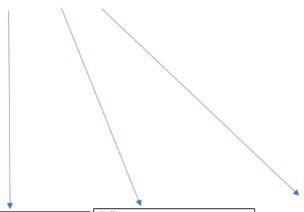
#### Scenario Based Diagrams

#### User

- -Can sign up for a new account and enter user information
- -Can log in after account creation to be routed to their respective page



#### Buyer

- Can use the search functionality to find a specific title or author, and the search results provide relevant and easily accessible information, including book details, prices, and ratings.
- -Can browse all book listings on the site
- -upon finding a book one wants to purchase, they can add it to their cart with a single click
- -the cart summary is dynamically updated to reflect the added items and allows one to review and adjust their selection at any time

#### Seller

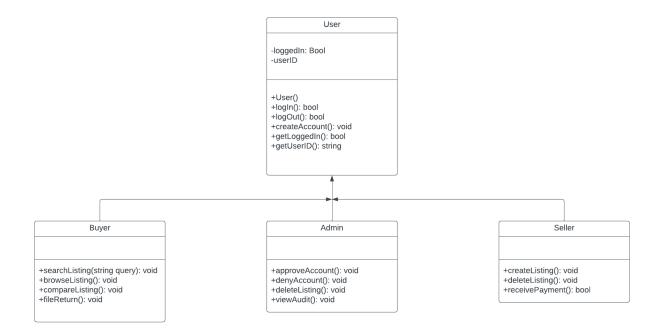
- -Can access the seller dashboard where one can easily create new book listings
- can access the listing creation process which includes fields for book details, pricing, condition, and images to showcase the book effectively
- can access the dashboard to view, edit, and remove listings one has created
- -can access the listing creation process which includes fields for book details, pricing, condition, and images to showcase the book effectively
- -when a Buyer places an order for one or more of someone's listed books, they receive a realtime notification
- -Scamazon securely handles the payment process, ensuring that Sellers receive their earnings promptly after a successful sale

#### Admin

from the site

- -Can view all Scamazon users and book listings -Can adjust user roles and information, along with being able to ban users
- -Can remove displayed book listings from the site if deemed to violate the Terms of Service

### Class Based Diagrams



#### Cart

-dbName: string

+Cart()
+Cart(string dbName): void
+viewCart(): void
+addToCart(string userID, string ISBN,
string dbName): bool
+removeFromCart(string userID, string
ISBN, string dbName): bool
+checkOut(): bool

#### Inventory

-dbName: string

- +Inventory()
- +Inventory(string dbName, tableName) +viewInventory(): void +searchInventory(string query): void

- +decreaseStock(int quantity, string isbn):

bool

#### Book

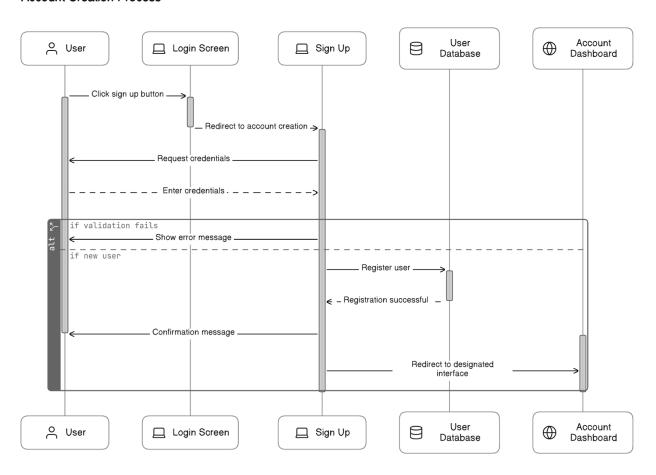
-ISBN: string -rating: int -price: float -title: string -pages: int -author: string

+Book()
+Book(string ISBN, int rating, float price, string title, int pages, string author): void
+updateRating(string ISBN, int rating): void
+updatePrice(string ISBN, float price): void

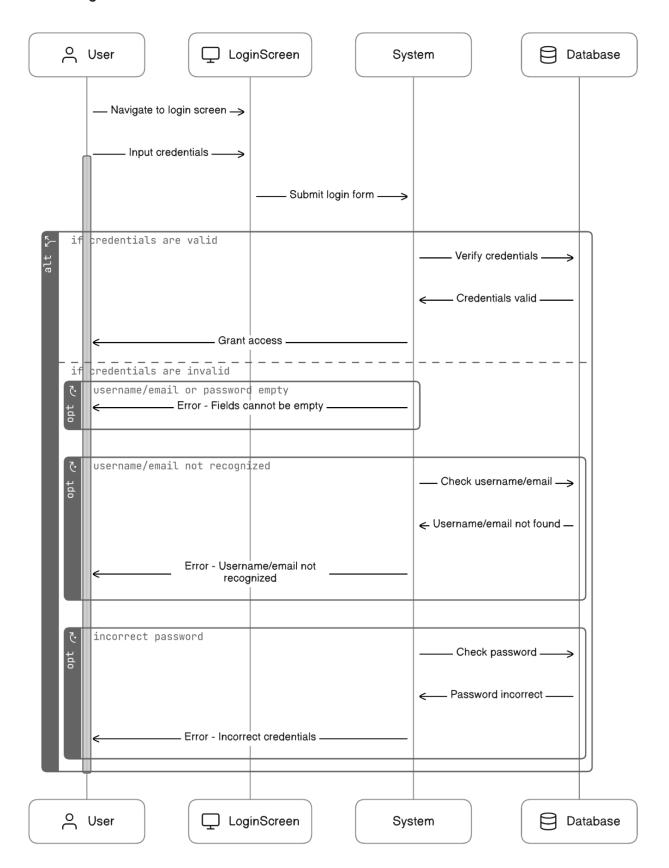
void
+updateTitle(string ISBN, string title): void
+updatePages(string ISBN, int pages):
void
+updateAuthor(string ISBN, string
author): void

## **Function Modeling Diagrams**

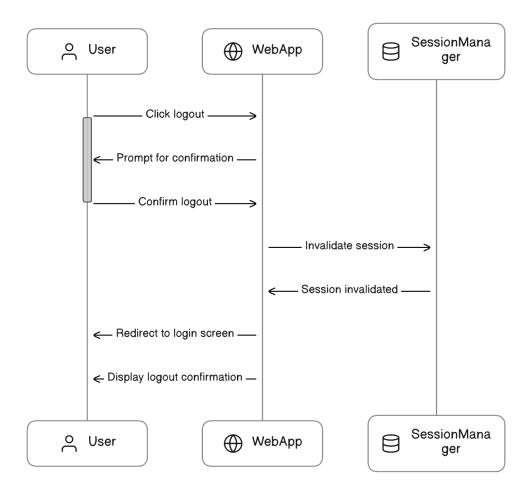
#### **Account Creation Process**



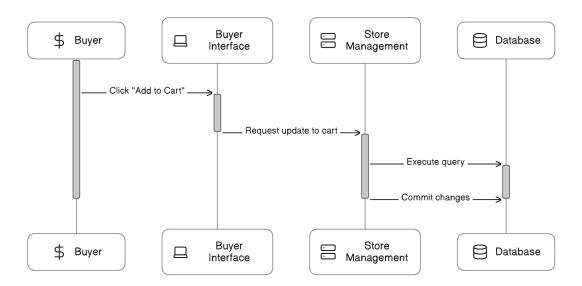
#### **User Login Process**



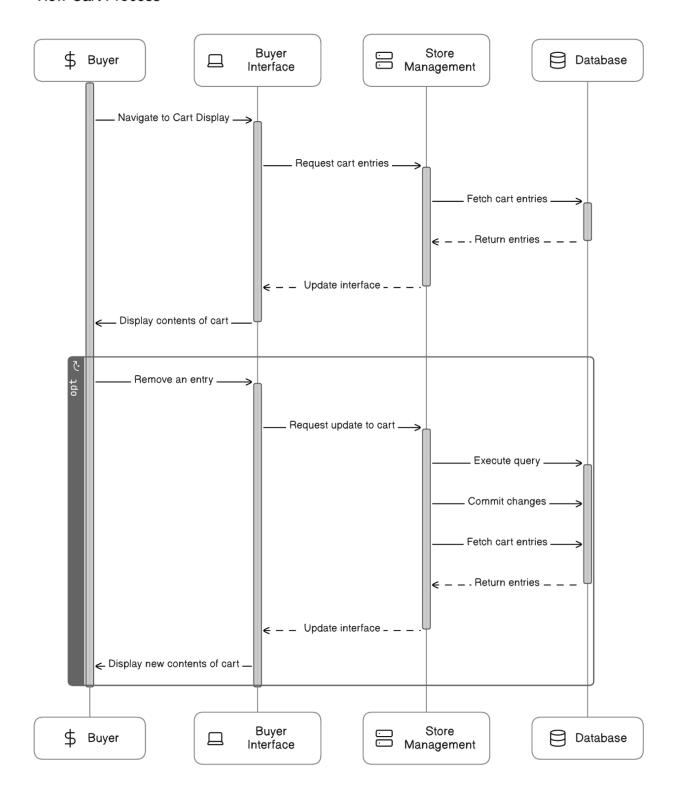
#### **Logout Process**

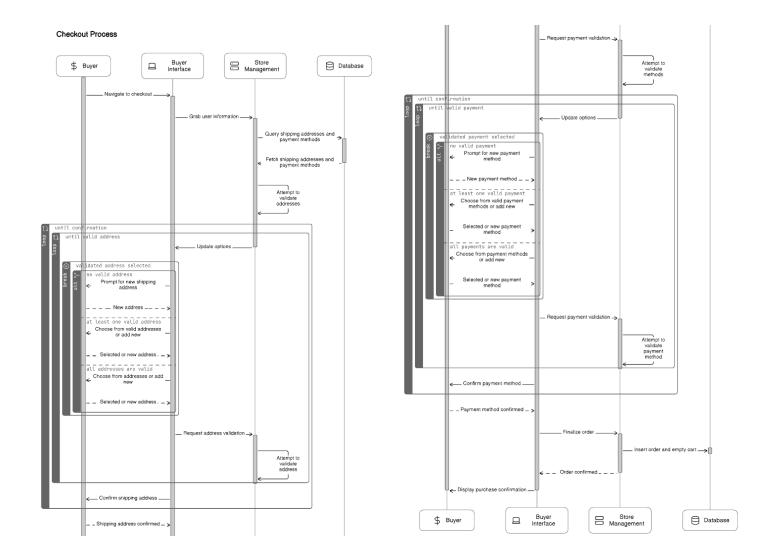


#### Add to Cart Process

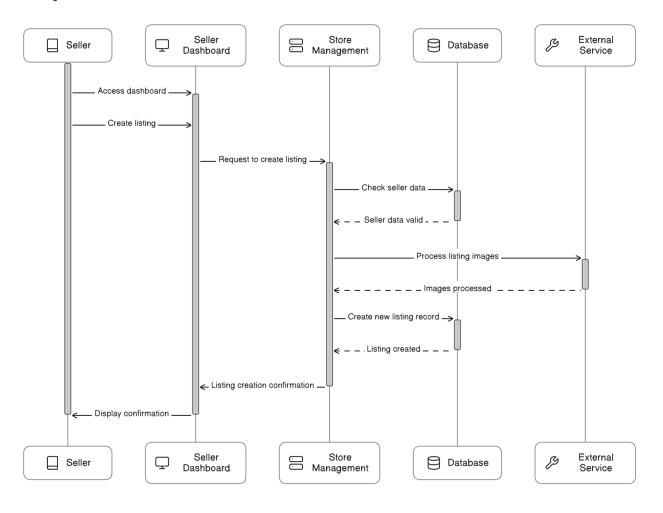


#### **View Cart Process**

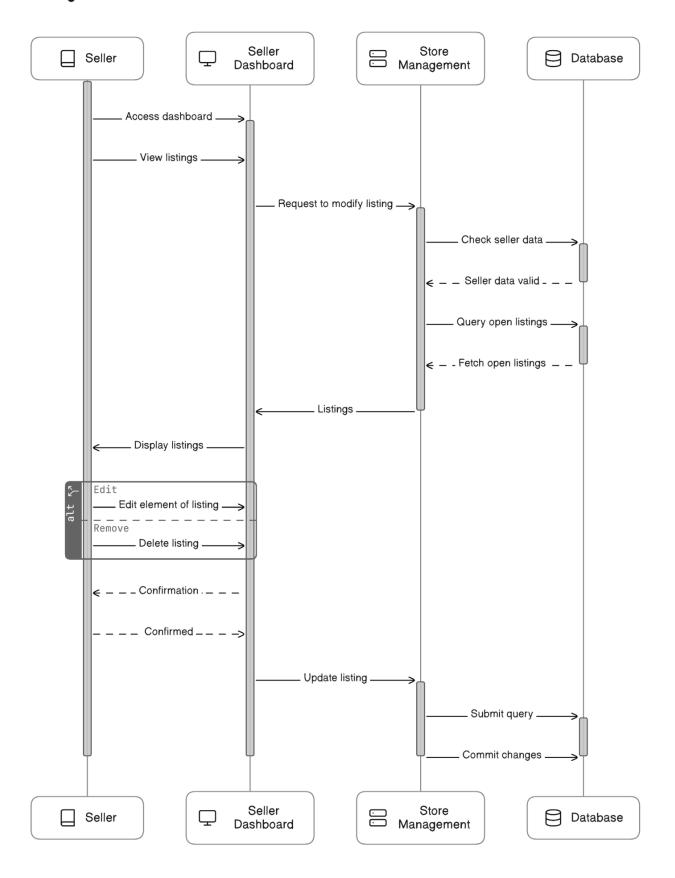




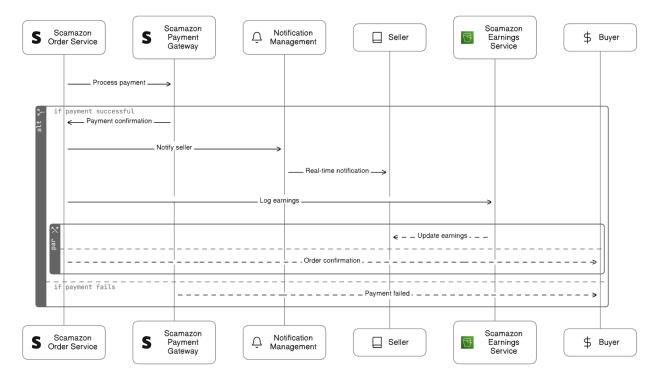
#### **Listing Creation Process**



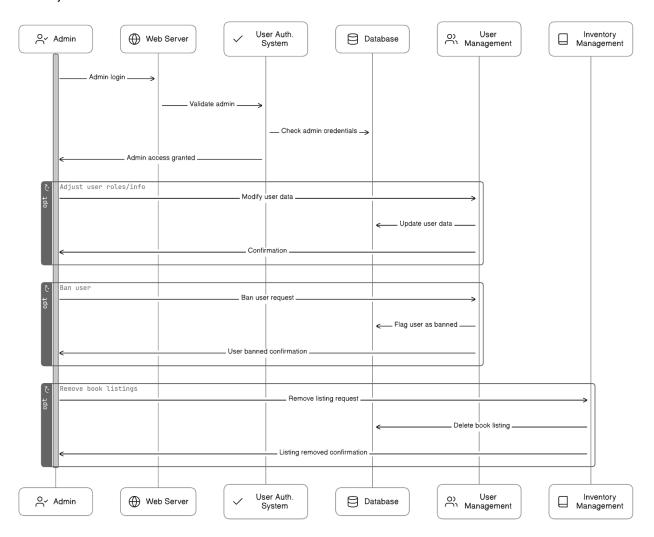
#### **Listing Modification Process**



#### Real Time Order and Payment Process

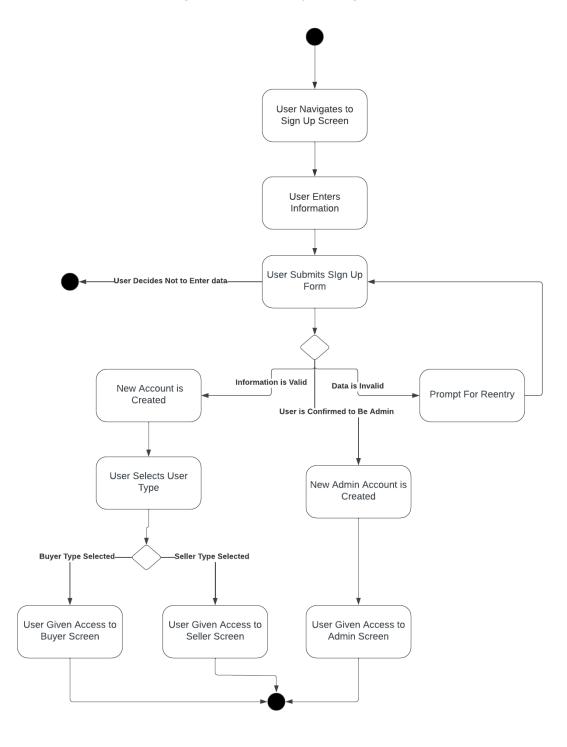


#### Admin System Interactions

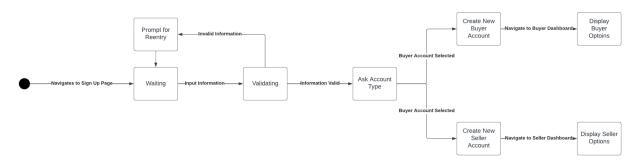


## Behavioral Modeling Diagrams

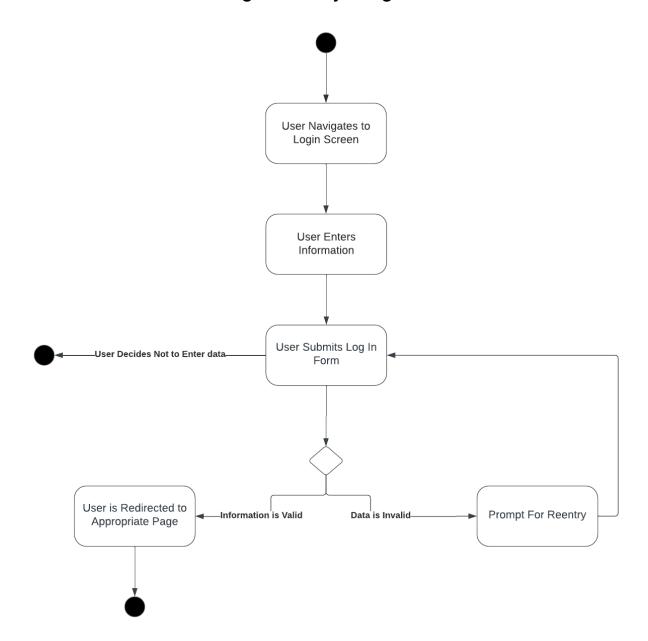
## Sign Up Activity Diagram



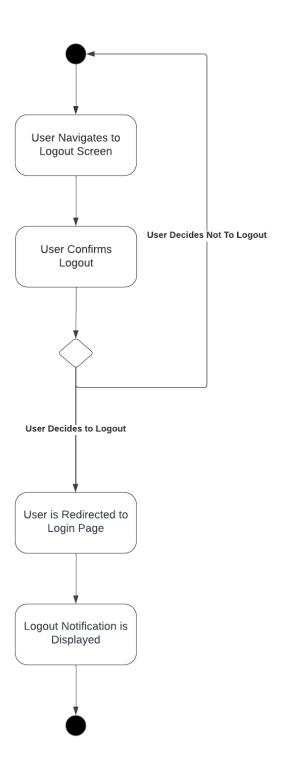
# Sign Up State Diagram



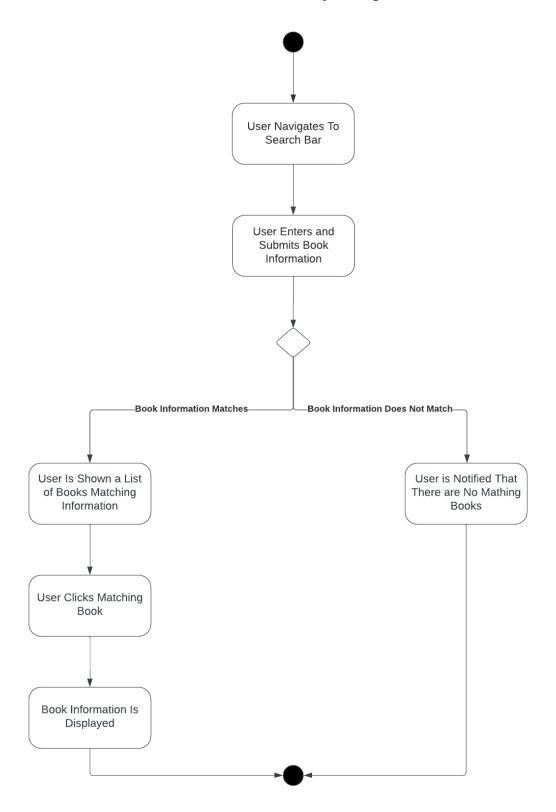
# Login Activity Diagram



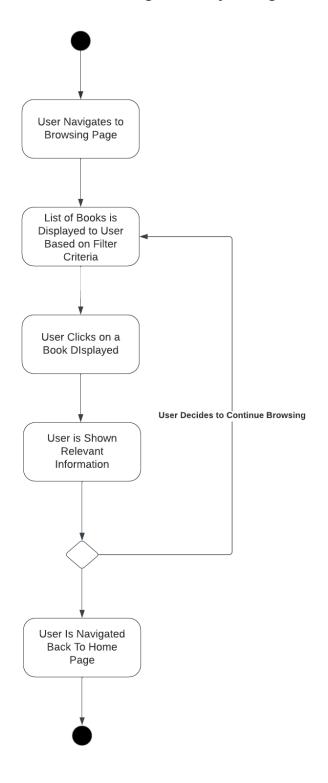
# Logout Activity Diagram



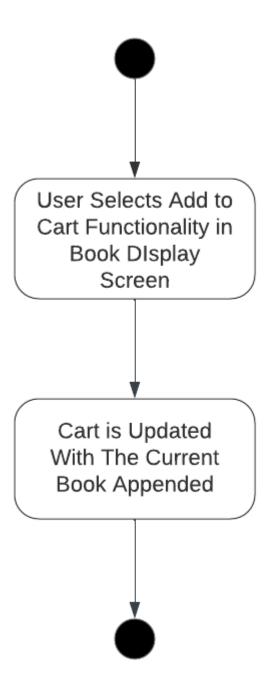
## **Book Search Activity Diagram**



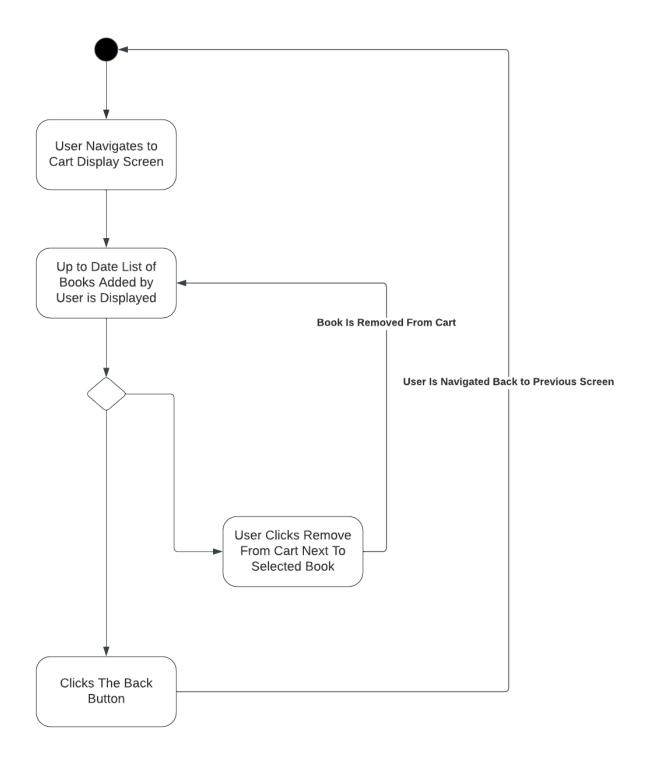
## **Book Browsing Activity Diagram**



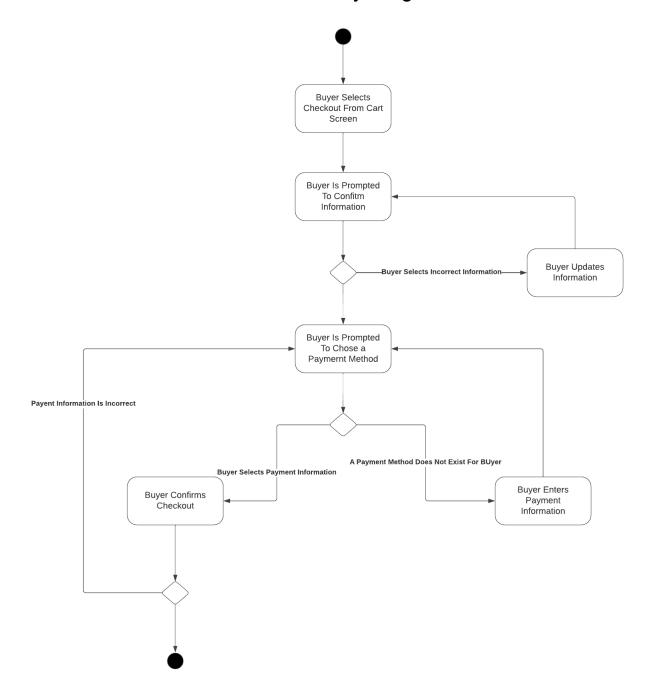
#### Adding A Book To Cart Activity Diagram



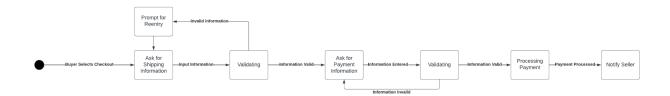
## Cart Updating Activity Diagram



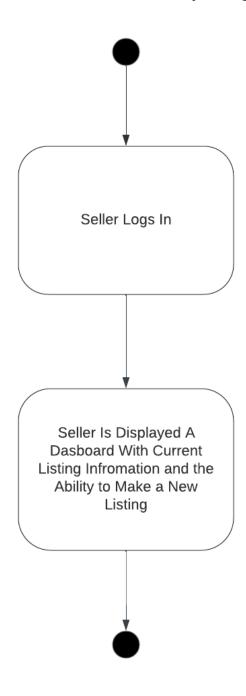
# **Checkout Activity Diagram**



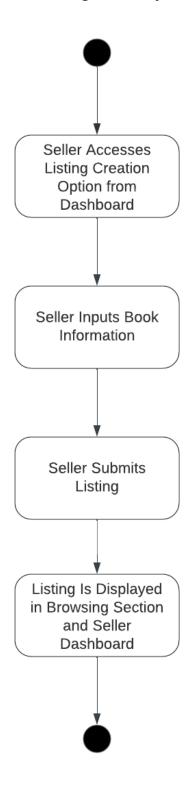
# Checkout State Diagram



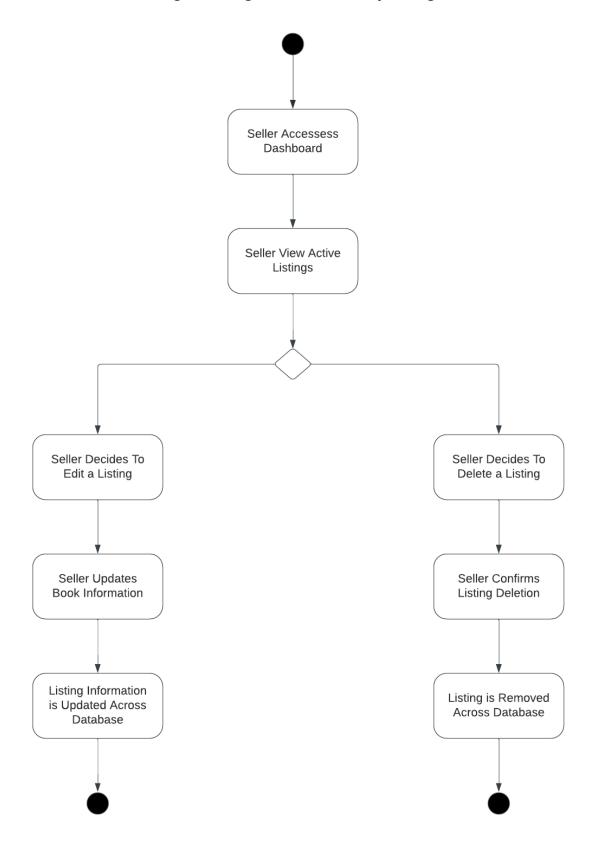
## Seller Dashboard Activity Diagram



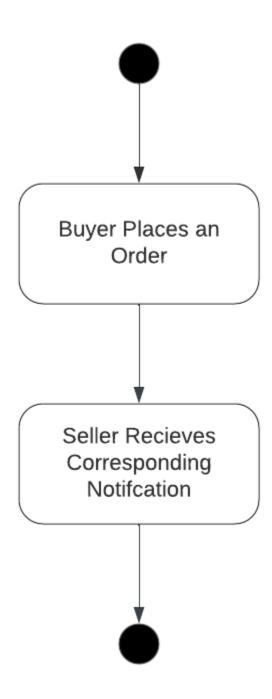
## Create a Listing Activity Diagram



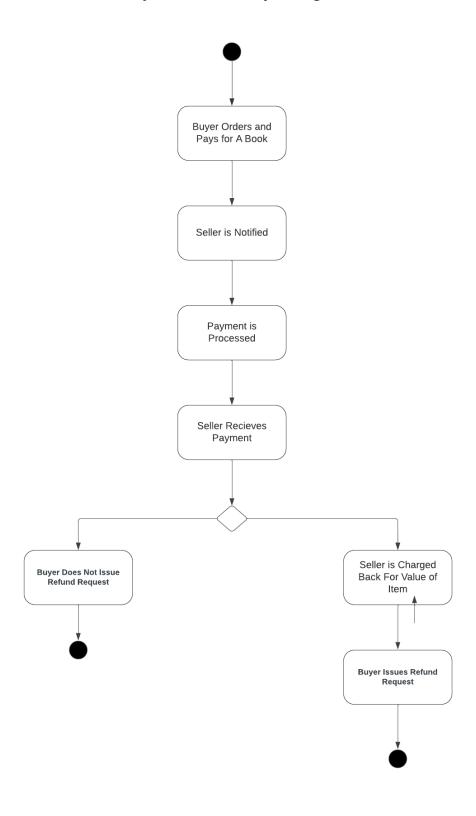
## Listing Management Activity Diagram



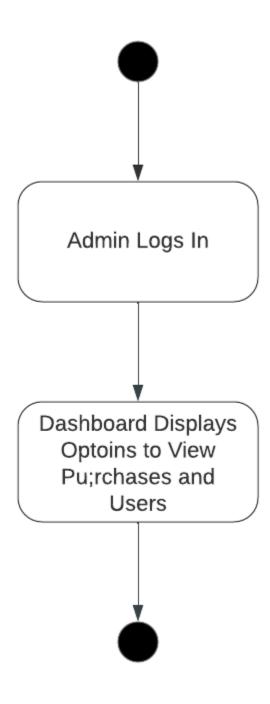
# Listing Notification Activity Diagram



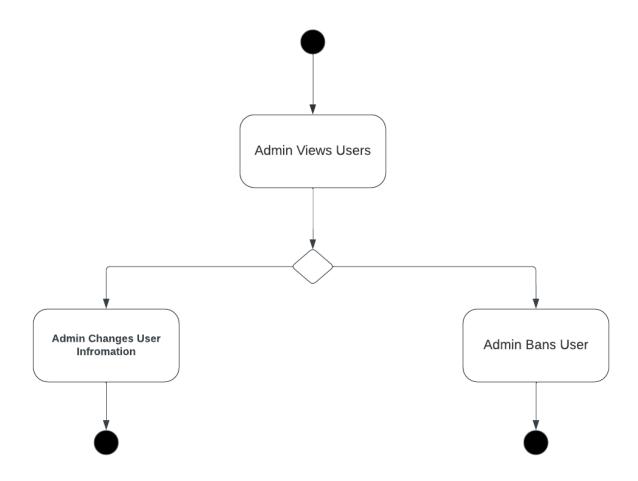
# Payment Activity Diagram



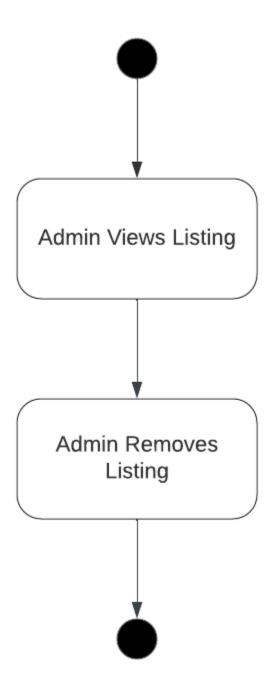
## Admin Dashboard Activity Diagram



# Admin Ban Users Activity Diagram

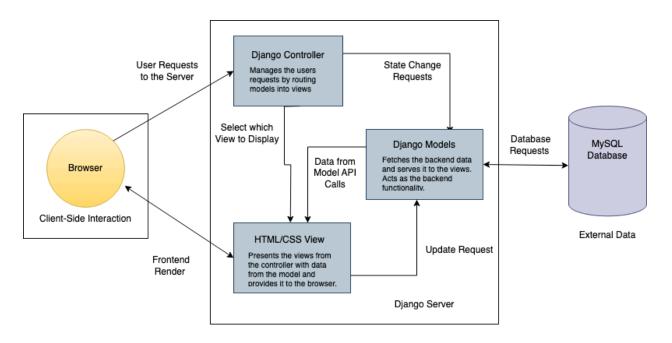


# Admin Remove Listing Activity Diagram



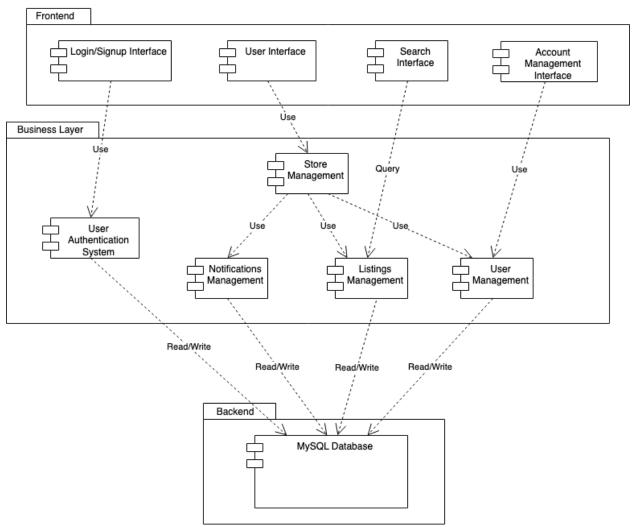
### Architectural Design Diagram

#### Model View Controller Architecture Diagram



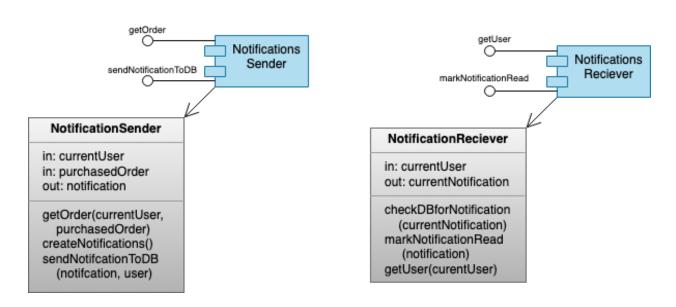
## Component Level Diagrams

Top Level Components Diagram

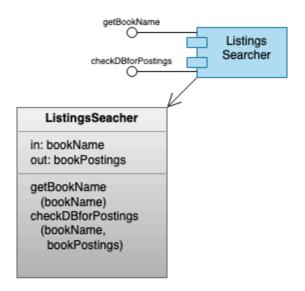


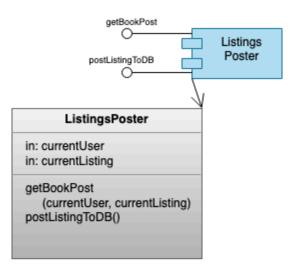
#### **Expanded Component Diagrams** Management Notifications Listings User Management Management Management Notifications Notifications Shopping Listings Listings Admin Purchaser Sender Reciever Searcher Poster Manager Checkout

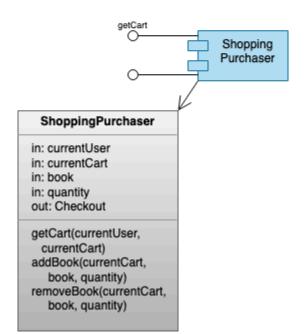
#### Notifications Management Components

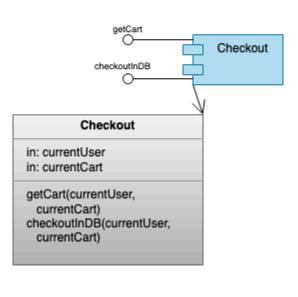


#### **Listings Management Components**









#### Users Management Components

