stage.
4. The user is able to see the nav bar to go to other parts of the website

Feature-2: Men's and Women's Section

Description: There are different sections of footwear for Men and Women. The Men's collection will include footwear for only men and the Women's collection will include footwear for only women. Users can navigate to these pages from the Home page: when they scroll down they will see two large images that will take them to the respective collections. Users can also use the nav bar at the top of the website to view these collections.

Use Case Diagram:



Use Case Scenario:

1. The user visits the Home page of the website. After scrolling down, they see two different images that say “Shop Men’s Collection” and “Shop Women’s Collection”
2. The user clicks on “Shop Men’s Collection”
3. The user views’ footwear for men.
4. The user views a product and adds its to the cart
5. The user views the shopping cart and buys the product.

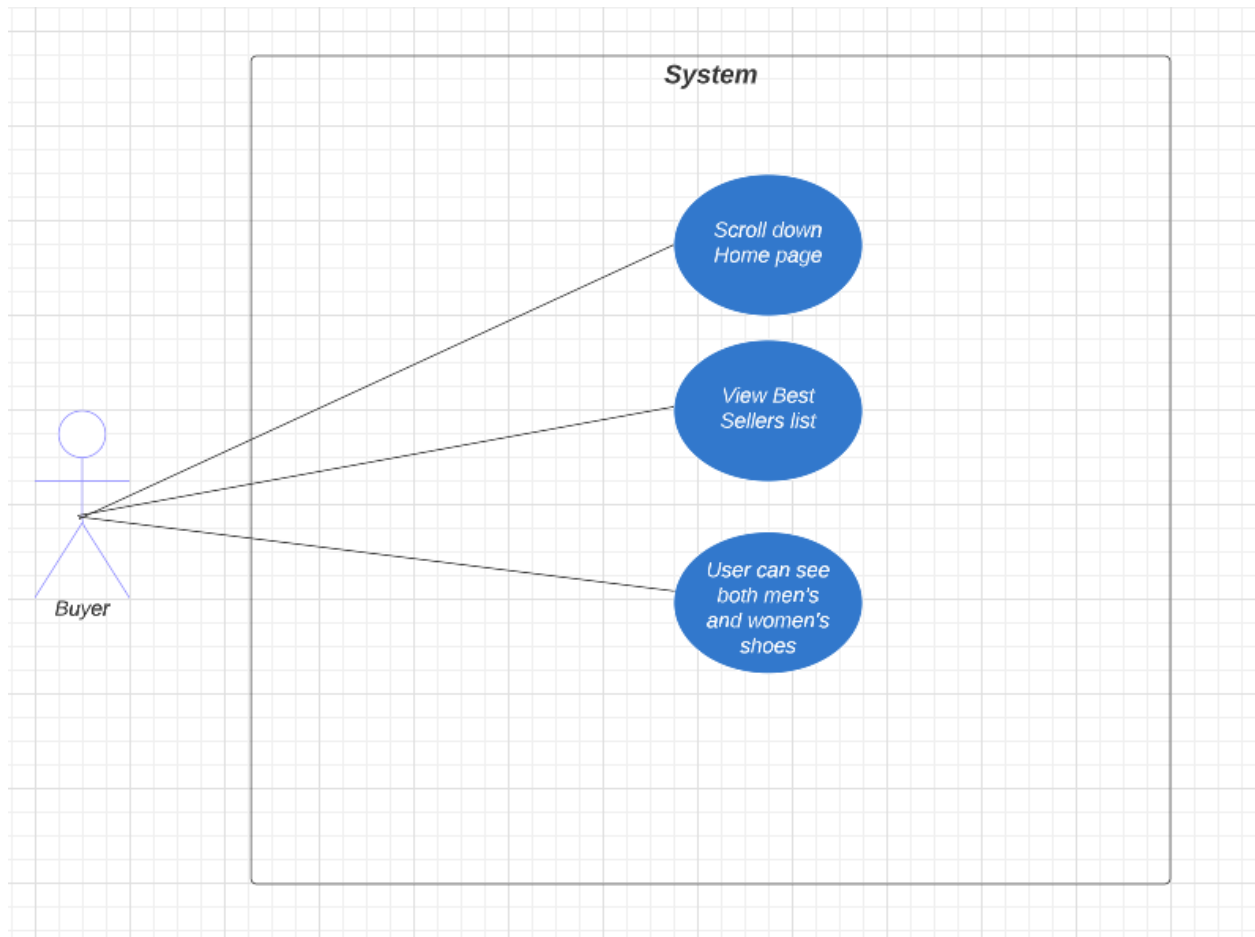
Test Plan:

1. Does the Home page have two divs with images of men’s and women’s footwear? It should also include text that specifies the collection
2. Does the nav bar have a Men and Women’s page in every page of the site?
3. Does the men’s collection only have men’s footwear?
4. Does the women’s collection only have women’s footwear?

Feature-3: Best Sellers in Footwear

Description: In the Home page of the site, users will be able to see the Best Sellers of the website. This includes both men's and women's footwear that have been most popular among buyers. This is like a featured page that is included in e-commerce websites like amazon. This is to encourage buyers to explore the newest and most popular items that are currently trending among customers. This can include new releases or new celebrity-endorsed products.

Use Case Diagram:



Use Case Scenario:

1. The user visits the Home page of the site.
2. The user scrolls down to the Best Sellers section of the page
3. The user is able to view both men's and women's footwear that are recently trending on the website
4. The user is able to add the products they are interested into the shopping cart
5. The user is able to checkout the products.

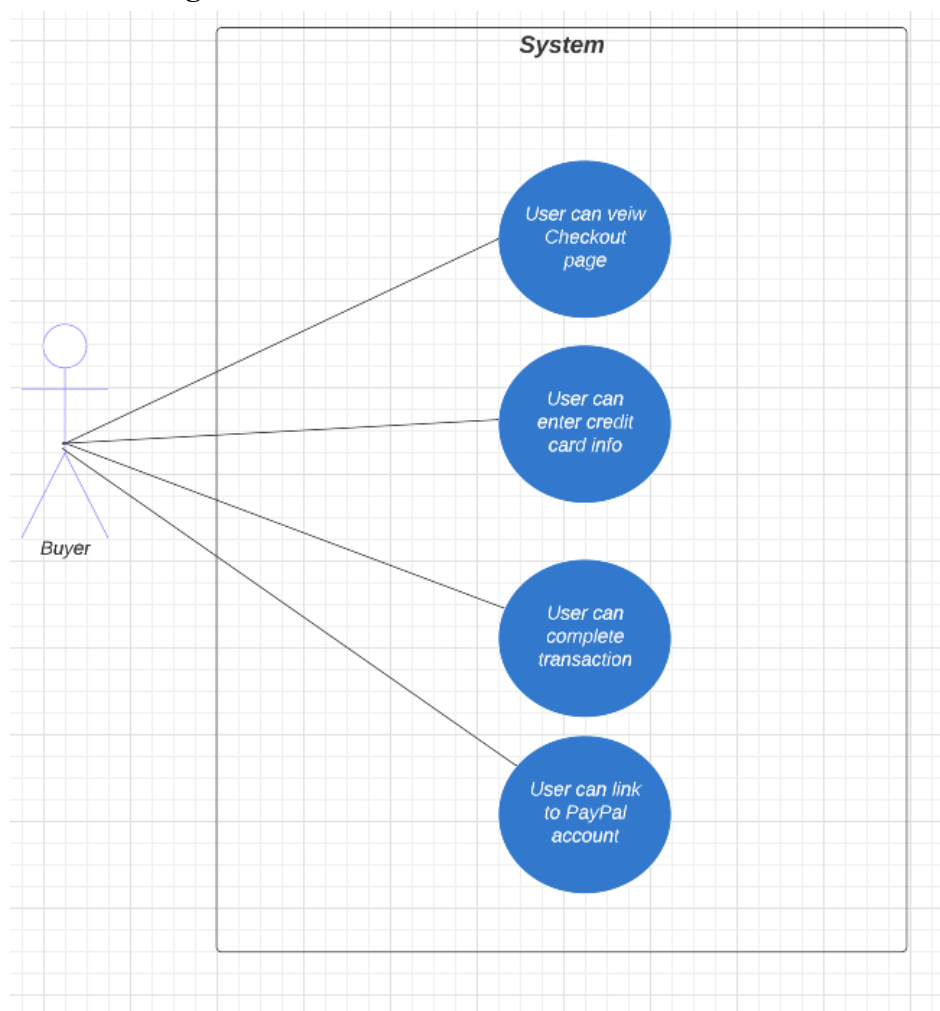
Test Plan:

1. Is there a Best Sellers section on the Home Page?
2. Does this section list products that are currently trending?
3. Does it have both men's and women's collections?
4. Are users able to checkout these products?

Feature-4: Checkout and Payment

Description: After adding the products that they like to the shopping cart, the users will be able to proceed to the checkout page. During checkout, users will be directed to enter their credit card information. They can also choose to pay using PayPal. If they choose this option, they will be able to link their PayPal account to the site and complete the transaction that way.

Use Case Diagram:



Use Case Scenario:

1. User is in the Men's or Women's collection
2. User adds a product they like to the shopping cart
3. After making the adjustments they need, the user would like to proceed to the checkout page
4. Once inside the checkout page, user enters their credit card information
5. User clicks on the Checkout button
6. User views a message that says Transaction Complete
7. User is able to see their order number and summary

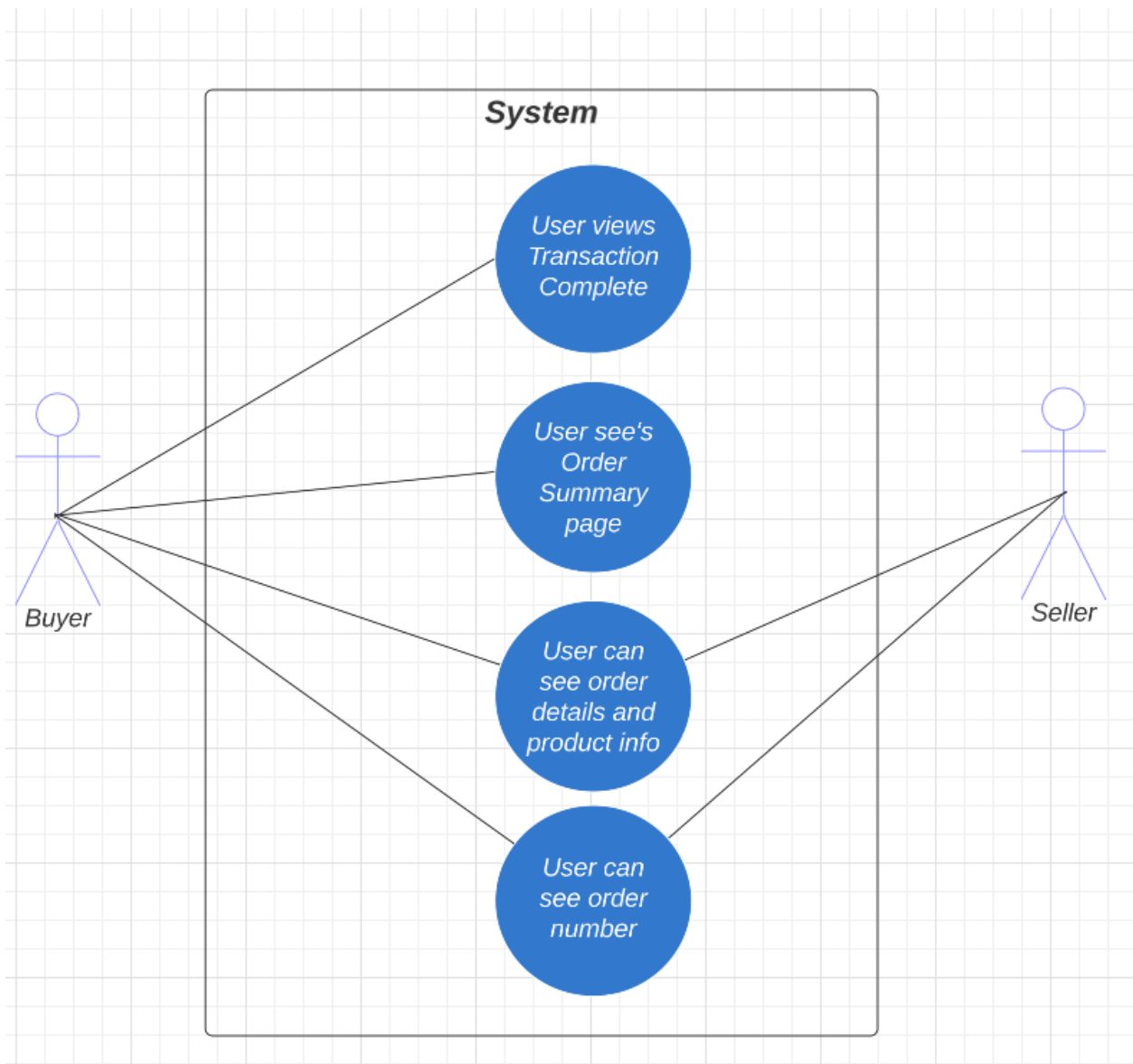
Test Plan:

1. From the shopping cart page, is there a page to the Checkout?
2. Is the user presented with a form where they can enter credit card information?
3. Can the user pay using their paypal account?
4. Does the user see a Transaction Complete message after making the purchase?

Feature-5: View Order Summary

Description: After making a purchase, the user is presented with a message that their transaction has been successfully completed. The user will also be able to see their order number. The user can also see the order summary such as the number of items that they bought, the product details, and the overall amount paid. This is a copy of the details that can be found in the shopping cart before purchasing the item. This is to ensure that the user has the needed information on the products they bought.

Use Case Diagram:



Use Case Scenario:

1. User lands on the Home page of the website
2. User navigates to Men's or Women's section or the Best Seller list
3. User adds a product to the cart and completes a purchase
4. User sees a message that says 'Transaction Complete'
5. User sees the Order Summary with details regarding the number of products they bought, the amount they paid, the order number, and the details on the items they purchased.

Test Plan:

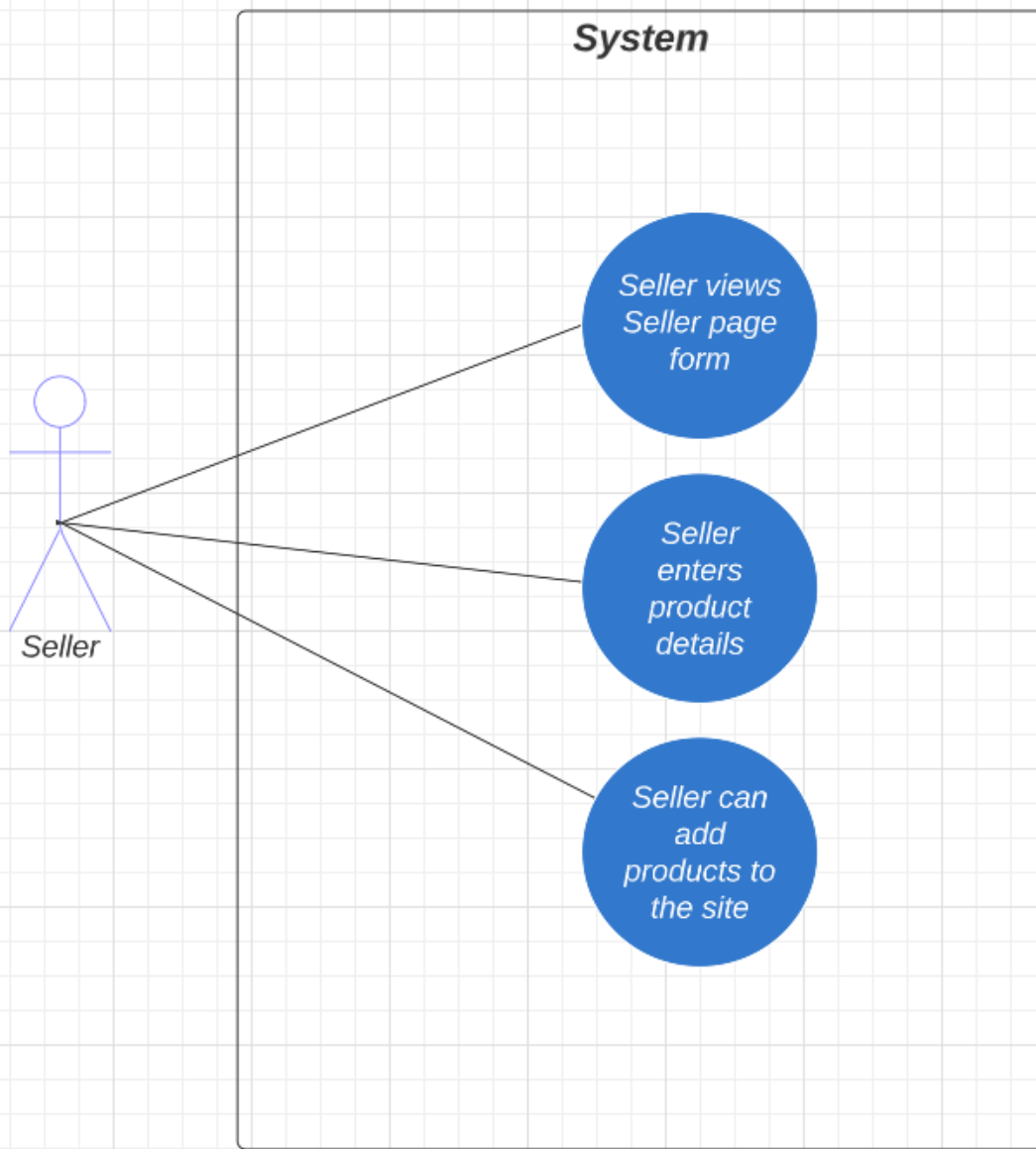
1. Does the Order Summary have an order number?

2. Does the page have product details such as image, product name, product description, and the total amount paid?
3. Does the user see a Transaction Complete message?

Feature-6: Seller Page

Description: This feature allows sellers to add to the inventory in the website. They need to fill out the form listed under the Seller page in order to add products. This form includes information such as product images, the quantity that is available, the color of the product, and the sizes that are available.

Use Case Diagram:



Use Case Scenario:

1. User logs in to the account/ Registers himself as a Seller.
2. Since he is a seller, he gets to see the landing page consisting of information about his product inventory.
3. He can click on add a product and just navigate to a form where details of a product is asked.
4. User can just go ahead and add a new product and click on submit button.
5. New product will be added in the list of products sold by this seller.

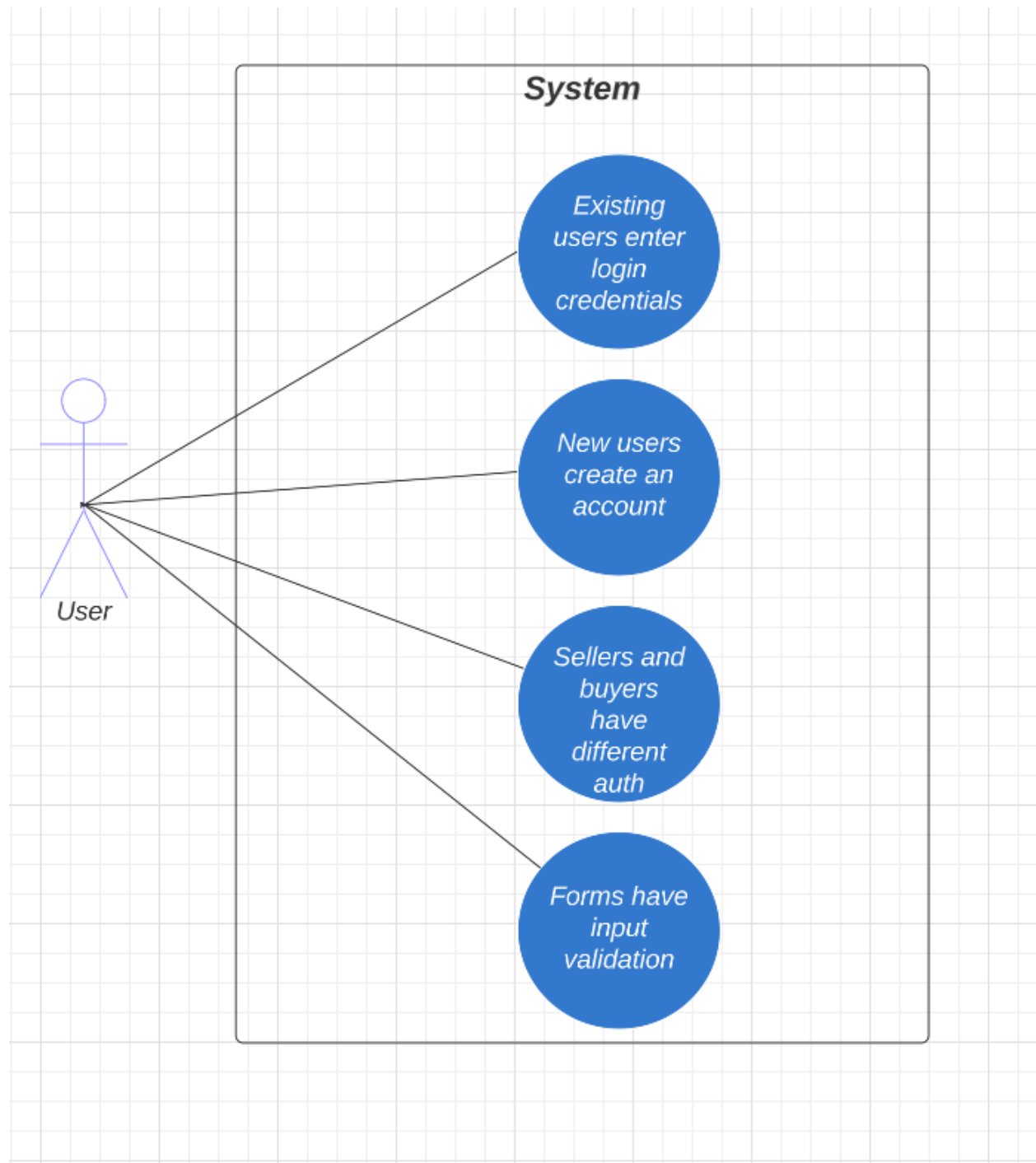
Test Plan:

1. The product will be added to a list of products sold by the seller and displayed by the seller.
2. It is added to the mongodb as a entry in new product.
3. It will be displayed on website to the user when searched.

Feature-7: User Authentication**Description:**

This module allows the user to register/ login to the account. The user can give its information as a form submission in case of registration or login. The user can login using the credentials and it will be authenticated from backend.

Use Case Diagram:



Use Case Scenario:

1. The user can use this module to login into the system.
2. The user can use this module to register into the system.
3. This module will authenticate the user logging in using the credentials.

Test Plan:

1. You can add wrong password and then it will deny you to login
2. You can try to add incorrect format information and you will be denied to register.

List of Features in the Following Milestones

M1: Seller Page (In-Progress)

M2: Shopping Cart

M3: Men's/Women's Section, Best Sellers in Footwear

M4: User Authentication, Order Summary

M5: Checkout and Payment