

CSCI-5448 OOAD

BOOKWISE - Project Part 2

Individual - Zhihao Wu

Use Case: Post Listing

Title: BOOKWISE (An android app for exchanging and selling textbooks)

Project Summary:

An Android App where students can post their textbooks for sale; users(students) would be able to search for a book, buy it or exchange it for a book that the other user(seller) requires. Books will be categorized for different subjects and will have information of condition, edition, picture of cover page and location. All data will be stored in a database.

Project Requirements:

Business Requirement				
ID	Requirement	Topic Area	User	Priority
BR - 001	All users must use university email id to create profile.	Authentication	All	Critical

User Requirements				
ID	Requirement	Topic Area	User	Priority
UR - 001	As a system admin, I want to see user profile as soon as it is created so that I can keep track of all the users of the system.	User Record Maintenance	Admin	Medium
UR - 002	As a customer service representative, I want to be notified of all failures (during login and payment etc) so that I can respond to corresponding user within an hour.	System Validation	Customer Service Representative	High
UR - 003	Only seller maintains all the information about book details such as updating book availability status, rejecting reservations and deleting book details when it is sold.	Book Profile	Seller	High
UR - 004	Buyer can search for the books, he is interested in and can reserve the same if it is available.	Book Reservation	Buyer	High

Functional Requirements				
ID	Requirement	Topic Area	User	Priority
FR - 001	System will lists some of the recent books available in home page screen, when user logged into system.	System Display	System	Medium
FR - 002	If buyer selects any book in which he is interested, then system will notify seller of the corresponding book about the same.	Notification to Seller	System	High

Non Functional Requirements				
ID	Requirement	Topic Area	User	Priority
NFR - 001	Login functionality shall behave the same on different platforms (Linux/Windows/iOS/mobile).	Portability	System	High
NFR - 002	Restart the system in case of failures.	Reliability	System	Medium
NFR - 003	Upon providing correct credentials, user shall be directed to the home page within 10 seconds max.	Performance	System	Medium
NFR - 004	System will be open sourced.	Legal	System	Medium

Users and Tasks:

In the system, we have two types of user: seller and buyer. Both seller and buyer should be able to register, login and logout. The buyer should be able to search for book by title, reserve book and cancel reservation. The seller should be able to post books for sale, reject buyer's reservation and delete posted book. In our android APP, we will provide various of activities such as register, search and result activities interacting with a central database to support those tasks. Use cases documents are shown below:

Use Case List

Use Case ID	Primary Actor	Use Cases
UC-1.1.1	General User	Register
UC-1.1.2	General User	Sign In
UC-1.1.3	General User	Logout

UC-1.1.4	General User	Provide Valid E-mail Address
UC-1.1.5	General User	Create Valid Password
UC-1.1.6	General User	Provide Valid Password
UC-1.1.7	General User	Provide Contact Information
UC-1.2.3	Buyer	Cancel Reservation
UC-1.3.1	Seller	Posting Books

Use cases

Use Case ID:	UC-1.1.1		
Use Case Name:	Register		
Created By:	Shuzhe Zhang	Last Updated By:	Shuzhe Zhang
Date Created:	Oct 6, 2015	Last Revision Date:	Oct 6, 2015
Actors:	General User (Any User)		
Description:	This use case allow a user to register for a new account		
Frequency of Use:	Once per User		
Preconditions:	User does not have an account		
Postconditions:	User has an account		
Normal Flow:	<ol style="list-style-type: none"> 1. User visit the register page 2. User provide valid @colorado.edu E-mail address 3. User create valid password (at least 8 digits) 4. Provide contact information (Mandatory/optional) 5. User click on register button 		
Exceptions:	<ol style="list-style-type: none"> 1. E-mail address is invalid 2. Password is invalid 3. Mandatory contact information not provided 4. Account Already exist 		
Includes:	Provide Valid Email Address Create Valid Password Provide Contact Information		
Special Requirements:	None		
Assumptions:	User has internet access		
Notes and Issues:	None		

Use Case ID:	UC-1.1.2
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Use Case Name:	Sign In		
Created By:	Shuzhe Zhang	Last Updated By:	Shuzhe Zhang
Date Created:	Oct 6, 2015	Last Revision Date:	Oct 6, 2015
Actors:	General User (Any User)		
Description:	This use case allow a user to sign in with his/her account		
Frequency of Use:	Every time switch account or sign in to a new device		
Preconditions:	User was logged out		
Postconditions:	User is signed in		
Normal Flow:	<ol style="list-style-type: none"> 1. User visit the sign in page 2. User provide valid @colorado.edu E-mail address 3. User provide valid password 4. User click on sign in button 		
Exceptions:	<ol style="list-style-type: none"> 1. E-mail address is invalid 2. Password is invalid 		
Includes:	Provide Valid E-mail Address Provide Valid Password		
Special Requirements:	None		
Assumptions:	User has internet access		
Notes and Issues:	None		

Use Case ID:	UC-1.1.3		
Use Case Name:	Log out		
Created By:	Shuzhe Zhang	Last Updated By:	Shuzhe Zhang
Date Created:	Oct 6, 2015	Last Revision Date:	Oct 6, 2015
Actors:	General User (Any User)		
Description:	This use case allow a user to log out his/her account		
Frequency of Use:	Every time user wants to log out		
Preconditions:	User was signed in		
Postconditions:	User is logged out		
Normal Flow:	<ol style="list-style-type: none"> 1. User click on log out button 		
Exceptions:	None		
Includes:	None		

Special Requirements:	None
Assumptions:	User has internet access
Notes and Issues:	None

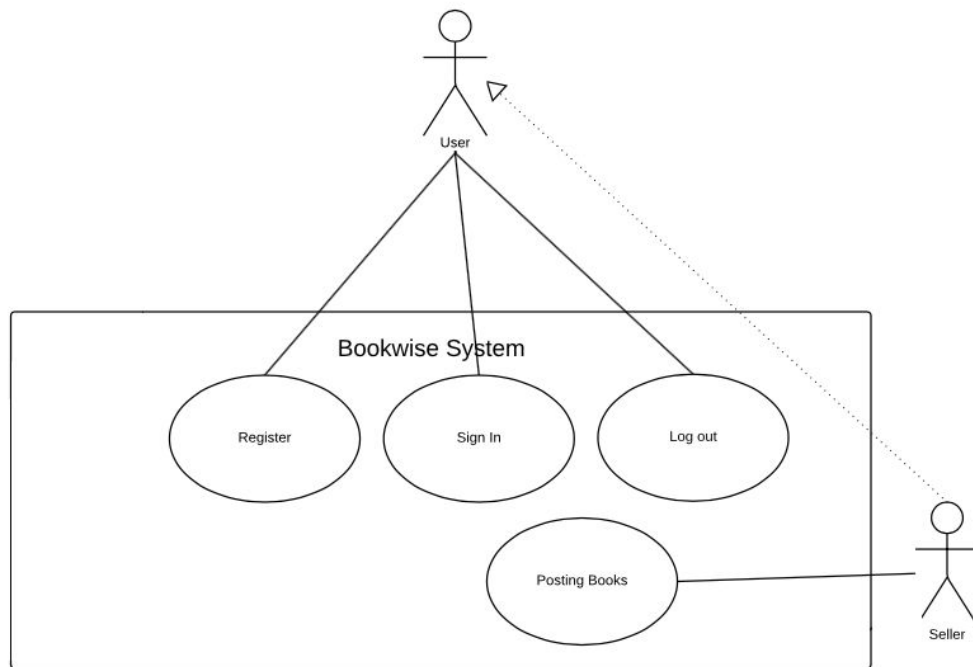
Use Case ID:	UC-1.1.4		
Use Case Name:	Provide Valid E-mail Address		
Created By:	Shuzhe Zhang	Last Updated By:	Shuzhe Zhang
Date Created:	Oct 6, 2015	Last Revision Date:	Oct 6, 2015
Actors:	General User (Any User)		
Description:	This use case allow a user to provide a valid E-mail address		
Frequency of Use:	Every time user wants to register or sign in		
Preconditions:	Email address not provided		
Postconditions:	Email address provided		
Normal Flow:	<ol style="list-style-type: none"> 1. User click on E-mail address input field 2. User type in E-mail address 		
Exceptions:	None		
Includes:	None		
Special Requirements:	None		
Assumptions:	User has internet access		
Notes and Issues:	None		
Use Case ID:	UC-1.1.5		
Use Case Name:	Create Valid Password		
Created By:	Shuzhe Zhang	Last Updated By:	Shuzhe Zhang
Date Created:	Oct 6, 2015	Last Revision Date:	Oct 6, 2015
Actors:	General User (Any User)		
Description:	This use case allow a user to create a valid password		
Frequency of Use:	Every time user wants to register		
Preconditions:	Password not exist		
Postconditions:	Password created		

Normal Flow:	1. User click on the new password input field 2. User type in a new password		
Exceptions:	None		
Includes:	None		
Special Requirements:	None		
Assumptions:	User has internet access		
Notes and Issues:	None		
Use Case ID:	UC-1.1.6		
Use Case Name:	Provide Valid Password		
Created By:	Shuzhe Zhang	Last Updated By:	Shuzhe Zhang
Date Created:	Oct 6, 2015	Last Revision Date:	Oct 6, 2015
Actors:	General User (Any User)		
Description:	This use case allow a user to provide a valid password		
Frequency of Use:	Every time user wants to sign in		
Preconditions:	Password not provided		
Postconditions:	Password provided		
Normal Flow:	1. User click on the password input field 2. User type in the password		
Exceptions:	None		
Includes:	None		
Special Requirements:	None		
Assumptions:	User has internet access		
Notes and Issues:	None		
Use Case ID:	UC-1.1.7		
Use Case Name:	Provide Contact Information		
Created By:	Shuzhe Zhang	Last Updated By:	Shuzhe Zhang
Date Created:	Oct 6, 2015	Last Revision Date:	Oct 6, 2015
Actors:	General User (Any User)		
Description:	This use case allow a user to provide his/her contact information		

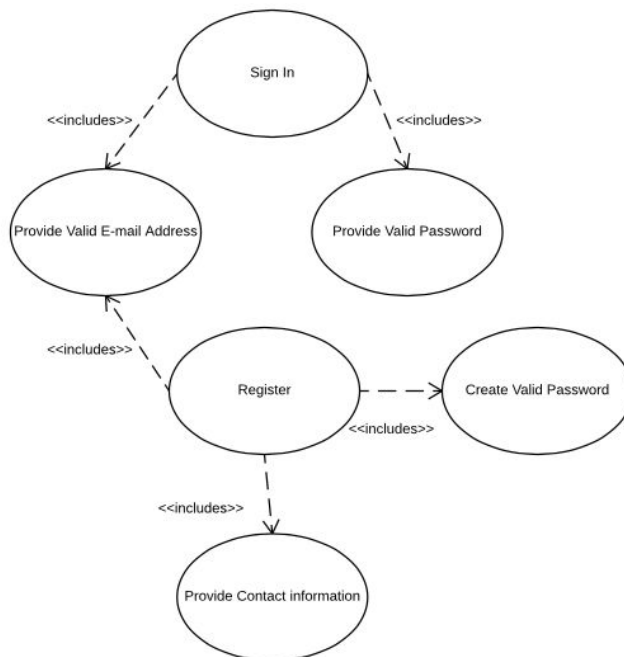
Frequency of Use:	Every time user wants to register
Preconditions:	Contact information (mandatory/optional) not provided
Postconditions:	Contact information (mandatory/optional) provided
Normal Flow:	1. User click on the contact information input field 2. User type in the contact information
Exceptions:	None
Includes:	None
Special Requirements:	None
Assumptions:	User has internet access
Notes and Issues:	None

Use Case ID:	UC-1.3.1		
Use Case Name:	Post Book		
Created By:	Shuzhe Zhang	Last Updated By:	Shuzhe Zhang
Date Created:	Oct 6, 2015	Last Revision Date:	Oct 6, 2015
Actors:	Seller		
Description:	This use case allow a seller to post a book he/she wants to sell		
Frequency of Use:	Every time a Seller has a book to sell		
Preconditions:	Seller has not posted the book for sale		
Postconditions:	Seller has posted the book for sale		
Normal Flow:	1. Seller visit the book posting page 2. Seller provide book title/author/edition 3. Seller click on post button		
Exceptions:	None		
Includes:	None		
Special Requirements:	None		
Assumptions:	User has internet access		
Notes and Issues:	None		

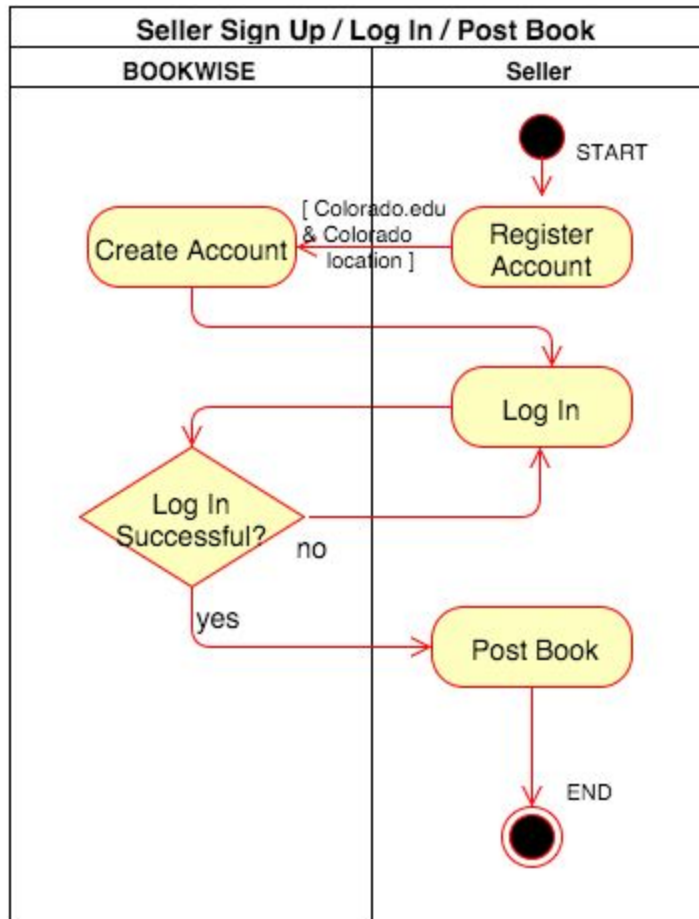
Use cases diagram:



Sub-Diagram

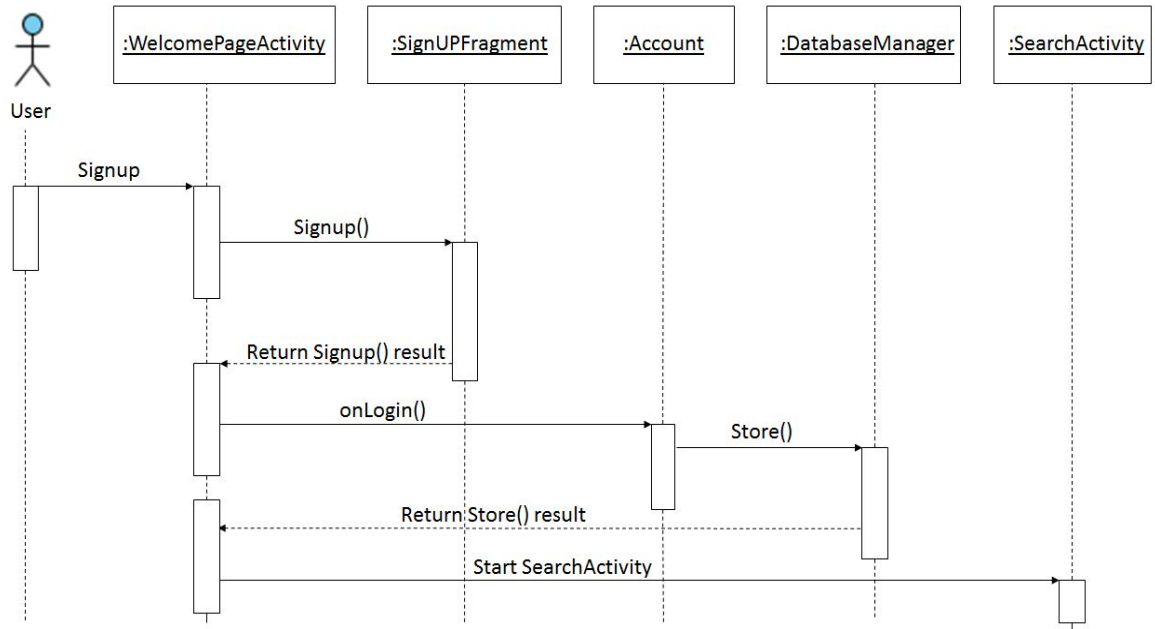


Activity Diagram:

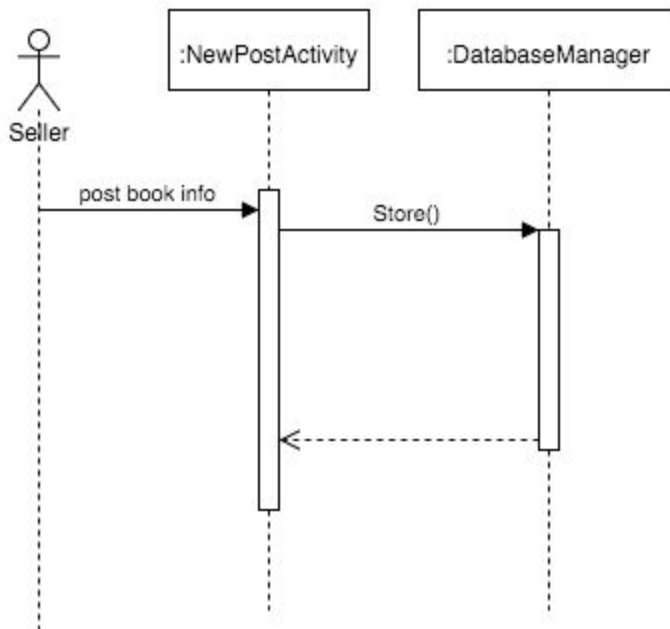


User Interactions:

Sign In Sequence Diagram



Post Books



Class Diagram:

