



Exchange4Students Milestone 3 Report

Document of Design Updates

SSW 322 Group 2

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Introduction

In Milestone 4 we have continued building and improving the platform of core functionality. The focus for this milestone includes refining key features, improving user experience, and making the site more stable and secure.

Buyers are able to do the following:

- Browse items by category, keywords, dimensions, size, color
- Add items to the cart
- Place an order
- Request updates and receive updates about existing requests.

Sellers are able to do the following:

- Receive buy requests.
- Mark Items as either sold, on hold or available to purchase.

Live state updates and error validation were implemented to simulate dynamic input flows

As a result of this implementation, we have updated our activity and class diagrams to reflect the new system behaviors and real-world state transitions. Only the functions that were fully implemented in Milestone 3 are included in these updated diagrams.

Team Collaboration

- James Grant: During this project, I contributed to:
 - Use Case Diagram update
 - Search by keyword function
 - Browse by size, color, dimension filter implementation
 - UI design/updates
 - Login.css, Register.css
 - Documentation updates in the form of this report and a presentation given on 4/16
- Justin Phan: During this project, I:

- Updated the class diagram
- Worked on implementing the feature for users to browse items
- Contributed to documentation details on GitHub repository
- Jacob Gelman-Funk:
 - Use Case Diagram Update
 - Activity Diagram Update
 - Worked on report, documentation, and presentation
- Edmund Yuen: For this milestone I contributed:
 - Backend development, Activity Diagram update
 - Setup database, backend server, and initial react front-end
 - Programs:
 - server.js, auth.js, items.js, db.js, SellerItems.jsx, App.js, Login.js, Register.js, PostItem.js

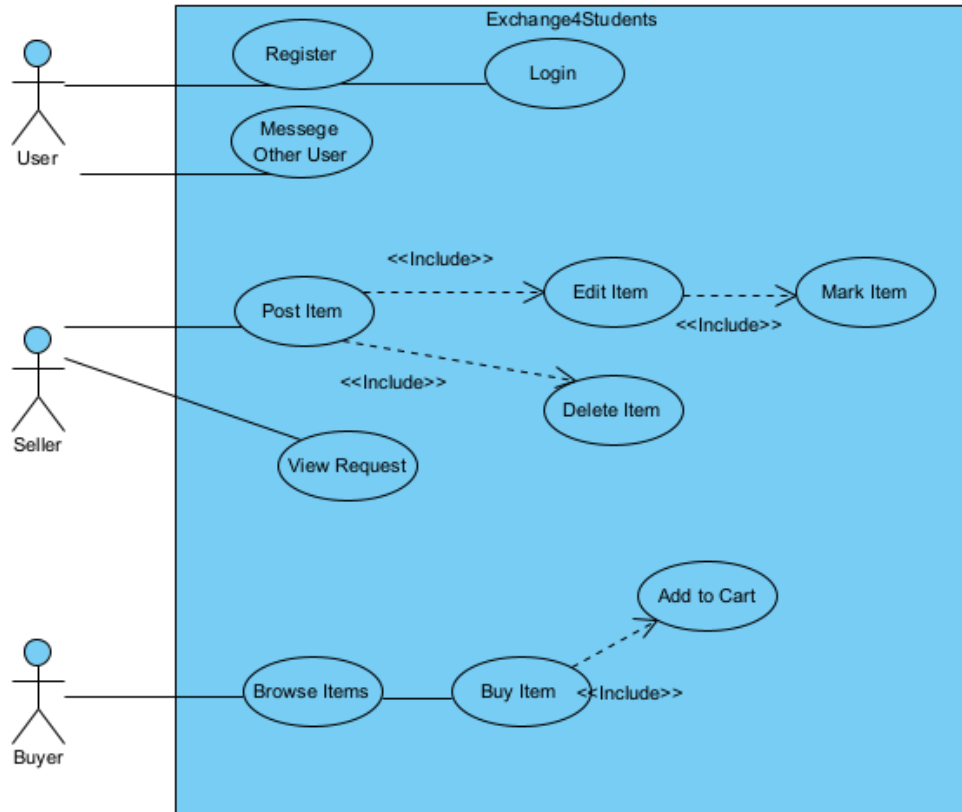
Updated Use Case Diagram

The Use Case Diagram for Milestone 4 has been updated to reflect the additional features added since Milestone 3's completion. New features have been introduced that significantly expand and improve the original use cases of the Exchange4Students platform.

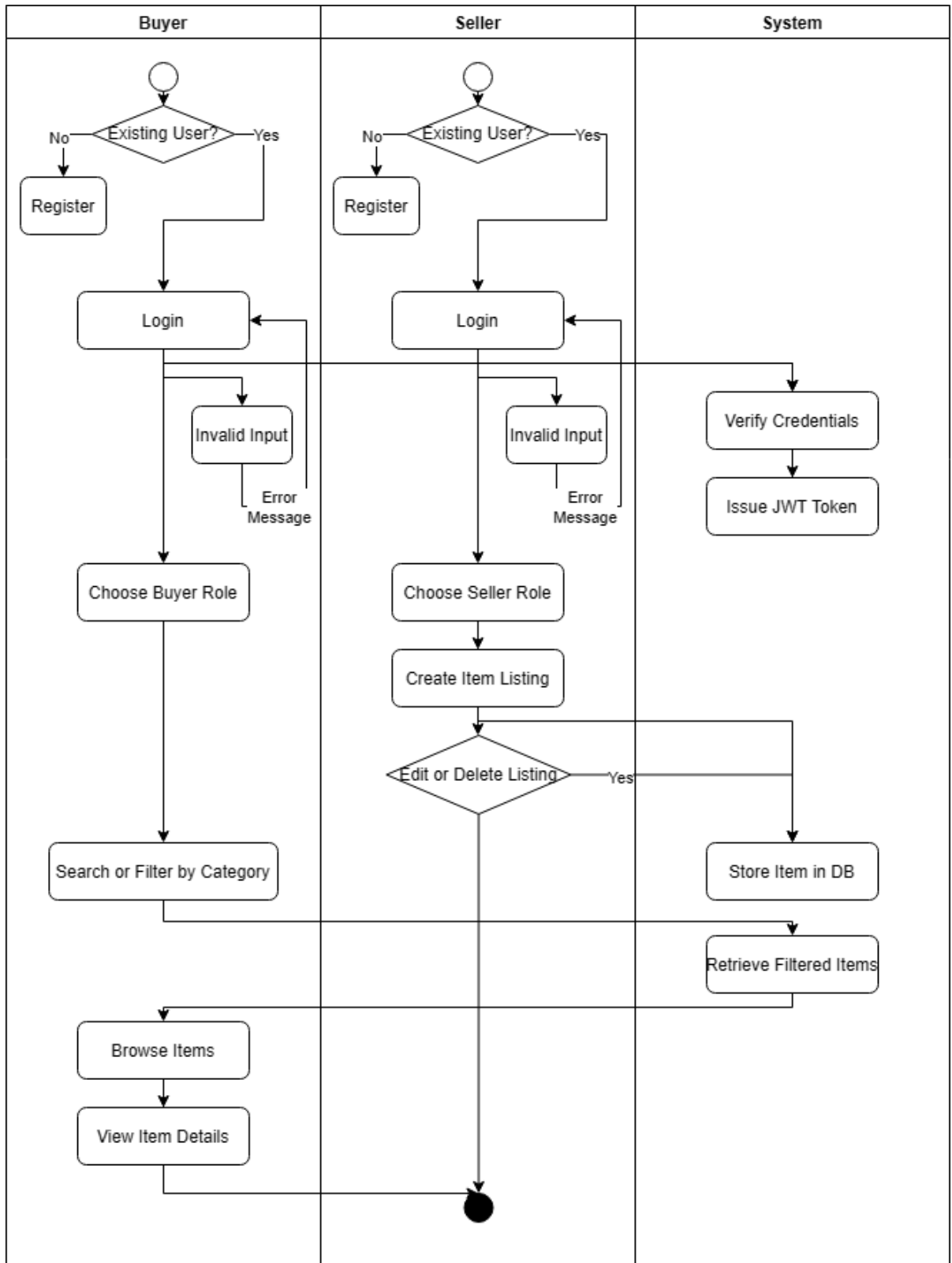
One key improvement is the implementation of a messaging system, which adds to the user model allowing for communication between potential buyers, customers, and sellers. Buyers and sellers can now directly contact each other, making the transaction process more flexible and personal.

For sellers, the platform now includes a request management feature. Sellers can view incoming purchase requests and respond accordingly. They can also mark items as sold, which helps maintain accurate inventory and reduces confusion for buyers. This change enhances the seller's control over their listings and improves the overall reliability of the platform.

For buyers changes were made on how they purchase items. Now buyers are able to browse items. This makes the user experience way better and will allow buyers to see a wide range of products before deciding the buy them or message the seller.



Updated Activity Diagram



Updated Class Diagram

The associations in the class diagram in milestone 4 are unchanged compared to milestone 3. However, changes were made to some of the individual classes to reflect the newly implemented features. In the seller class, a buy request attribute was added so that the request made to the buyer can be tracked, managed and sorted. The operations for sellers to choose a buyer to proceed with was added. The goal of that is if there are multiple people requesting to buy an item sellers can chose who to accept. To the buyer class an operation for buyers to request updates from the seller has also been added.

