### Bookshelf.me: Project Part 2

#### Team:

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#### Title:

Bookshelf.me

### Project Summary:

The program will be used by users in order to track which books they own. It will be able to track what they have read, are currently reading, and want to read.

## Project Requirements:

### Business Requirements

| ID     | Requirement                                   | Topic Area            | User     | Priority |
|--------|---|-----------------------|----------|----------|
| BR - 1 | User must be able to pay by credit card       | Payment<br>processing | Customer | Critical |
| BR-2   | User must be able to contact customer service | Customer<br>Service   | Customer | Critical |

## User Requirements

| ID     | Requirement  | Topic Area            | User     | Priority |
|--------|--|-----------------------|----------|----------|
| UR - 1 | User must be able to register  | Account<br>management | Customer | Critical |
| UR-2   | User must be able to login   | Account<br>management | Customer | Critical |
| UR-3   | Administrator must be able to see user account credentials in order to reset passwords | Account<br>Management | Admin    | High     |
| UR-4   | User must be able to add books to their bookshelf                                      | Functionality         | Customer | High     |
| UR-5   | User must be able to add their<br>e-book's file path to their<br>bookshelf             | Functionality         | Customer | Medium   |

| UR-6  | User must be able to rate books<br>that I have read on a 5 star<br>system                                | Functionality     | Customer | Medium |
|-------|--|-------------------|----------|--------|
| UR-7  | User must be able to see statistics on their reading progress like number of books read in the past year | Functionality     | Customer | Low    |
| UR-8  | Administrator must be able to see how many books users are storing in the program                        | Data<br>Gathering | Admin    | Low    |
| UR-9  | User must be able to add comments or review about the book   | Functionality     | Customer | Low    |
| UR-10 | User must be able to get a book suggestion from system database.   | Functionality     | Customer | Low    |

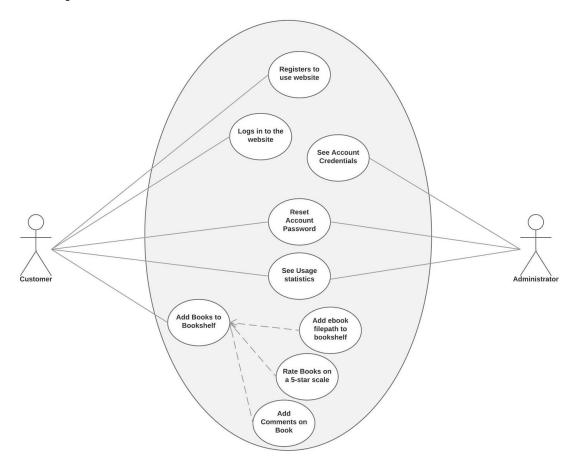
# Functional Requirements

| ID     | Requirement   | Topic Area    | User | Priority |
|--------|---|---------------|------|----------|
| FR - 1 | Bookshelfs are pre-populated with read, to-read, reading. |               |      |          |
| FR-2   | Fill in file path automatically when adding an ebook      | Functionality |      |          |

# Non-Functional Requirements

| ID        | Requirement  | Topic Area                  | User            | Priority   |
|-----------|--|-----------------------------|-----------------|------------|
| NFR -     | Adding books to the user library must be fairly straightforward. | Usability                   | Program<br>user | Mediu<br>m |
| NFR-<br>2 | The program should start up reliably w/out bugs.                 | Performance/<br>Reliability | All             | Critical   |

## Main Use Case Diagram:



| Use Case ID      | UC-1   |                 |  |
|------------------|--|-----------------|--|
| Use Case Name    | User Registration  |                 |  |
| Description      | When the User first goes to the website, they must be able to create an account to track their data                |                 |  |
| Actors           | Customer   |                 |  |
| Pre-Conditions   | Customer navigates to the website  |                 |  |
| Post-Conditions  | Customer receives confirmation that their account h  |                 |  |
| Frequency of Use | First time only  |                 |  |
| Flow of Events   | Actor Actions 1. Click Register User button on top right 2. Insert Username 3. Insert Password 4. Confirm Password | System Response |  |

|                  | 5. Click Register User 6. Go to screen to insert payment information 7. Go to screen then creates account the database |        |
|------------------|--|--------|
|                  | account has been 7. Process payment created and allows you to download   |        |
| Variations       | If passwords don't match then alert the user to reente passwords   | er the |
| Notes and Issues |  |        |
| Developer Notes  |  |        |

| Use Case ID         | UC-2   |   |  |
|---------------------|--|---|--|
| Use Case Name       | Login  |   |  |
| Description         | When customer visits the website again they can sign in and view their bookshelf   |   |  |
| Actors              | Customer   |   |  |
| Pre-Conditions      | <ol> <li>Navigate to website</li> <li>The customer has regist</li> </ol>   | ered  |  |
| Post-Conditions     | The Customer can view their d  | ata   |  |
| Frequency of<br>Use | Every time the customer visits the website   |   |  |
| Flow of Events      | Actor Actions 1. Click Login button in top-right 2. Insert Username 3. Insert Password 4. Click submit   | System Response  2. Brings user to login screen  5. Checks database for customer credentials and then redirects to user dashboard |  |
| Variations          | If customer is not registered, program redirects to registration page. If Password does not match existing password in database customer is prompted to reenter credentials. |   |  |
| Notes and Issues    |  |   |  |

| Developer Notes | Need to sanitize queries so that we don't face SQL |
|-----------------|--|
|                 | injection attacks.                                 |

| Use Case ID         | UC-3   |  |  |
|---------------------|--|--|--|
| Use Case Name       | Admin Reset Password   |  |  |
| Description         | The Administrators must have a way to reset the users passwords in case they forget  |  |  |
| Actors              | Administrator  |  |  |
| Pre-Conditions      | Admin logged in  |  |  |
| Post-Conditions     | Password has been reset  |  |  |
| Frequency of<br>Use | Infrequent - Most Users will remember their passwords  |  |  |
| Flow of Events      | Actor Actions 1. See list of usernames and passwords 2. Admin makes sure user has an account 3. Click user to reset the password   | System Response  3. System clears users password |  |
| Variations          | If User does not exist, Admin informs customer to create an account  |  |  |
| Notes and Issues    | There could be ethical concerns as the administrators would have access to all user passwords.  Potential fix would be to not allow admins to view passwords only to reset them. |  |  |
| Developer Notes     |  |  |  |

| Use Case ID      | UC-4   |
|------------------|--|
| Use Case Name    | Add Books  |
| Description      | User must be able to add books to their bookshelf        |
| Actors           | Customer   |
| Pre-Conditions   | User has an account and is logged in                     |
| Post-Conditions  | Bookshelf has been updated with new book                 |
| Frequency of Use | Frequent - This is the main functionality of the website |

| Flow of Events   | Actor Actions 1. Click + button on bookshelf 2. Get prompt with areas to enter book title 3. Click Save | 3. Run search against ISBN database to see prefill data 4. System adds book to database for customer 5. System reloads page for customer  |  |
|------------------|---|---|--|
| Variations       | search against our ISBN databo<br>the fields. The User will be show                                     | e the Book title is added the system will trigger a sch against our ISBN database and attempt to fill in all fields. The User will be shown the pre-filled screens if the title is wrong they can run the search again. |  |
| Notes and Issues |   |   |  |
| Developer Notes  |   |   |  |

| Use Case ID      | UC-5   |   |
|------------------|--|---|
| Use Case Name    | E-book Support   |   |
| Description      | User must be able to add their e-book's file path to their bookshelf   |   |
| Actors           | Customer   |   |
| Pre-Conditions   | Customer is logged in  |   |
| Post-Conditions  | Bookshelf has been updated with file path  |   |
| Frequency of Use | Frequent - This is the main functionality of the website   |   |
| Flow of Events   | Actor Actions 1. Click on a book in the bookshelf 2. Get prompt with areas to add information and insert books 3. Click add file path 4. Add the string for the location of the book 5. Click Save | 5. System updates the database with new information |

|                  |   | 6. Updated webpage will be displayed with new information |
|------------------|---|---|
| Variations       | Not all information needs to be filled out for the book to be added to the bookshelf. |   |
| Notes and Issues |   |   |
| Developer Notes  |   |   |

| Use Case ID         | UC-6   |   |
|---------------------|--|---|
| Use Case Name       | Starring Books   |   |
| Description         | User must be able to rate books that I have read on a 5 star system  |   |
| Actors              | Customer   |   |
| Pre-Conditions      | Customer is logged in  |   |
| Post-Conditions     | Book has been update with stars on bookshelf   |   |
| Frequency of<br>Use | Frequent - This is the part of the main functionality of the website   |   |
| Flow of Events      | Actor Actions 1. Click on a book in the bookshelf 2. Get prompt with areas to add information and insert books 3. Click a star to indicate how many stars to add out of 5 4. Add the string for the location of the book 5. Click Save | 5. Database is updated with new information 6. Updated webpage will be displayed with new information |
| Variations          | Not all information needs to be filled out for the book to be added to the bookshelf.  |   |
| Notes and Issues    |  |   |
| Developer Notes     |  |   |

| Use Case ID         | UC-7   |  |
|---------------------|--|--|
| Use Case Name       | See Progress   |  |
| Description         | User must be able to see statistics on their reading progress like number of books read in the past year         |  |
| Actors              | Customer   |  |
| Pre-Conditions      | Customer is logged in  |  |
| Post-Conditions     |  |  |
| Frequency of<br>Use | Frequent - This is the part of the main functionality of the website   |  |
| Flow of Events      | Actor Actions 1. Customer goes to website dashboard 2. In Top right corner the number of books read is displayed | System Actions 1. System checks count of books read by the customer and then renders that on the dashboard |
| Variations          |  |  |
| Notes and Issues    |  |  |
| Developer Notes     |  |  |

| Use Case ID         | UC-8   |   |
|---------------------|--|---|
| Use Case Name       | See Statistics   |   |
| Description         | Administrator must be able to see how many books users are storing in the program  |   |
| Actors              | Administrator  |   |
| Pre-Conditions      | Administrator is logged in   |   |
| Post-Conditions     |  |   |
| Frequency of<br>Use | In-Frequent. Administrator will only log in when dealing with customer support   |   |
| Flow of Events      | Actor Actions 1. Administrator goes to website dashboard 2. In Top right corner the number of books read by all customers is | System Actions  2. System runs a sum function on all the customers books to see |

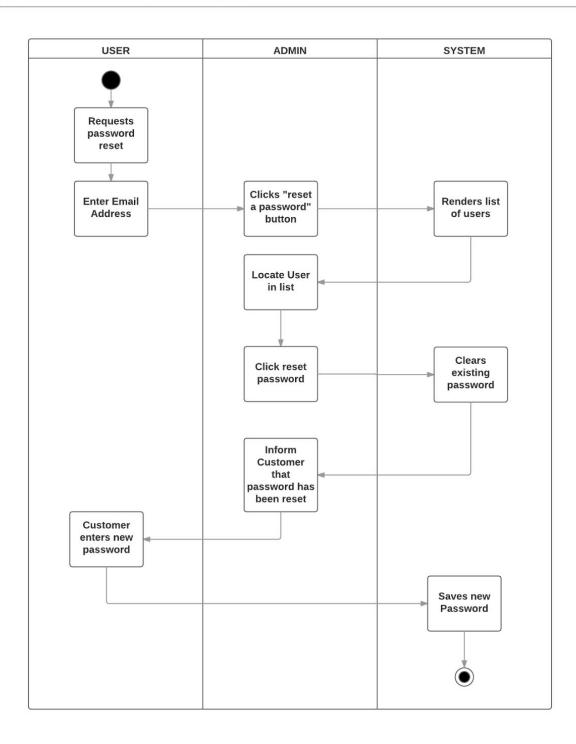
|                  | displayed | how many have been read. |
|------------------|-----------|--------------------------|
| Variations       |           |                          |
| Notes and Issues |           |                          |
| Developer Notes  |           |                          |

| Use Case ID         | UC-9   |   |
|---------------------|--|---|
| Use Case Name       | Add Comments   |   |
| Description         | User must be able to add comments or review about the book   |   |
| Actors              | Customer   |   |
| Pre-Conditions      | User is logged in  |   |
| Post-Conditions     |  |   |
| Frequency of<br>Use | Frequent. This is part of the main functionality of the website  |   |
| Flow of Events      | Actor Actions 1. Click on a book in the bookshelf 2. Get prompt with areas to add information and insert books 3. Click add review 4. Type thoughts about the book 5. Click Save | 5. Database is updated with new information 6. Updated webpage will be displayed with new information |
| Variations          | Not all information needs to be filled out for the book to be added to the bookshelf.  |   |
| Notes and Issues    |  |   |
| Developer Notes     |  |   |

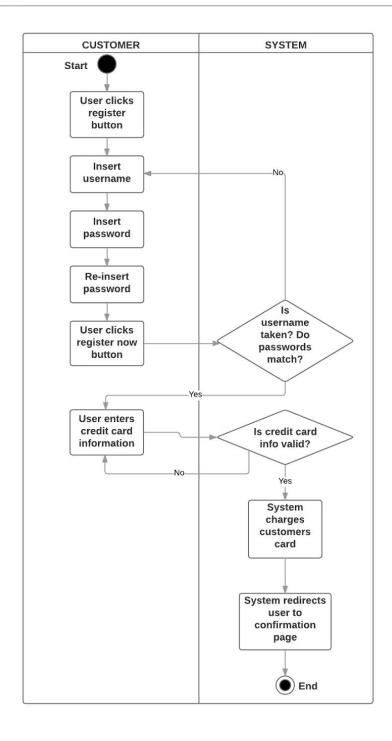
| Use Case ID UC-10 |
|-------------------|
|-------------------|

| Use Case Name       | Suggested Books  |  |
|---------------------|--|--|
| Description         | User uses the program to generate a new book suggestion that they can add to their bookshelf   |  |
| Actors              | Customer   |  |
| Pre-Conditions      | 1. User is logged in   |  |
| Post-Conditions     | User has a new book suggestion added in their bookshelf.   |  |
| Frequency of<br>Use | Frequent. This is part of the main functionality of the website  |  |
| Flow of Events      | Actor Actions  1. User clicks on suggest button  2. Choose books from bookshelves or a genre that they would like to read as inputs to the system  3. Review the random book selection made by system  4. Add book | System Actions  1. System displays prompt for suggestion types  2. System checks Google Books API for books in the same genres  3. Displays book suggestion from same genre  4. User adds book, and updates database |
| Variations          | User clicks suggest again to get new book recommendation.  |  |
| Notes and Issues    |  |  |
| Developer Notes     |  |  |

#### **UC-3 ADMIN RESET PASSWORD**

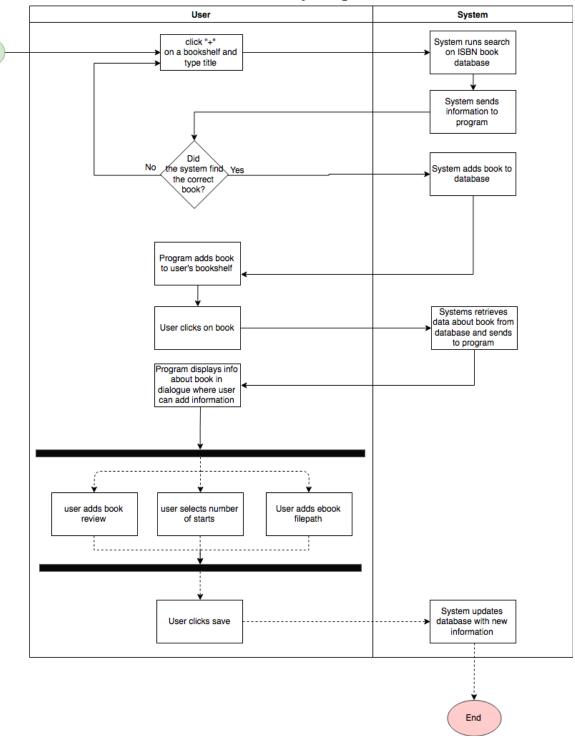


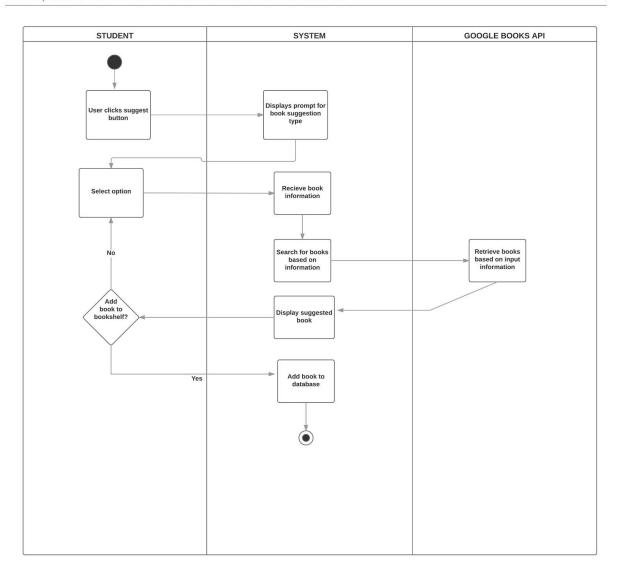
UC-1 DIAGRAM Samuel Taylor

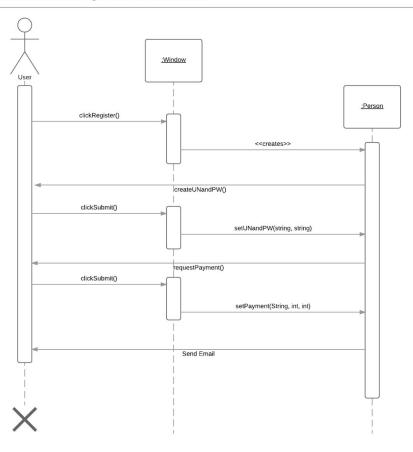


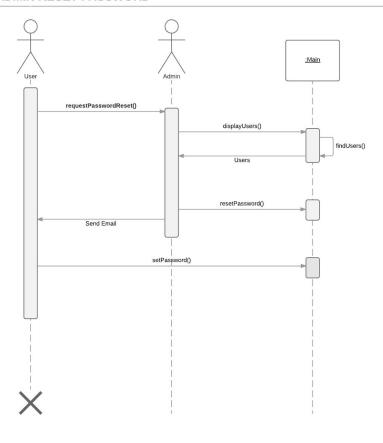
# UR 4,5,6 / UC 4,5,6 Activity Diagram: Soham Shah

Start



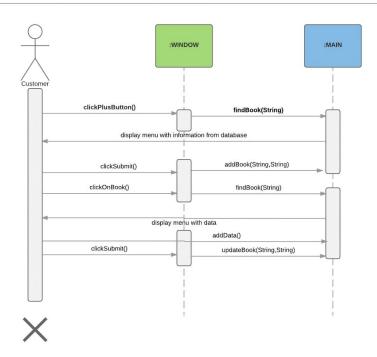


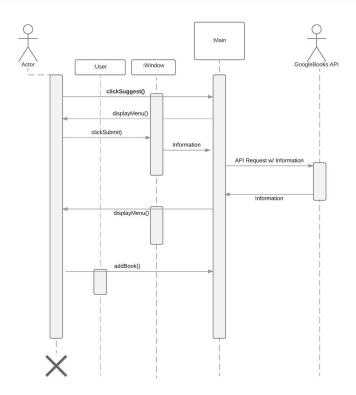




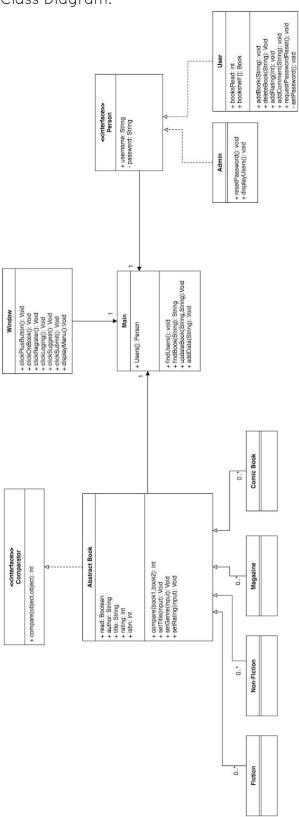
#### UR 4,5,6 / UC 4,5,6 SEQUENCE DIAGRAM

Soham Shah | October 13, 2016





## Class Diagram:

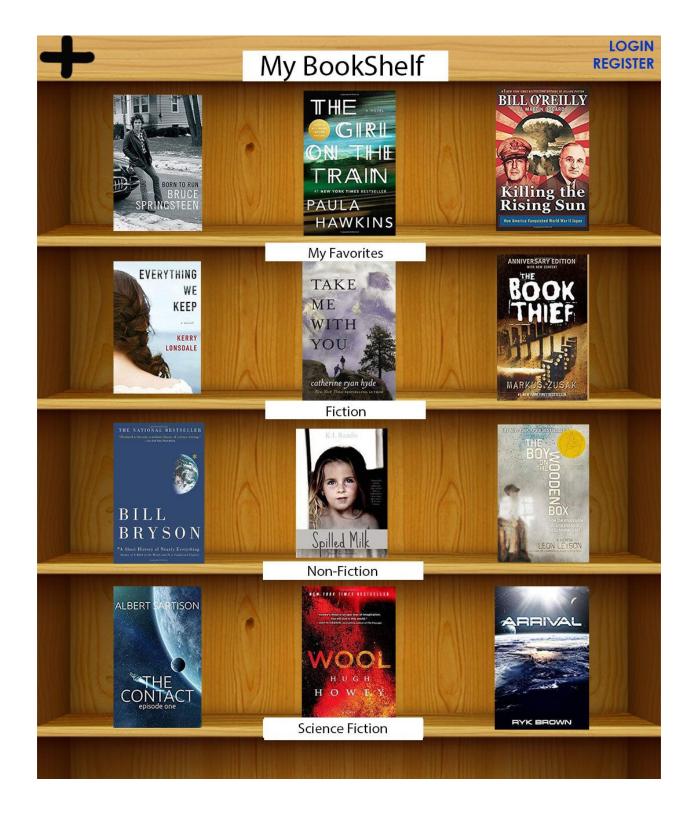


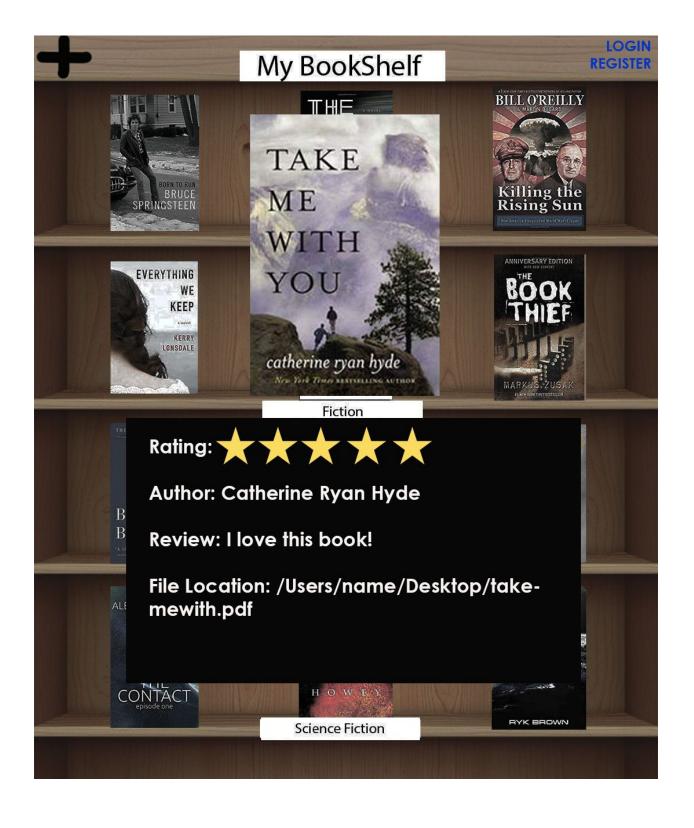
<sup>\*</sup>Class Diagram is also in the Github as an image for increased visibility.

## Data Storage:

We will use MySql to store the data on people's bookshelves. There will be two main tables, Users, and Books. This way each user will have a unique bookshelf where they can store the different books that they own and their unique reviews and settings. We will use Hibernate to access and represent this data in Java.

## UI Mockup:





# Registration

| username          |  |
|-------------------|--|
| password          |  |
| re-enter password |  |

Register Now