

Use Case ID:	0		
Use Case Name:	Login		
Created By:	Siteng	Last Updated By:	Zhou Wei
Date Created:	27/01/2022	Date Last Updated:	02/02/2022

Actor:	User (Account Owner)
Description:	The user logs in to the system.
Preconditions:	The user has an account in the database.
Postconditions:	The user is directed to the homepage.
Priority:	High
Frequency of Use:	Once per session
Flow of Events:	<ol style="list-style-type: none"> 1. The user clicks on the login button. 2. The system displays the input field for an email/username and a password. 3. The user inputs an email/username and a password. 4. The user clicks on log in. 5. The system verifies for the email/username and password combination with the account information in the database. 6. If the login is successfully authenticated, the system loads the main interface.
Alternative Flows:	<p>0.AF.1: If the email/username and password are invalid.</p> <ol style="list-style-type: none"> 1. The system displays the message "Invalid email/username and password. Please try again!". 2. The system returns to main flow, step 2. <p>0.AF.2: If the user enters the wrong password for five times.</p> <ol style="list-style-type: none"> 1. The system sends an email registered under the email/username, informing the user of the suspicious activity. 2. The account owner is prompted in the email to change password with the link provided. 3. The system displays the message "Invalid email/username and password. Please try again!". 4. The system returns to main flow, step 2.
Exceptions:	<p>0.EC.1: If the user enters an unregistered username/email.</p> <ol style="list-style-type: none"> 1. The user enters inputs an email/username and a password. 2. The user clicks on log in. 3. The system is unable to find the email/username in the database. 4. The system displays the message that the email/username is not in the database. 5. The user clicks on “Sign Up” to go to the sign-up interface.
Includes:	
Special Requirements:	<ul style="list-style-type: none"> • The authentication by the system must be completed within 2 minutes • Remember me function in login page • Passwords cannot be visible at point of entry or any other time
Assumptions:	
Notes and Issues:	

Use Case ID:	1		
Use Case Name:	Sign up		
Created By:	Xiangyi	Last Updated By:	Siteng
Date Created:	27/01/2022	Date Last Updated:	17/02/2022

Actor:	User
Description:	The user creates an account.
Preconditions:	The user does not have an account associated with the email one is attempting to sign up with.
Postconditions:	The user has an account on the platform and is directed to the login interface.
Priority:	High
Frequency of Use:	Once per user.
Flow of Events:	<ol style="list-style-type: none"> 1. The user clicks on “Sign Up” to go to the sign-up interface. 2. The system displays input field for email, username, DOB once and password twice. 3. The system loads the CAPTCHA test. 4. The user fills up the relevant fields and passes the CAPTCHA test. 5. The user clicks on sign up. 6. The system checks for overlapping username and email in the database. 7. The system verifies that no existing username and email match the input username and email. 8. The system prompts the user that a confirmation email has been sent. 9. The user clicks to acknowledge the message. 10. The system loads the login interface.
Alternative Flows:	<p>1.AF.1: If the system finds an existing email matching the input email.</p> <ol style="list-style-type: none"> 1. The system displays the message "Email already has an account." 2. The system returns to main flow, step 2. <p>1.AF.2: If the system finds an existing username matching the input Username.</p> <ol style="list-style-type: none"> 1. The system displays the message "Username has been taken. Please try again!" 2. The system returns to main flow, step 2.
Exceptions:	
Includes:	
Special Requirements:	<ul style="list-style-type: none"> • The system provides CAPTCHA to prevent overload of database.
Assumptions:	
Notes and Issues:	

Use Case ID:	2		
Use Case Name:	View account information		
Created By:	Siteng	Last Updated By:	Siteng
Date Created:	15/02/2022	Date Last Updated:	15/02/2022

Actor:	User (Account Owner)
Description:	The user views his account information.
Preconditions:	The user is logged in to the system.
Postconditions:	The user is on the account page.
Priority:	Medium
Frequency of Use:	Once per multiple session
Flow of Events:	<ol style="list-style-type: none"> 1. The user clicks on the account avatar. 2. The user views the information of the account.
Alternative Flows:	
Exceptions:	
Includes:	
Special Requirements:	
Assumptions:	
Notes and Issues:	

Use Case ID:	3		
Use Case Name:	Change username		
Created By:	Siteng	Last Updated By:	Siteng
Date Created:	27/01/2022	Date Last Updated:	15/02/2022

Actor:	User (Account Owner)
Description:	The user changes username.
Preconditions:	The user has an account in the database.
Postconditions:	The user has an updated username.
Priority:	Low
Frequency of Use:	Once per multiple session
Flow of Events:	<ol style="list-style-type: none"> 1. The user clicks on the user avatar. 2. The system displays the user account information page. 3. The user clicks on "edit profile". 4. The system redirects the user to the edit profile page. 5. The user inputs a valid new username. 6. The user enters the correct password, and the username is changed.
Alternative Flows:	
Exceptions:	<p>3.EC.1: If the user enters an invalid username.</p> <ol style="list-style-type: none"> 1. The user clicks on the user avatar. 2. The system displays the user account information page. 3. The user clicks on "edit profile". 4. The system redirects the user to the edit profile page. 5. The user inputs an invalid new username. 6. The user inputs the correct password. 7. The system informs the user that the new username is invalid and prompts the user to input another username. <p>3.EC.2: If the user enters the wrong password.</p> <ol style="list-style-type: none"> 8. The user clicks on the user avatar. 9. The system displays the user account information page. 10. The user clicks on "edit profile". 11. The system redirects the user to the edit profile page. 12. The system prompts the user to input a valid username. 13. The user inputs a valid new username. 14. The user enters the wrong password. 15. The system informs the user that the password is wrong and prompts the user to input password again.
Includes:	
Special Requirements:	
Assumptions:	
Notes and Issues:	

Use Case ID:	4		
Use Case Name:	Change email		
Created By:	Siteng	Last Updated By:	Siteng
Date Created:	15/02/2022	Date Last Updated:	19/02/2022

Actor:	User (Account Owner)
Description:	The user changes email.
Preconditions:	The user has an account in the database.
Postconditions:	The user has an updated email.
Priority:	Low
Frequency of Use:	Once per multiple session
Flow of Events:	<ol style="list-style-type: none"> 1. The user clicks on the user avatar. 2. The system displays the user account information page. 3. The user clicks on "edit profile". 4. The system redirects the user to the edit profile page. 5. The user inputs a valid new email. 6. The user enters the correct password, and the email is changed.
Alternative Flows:	
Exceptions:	<p>4.EC.1: If the user enters an invalid email.</p> <ol style="list-style-type: none"> 1. The user clicks on the user avatar. 2. The system displays the user account information page. 3. The user clicks on "edit profile". 4. The system redirects the user to the edit profile page. 5. The user inputs an invalid new email. 6. The user inputs the correct password. 7. The system informs the user that the new email is invalid and prompts the user to input another email. <p>4.EC.2: If the user enters the wrong password.</p> <ol style="list-style-type: none"> 8. The user clicks on the user avatar. 9. The system displays the user account information page. 10. The user clicks on "edit profile". 11. The system redirects the user to the edit profile page. 12. The user inputs a valid new email. 13. The user enters the wrong password. 14. The system informs the user that the password is wrong and prompts the user to input password again.
Includes:	
Special Requirements:	
Assumptions:	
Notes and Issues:	

Use Case ID:	5		
Use Case Name:	Change password		
Created By:	Siteng	Last Updated By:	Siteng
Date Created:	15/02/2022	Date Last Updated:	15/02/2022

Actor:	User (Account Owner)
Description:	The user changes his password.
Preconditions:	The user is logged in into the system.
Postconditions:	The user has a new password registered.
Priority:	High
Frequency of Use:	Once per multiple session
Flow of Events:	<ol style="list-style-type: none"> 1. The user clicks on the account avatar. 2. The user scrolls down and press the 'change password' button. 3. The user is brought to the change password page. 4. The user inputs the old password, and the new password twice. 5. System informs the user that the password has been changed successfully.
Alternative Flows:	
Exceptions:	<p>5.EC.1: If the user enters the wrong old password.</p> <ol style="list-style-type: none"> 1. The user clicks on the account avatar. 2. The user scrolls down and press the 'change password' button. 3. The user is brought to the change password page. 4. The user inputs the old password, and the new password twice. 5. System informs the user that the old password is wrong and prompts the user to input the old password again. <p>5.EC.2: If the two new password inputs do not match.</p> <ol style="list-style-type: none"> 1. The user clicks on the account avatar. 2. The user scrolls down and press the 'change password' button. 3. The user is brought to the change password page. 4. The user inputs the old password, and the new password twice. 5. System informs the user that the new passwords do not match and prompts the user to input again. <p>5.EC.3: If the new password has an invalid format.</p> <ol style="list-style-type: none"> 1. The user clicks on the account avatar. 2. The user scrolls down and press the 'change password' button. 3. The user is brought to the change password page. 4. The user inputs the old password, and the new password twice. 5. System informs the user that the new password format is invalid and prompts the user to input again.
Includes:	

Special Requirements:	
Assumptions:	
Notes and Issues:	

Use Case ID:	6		
Use Case Name:	Forget password		
Created By:	Siteng	Last Updated By:	Siteng
Date Created:	15/02/2022	Date Last Updated:	15/02/2022

Actor:	User (Account Owner)
Description:	The user forgot his password and attempts to reset.
Preconditions:	The user is on the login page.
Postconditions:	The user is on the change password page.
Priority:	Medium
Frequency of Use:	Once per multiple session
Flow of Events:	<ol style="list-style-type: none"> 1. The user clicks on 'forget password' in the login page. 2. The system prompts the user to input his/her email. 3. The user inputs the correct email for the account. 4. A verification email is sent to the user with a temporary password. 5. The user logs in with his temporary password and can change password.
Alternative Flows:	
Exceptions:	6.EC.1: If the user enters an invalid email. <ol style="list-style-type: none"> 1. The user clicks on 'forget password' in the login page. 2. The system prompts the user to input his/her email and username. 3. The user inputs an invalid email for the account. 4. The system informs the user that the email/username is invalid.
Includes:	Use Case Change Password
Special Requirements:	
Assumptions:	
Notes and Issues:	

Use Case ID:	7		
Use Case Name:	Logout		
Created By:	Siteng	Last Updated By:	Siteng
Date Created:	15/02/2022	Date Last Updated:	15/02/2022

Actor:	User (Account Owner)
Description:	The user logs out of his account.
Preconditions:	The user is logged in.
Postconditions:	The user is logged out.
Priority:	High
Frequency of Use:	Once per session.
Flow of Events:	<ol style="list-style-type: none"> 1. The user clicks on the account avatar. 2. The user scrolls to the bottom of the page and clicks on the "Log out" button. 3. The user is logged out and is redirected to the homepage.
Alternative Flows:	7.AF.1: If the user exits the webapp spontaneously. <ol style="list-style-type: none"> 1. The user closes the tab. 2. The system automatically logs the user out of the session.
Exceptions:	
Includes:	
Special Requirements:	
Assumptions:	
Notes and Issues:	

Use Case ID:	8		
Use Case Name:	Delete account		
Created By:	Siteng	Last Updated By:	Siteng
Date Created:	15/02/2022	Date Last Updated:	15/02/2022

Actor:	User (Account Owner)
Description:	The user deletes his account.
Preconditions:	The user is logged in.
Postconditions:	The user has been logged out and account removed from database.
Priority:	High
Frequency of Use:	Once per user.
Flow of Events:	<ol style="list-style-type: none"> 1. The user clicks on the account avatar. 2. The user scrolls to the bottom of the page and clicks on the "Delete Account" button. 3. The user is brought to the delete account page. 4. The system prompts the user to input his password. 5. The user inputs his password. 6. The system prompts for one last confirmation. 7. The user confirms the action, and the account is deleted.
Alternative Flows:	
Exceptions:	<p>8.EC.1: If the user enters an invalid password.</p> <ol style="list-style-type: none"> 1. The user clicks on the account avatar. 2. The user scrolls to the bottom of the page and clicks on the "Delete Account" button. 3. The user is brought to the delete account page. 4. The system prompts the user to input his password. 5. The user inputs his password. 6. The system informs the user that the password is incorrect and prompts the user to re-enter the password.
Includes:	
Special Requirements:	
Assumptions:	
Notes and Issues:	

Use Case ID:	9		
Use Case Name:	Standard search		
Created By:	Xiangyi	Last Updated By:	Siteng
Date Created:	27/01/2022	Date Last Updated:	31/01/2022

Actor:	User
Description:	The user performs a standard search using book title, ISBN, author or/and genre.
Preconditions:	The user is at the homepage.
Postconditions:	The system displays a list of relevant books based on the user input.
Priority:	High
Frequency of Use:	Multiple times per session
Flow of Events:	<ol style="list-style-type: none"> 1. The system displays the search bar with four input fields: Title, ISBN, Author, Genre. 2. The user fills in at least one and at most four fields. 3. The system retrieves the data via external APIs. 4. The system displays the list of books matched. 5. The user views the list of books by navigating the pages.
Alternative Flows:	<p>9.AF.1: System finds no matching results.</p> <ol style="list-style-type: none"> 1. No matching results in the data retrieved by the system. 2. System displays an empty list and the message “No matching books found. Please try again.”. 3. The system returns to main flow, step 2. <p>9.AF.2: User did not fill in at least 1 field.</p> <ol style="list-style-type: none"> 1. The user presses search without filling in any fields. 2. System displays the message “Please input at least 1 field.” 3. The system returns to main flow, step 2.
Exceptions:	<p>9.EC.1: API fetching is unsuccessful.</p> <ol style="list-style-type: none"> 1. System is unable to retrieve data from the external APIs. 2. System displays error message.
Includes:	
Special Requirements:	<ul style="list-style-type: none"> • The system must return results within 1 minute for standard search. • The system must return the same results in the same order for an identically given set of search inputs.
Assumptions:	
Notes and Issues:	

Use Case ID:	10		
Use Case Name:	Plot search		
Created By:	Xiangyi	Last Updated By:	Siteng
Date Created:	27/01/2022	Date Last Updated:	31/01/2022

Actor:	User
Description:	The user performs plot search.
Preconditions:	The user is at the homepage.
Postconditions:	The system displays a list of relevant books based on the user input.
Priority:	High
Frequency of Use:	Few times per session
Flow of Events:	<ol style="list-style-type: none"> 1. The user clicks on the plot search option. 2. The system displays the input field. 3. The user inputs the plot. 4. The system retrieves the data via external APIs. 5. The system displays the list of books matched. 6. The user views the list of books by navigating the pages.
Alternative Flows:	<p>10.AF.1: System finds no matching results.</p> <ol style="list-style-type: none"> 1. No matching results in the data retrieved by the system. 2. System displays an empty list and the message “No matching books found. Please try again.”. 3. The system returns to main flow, step 3. <p>10.AF.2: User did not input anything.</p> <ol style="list-style-type: none"> 1. The user presses search without any inputs. 2. The system displays the message “Please input at least 1 sentence.” 3. The system returns to main flow, step 3.
Exceptions:	<p>10.EX.1: API fetching is unsuccessful.</p> <ol style="list-style-type: none"> 1. System is unable to retrieve data from the external APIs. 2. System displays error message.
Includes:	
Special Requirements:	<ul style="list-style-type: none"> • The system must return results within 5 minutes for advanced search. • The system must return the same results in the same order for identical plot inputs.
Assumptions:	
Notes and Issues:	

Use Case ID:	11		
Use Case Name:	View Book Information		
Created By:	Xiangyi	Last Updated By:	Siteng
Date Created:	27/01/2022	Date Last Updated:	17/02/2022

Actor:	User
Description:	The user views information about the book.
Preconditions:	The user has been either recommended books by the system, or the user has queried for book searches.
Postconditions:	The user can rate or share books.
Priority:	Medium
Frequency of Use:	Multiple times per session
Flow of Events:	<ol style="list-style-type: none"> 1. The user clicks on the book title that they wish to view. 2. The system loads the book information page by retrieving from external APIs. 3. The user can view the book cover, title, ISBN, author, publisher, genre and abstract. The user can choose to rate or share the book or go back to the search list.
Alternative Flows:	<p>11.AF.1: The user receives a link from another user.</p> <ol style="list-style-type: none"> 1. The user clicks on the link shared by another user. 2. The system loads the book information page by retrieving from external APIs. 3. The user can view the book cover, title, ISBN, author, publisher, genre and abstract. The user can choose to rate or share the book.
Exceptions:	
Includes:	
Special Requirements:	<ul style="list-style-type: none"> • The language displayed must in accordance with the user's preference. • Light/dark mode must be displayed in accordance with the user's preference.
Assumptions:	
Notes and Issues:	

Use Case ID:	12		
Use Case Name:	Rate Books		
Created By:	Xiangyi	Last Updated By:	Siteng
Date Created:	27/01/2022	Date Last Updated:	31/01/2022

Actor:	User
Description:	The user can rate books based on a 5-stars rating system. The ratings help the system recommend the users books based on certain algorithms.
Preconditions:	The system has loaded the view book interface and the user is logged in.
Postconditions:	The system registers the preference and updates the recommendations.
Priority:	Medium
Frequency of Use:	Multiple times per session
Flow of Events:	<ol style="list-style-type: none"> 1. The user clicks on the stars. 2. The user selects the number of stars for the book. 3. The system registers the rating. 4. The system updates the recommendations for the user.
Alternative Flows:	
Exceptions:	
Includes:	
Special Requirements:	
Assumptions:	The user understands the underlying meaning of a star rating system.
Notes and Issues:	

Use Case ID:	13		
Use Case Name:	Share books		
Created By:	Siteng	Last Updated By:	Xiangyi
Date Created:	27/01/2022	Date Last Updated:	31/01/2022

Actor:	User
Description:	The user shares a book using a link provided to other users/non-users.
Preconditions:	The system has loaded the view book interface.
Postconditions:	The book link is copied onto the user's local clipboard.
Priority:	Low
Frequency of Use:	Multiple times per session
Flow of Events:	<ol style="list-style-type: none"> 1. The user clicks on the share button. 2. The system generates a formatted text message containing the book title, author name and book link. 3. The message is automatically copied to the user's clipboard. 4. System displays the message "Copied to clipboard!". 5. The user clicks to acknowledge the message.
Alternative Flows:	
Exceptions:	13.EC.1: If message is not copied successfully. <ol style="list-style-type: none"> 1. The message is unable to be copied to the user's clipboard. 2. System displays the error message.
Includes:	
Special Requirements:	
Assumptions:	
Notes and Issues:	

Use Case ID:	14		
Use Case Name:	Save Books		
Created By:	Siteng	Last Updated By:	Xiangyi
Date Created:	15/02/2022	Date Last Updated:	20/02/2022

Actor:	User (Account Owner)
Description:	The user saves a book he is viewing.
Preconditions:	The user is on the book information page and the user is logged in.
Postconditions:	A new book is added to the list of books saved by the user.
Priority:	Medium
Frequency of Use:	Multiple times per session
Flow of Events:	<ol style="list-style-type: none"> 1. The user clicks on the “Bookmark” button to save the book. 2. The system colours the bookmark to inform the user that the book has been successfully added to “Saved Books” list.
Alternative Flows:	
Exceptions:	
Includes:	
Special Requirements:	
Assumptions:	
Notes and Issues:	

Use Case ID:	15		
Use Case Name:	View Rated Books History		
Created By:	Siteng	Last Updated By:	Xiangyi
Date Created:	15/02/2022	Date Last Updated:	20/02/2022

Actor:	User (Account Owner)
Description:	The user checks his history of rated books.
Preconditions:	The user is logged in to the system.
Postconditions:	-
Priority:	Medium
Frequency of Use:	Once per multiple sessions
Flow of Events:	<ol style="list-style-type: none"> 1. The user clicks on the account avatar to view user profile. 2. The user scrolls down to the “Rated Books” column and sees a list of books rated previously.
Alternative Flows:	
Exceptions:	
Includes:	
Special Requirements:	
Assumptions:	
Notes and Issues:	

Use Case ID:	16		
Use Case Name:	View Viewed Books History		
Created By:	Siteng	Last Updated By:	Xiangyi
Date Created:	15/02/2022	Date Last Updated:	20/02/2022

Actor:	User (Account Owner)
Description:	The user checks his history of viewed books.
Preconditions:	The user is logged in to the system.
Postconditions:	-
Priority:	Medium
Frequency of Use:	Once per multiple sessions
Flow of Events:	<ol style="list-style-type: none"> 1. The user clicks on the account avatar to view user profile. 2. The user scrolls down to the “viewed books” column and sees a list of books viewed previously.
Alternative Flows:	
Exceptions:	
Includes:	
Special Requirements:	
Assumptions:	
Notes and Issues:	

Use Case ID:	17		
Use Case Name:	View Saved Books History		
Created By:	Siteng	Last Updated By:	Xiangyi
Date Created:	17s/02/2022	Date Last Updated:	20/02/2022

Actor:	User (Account Owner)
Description:	The user checks his history of saved books.
Preconditions:	The user is logged in to the system.
Postconditions:	-
Priority:	Medium
Frequency of Use:	Once per multiple sessions
Flow of Events:	<ol style="list-style-type: none"> 1. The user clicks on the account avatar to view user profile. 2. The user scrolls down to the “saved books” column and sees a list of books saved previously.
Alternative Flows:	
Exceptions:	
Includes:	
Special Requirements:	
Assumptions:	
Notes and Issues:	

Use Case ID:	18		
Use Case Name:	Recommend books		
Created By:	Siteng	Last Updated By:	Siteng
Date Created:	27/01/2022	Date Last Updated:	20/02/2022

Actor:	User (Account owner)
Description:	The system recommends books to the user based on the user's past ratings.
Preconditions:	The user has rated at least 5 books and the user is logged in.
Postconditions:	-
Priority:	Low
Frequency of Use:	Once per session
Flow of Events:	<ol style="list-style-type: none"> 1. The user clicks on the "Recommend Me" option. 2. The system displays a list of recommendations.
Alternative Flows:	
Exceptions:	<p>18.EC.0: The user has not rated at least 5 books.</p> <ol style="list-style-type: none"> 1. System displays the message "Please rate at least N more books to unlock recommendations!". 'N' is the number of books the user must rate to reach the minimum of 5 rated books.
Includes:	
Special Requirements:	
Assumptions:	
Notes and Issues:	