Bookies

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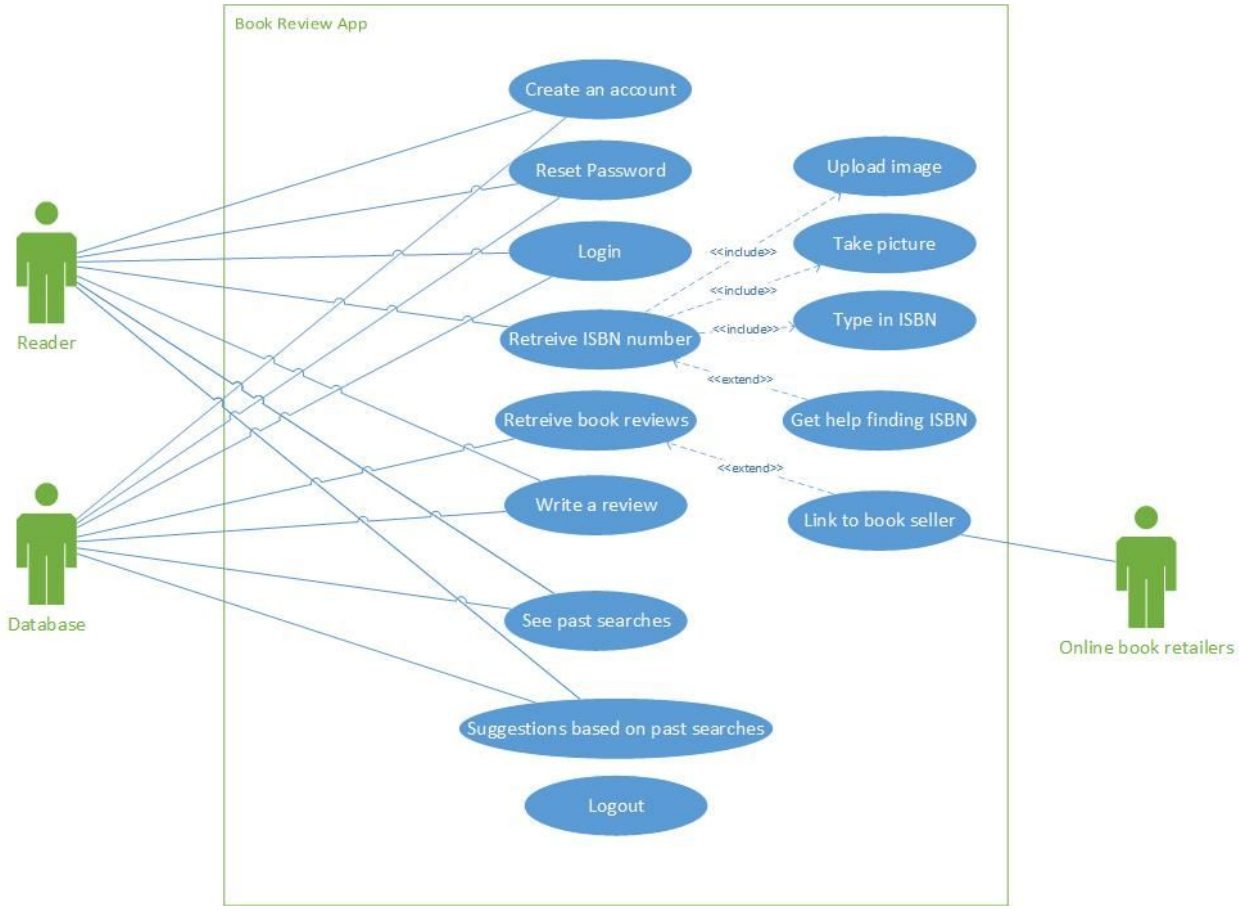
Planning and Scheduling

Assignee Name	Email	Task	Duration (hours)	Due Date	Note
Sarina Phejlada	pphejlada1@student.gsu.edu	System Requirement	3 hours	2/5	Did her part with Wilgens 100% grade
Tien Tran	ttran119@student.gsu.edu	Database portion of System Modeling	2 hours	2/12	Did his part with Nathan 100% grade
Nathan Witherell	nwitherell1@student.gsu.edu	Class Diagrams portion of System Modeling	1 hour	2/8	Did his part with Tien 100% grade
Wigens Pierre	wpierre4@student.gsu.edu	System Requirement	3 hours	2/5	Did his part with Sarina 100% grade
Kevin Nguyen (Team Coordinator)	knguyen113@student.gsu.edu	1. Technical writing (getting report ready 2. Assignment 1 corrections 3. Video editing	1 hour	2/14	Did his part 100% grade

Problem Statement (overall User Requirement)

On a high level, our product is a book review app that provides instant reviews on books, which is worth developing because not only does it provide a convenient way to obtain book reviews but it also saves user's time by eliminating the process of having to pull up a web browser for reviews. The way we will accomplish this is to create an app capable of registering a book either through a mobile device's camera, by scanning, or by manual input, and displaying them in a concise and readable manner. So what? How is this any different compared to our competitors? Besides the fact that there aren't many competitors out there with this type of product, which are websites and apps, such as Amazon and Goodread, what is novel and what differentiates this product from competitors is our approach that one picture of the book gives the user access to the same info from those same websites and apps. This could appeal to readers who want a copy of a book but don't have a convenient, quick, and accessible way to obtain reviews on the spot without aimlessly searching. Also, we are aware that there are virtual assistants, such as Bixby, that provide some similar services, but they are limited to specific phone manufacturers--our product will be available for use on all mobile platforms. Our product is feasible because the product itself should not be incredibly large: enough to utilize the camera of a phone and have access to a database, and our system does not need heavy resources as all the hardware needed for the app to work are already integrated in a phone, and books already have an electronic ordering system--the system can be built! Ultimately, our project would be interesting because It utilizes not only the features in a phone, but it's building upon everyday features in-order to better present a user with a quick rundown of the product they're looking for.

System Requirements



Use Case: Create an account
Identifier: 01
Iteration: 1
Actors: Reader, database
Summary: Reader creates an account to access app
Basic course of events:

1. User selects “Create an Account” option
2. Enter first name
3. Enter last name
4. Enter email
5. Enter username
6. Enter password
7. Click submit
8. Check database if account already exists for email
9. Check database if username is already taken
10. Completion of create an account

Alternate path: In step 8, if account already exists with email then give option to login or reset password.
Exception paths: In step 8, if email is invalid then user must enter a new email address. In step 9, if username is already taken then user must enter a new username.
Extension point: Login use case
Pre-condition: Account doesn’t already exist with entered email
Post-condition: User can login with newly created account

Use Case: Login
Identifier: 02
Iteration: 1
Actors: Reader, database
Summary: Reader wants to gain access to account and app by logging in
Basic course of events:

1. Completion of create an account
2. Enter username or email
3. Enter password
4. Click submit
5. Check database if username/email account exists
6. Check database if password matches username
7. If password matches username, then access is granted to app
8. Completion of login use case

Alternate path: After step 2, user can select “Forgot password” option to reset password.
Exception paths: In step 5, if username doesn’t exist then go back to step 0. In step 6, if password doesn’t match username then try again with another password.
Pre-condition: Account is already created
Post-condition: User is logged into app

Use Case: Reset password
Identifier: 03
Iteration: 1
Actors: Reader, database
Summary: Reader wants to reset their forgotten password
Basic course of events:

1.Failed login attempt
2.Enter email associated with account
3.Verification code sent to email
4.User enters verification code
5.Enter new password
6.Confirm new password
7.Completion of reset password

Alternate path: During any step the user can go back to cancel the process
Exception paths: In step 2, if account is not associated with given email then the user must enter another email. In step 3, if verification code is incorrect then the user may be able to have another code be sent to their email. In step 5, if the password does not meet requirements then then user must enter a new password. In step 6, if the password does not match the previous password then the user must reenter the password.
Pre-condition: Reader has forgotten their password or fails to login successfully
Post-condition: Reader is taken back to login page

Use Case: Retrieval of ISBN & Book Reviews
Identifier: 04
Iteration: 1
Actors: Reader, Database
Summary: Reader provides an ISBN number and the app provides a list of reviews for the book
Basic course of events:

1. Completion of login
2. Provide ISBN number via image or text
3. Click submit
4. Run ISBN number through database
5. Display review results
6. Completion of retrieval of ISBN

Alternate path: In step 2, if the user cannot locate the ISBN number then they can press a get info button which provides an image of where they can locate the ISBN number on a given book.
Exception paths: In step 4, if the ISBN number doesn't exist then alert the user that the book does not exist for that ISBN number and take the user back to step 2. In step 5, if the ISBN number has no reviews then alert the user that no reviews exist and skip to step 6.
Pre-condition: Login is completed
Post-condition: Reviews are displayed for given ISBN

Use Case: Write a Review
Identifier: 05
Iteration: 1

Actors: Reader, database
Summary: Reader wants to add a review to a book
Basic course of events:

1. Completion of ISBN retrieval use case
2. Selects “Write a Review” option
3. Select the rating user wants to give the book and type review
4. Click submit
5. Review is added to the database
6. Completion of write a review

Exception paths: In step 5, if the user does not enter a rating or type a review then a prompt will inform the user to enter the missing information.
Pre-condition: User is already logged in and book already exists in database
Post-condition: New review is added to existing book

Use Case: Link to Book Seller
Identifier: 06
Iteration: 1
Actors: Reader, database
Summary: Reader wants the link to buy the book they are searching for
Basic course of events:

1. Completion of ISBN retrieval use case
2. User selects the “Where To Buy” option
3. The database is queried to determine if a link to an online seller exists for the book
4. If step 3 is successful, the user is redirected to a webpage where the book is being sold

Alternate path: None
Exception paths: At step 3, if the link is invalid, outdated, or fails for any reason, the user will be notified of the error in the system.
Pre-condition: The ISBN retrieval was successful
Post-condition: The user has the option to buy the book

Use Case: Past Searches
Identifier: 07
Iteration: 1
Actors: Reader, database
Summary: Reader can view the books they have previously searched for
Basic course of events:

1. Completion of login
2. User selects “History” section of app
3. Database selects the previously searched books for user logged in and displays them onto the screen
4. User selects book from history and is redirected to step 4 of “Retrieval of ISBN” use case
5. Completion of past searches

Alternate path: After step 3, the user can skip to step 5
Exception paths: In step 3, if there are not previously searched book results in the database then the screen will not display any books
Extension point: Login use case
Pre-condition: User is already logged into app
Post-condition: User can view previously searched books without entering the ISBN number again

Use Case: Suggestions Based on Past Searches
Identifier: 08
Iteration: 1
Actors: Reader, database
Summary: Reader wants to view book suggestions based on past searches
Basic course of events:

1. Completion of login
2. Select "History" section of app
3. Database searches for other books with similar genres and displays top 5 on the bottom of screen
4. Completion of suggestions based on past reviews

Alternate path: After step 3, the user may select a suggested book to view its reviews
Exception paths: In step 3, if there are no other books with a similar genre then no suggestions will display
Pre-condition: User is already logged in and has at least one previously searched book
Post-condition: User knows what books are similar to their past searches

Use Case: Logout
Identifier: 09
Iteration: 1
Actors: Reader
Summary: Reader wants to end their session by logging out
Basic course of events:

1.Completion of login
2.Click logout button
3.Completion of logout

Pre-condition: User is already logged in of app
Post-condition: User is logged out of app and taken back to login page

System Modeling (Analysis)

*Database specification and analysis:

1. We will have 2 collections:

*Book collection: these are the attributes of the collection

I. ISBN (primary key).

II. Author.

III. Publish date.

IV. Stars review.

V. Reviews.

*User collection: these are the attributes of the collection

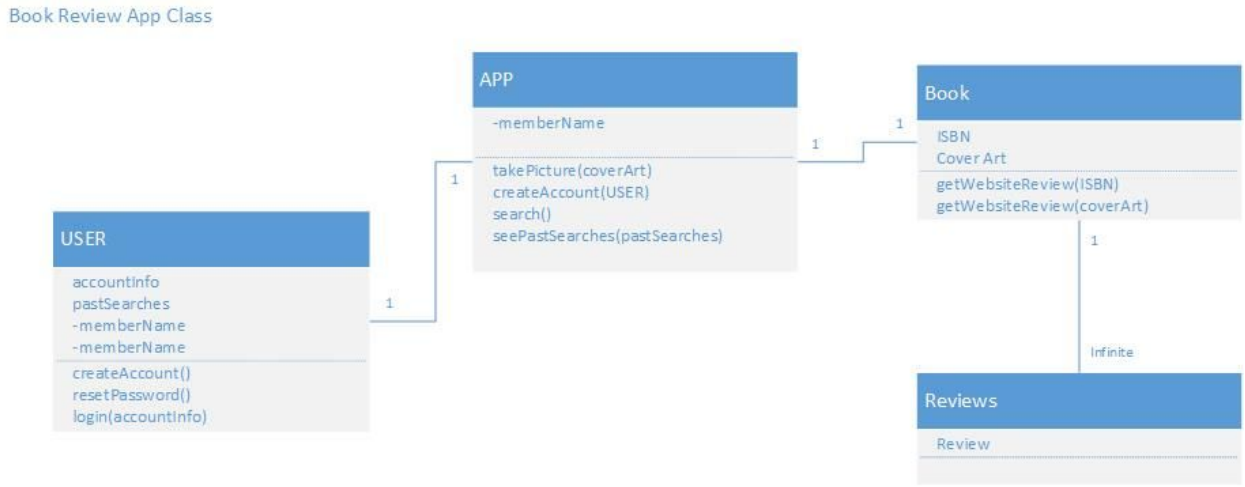
I. Username

II. Password

III. Security questions

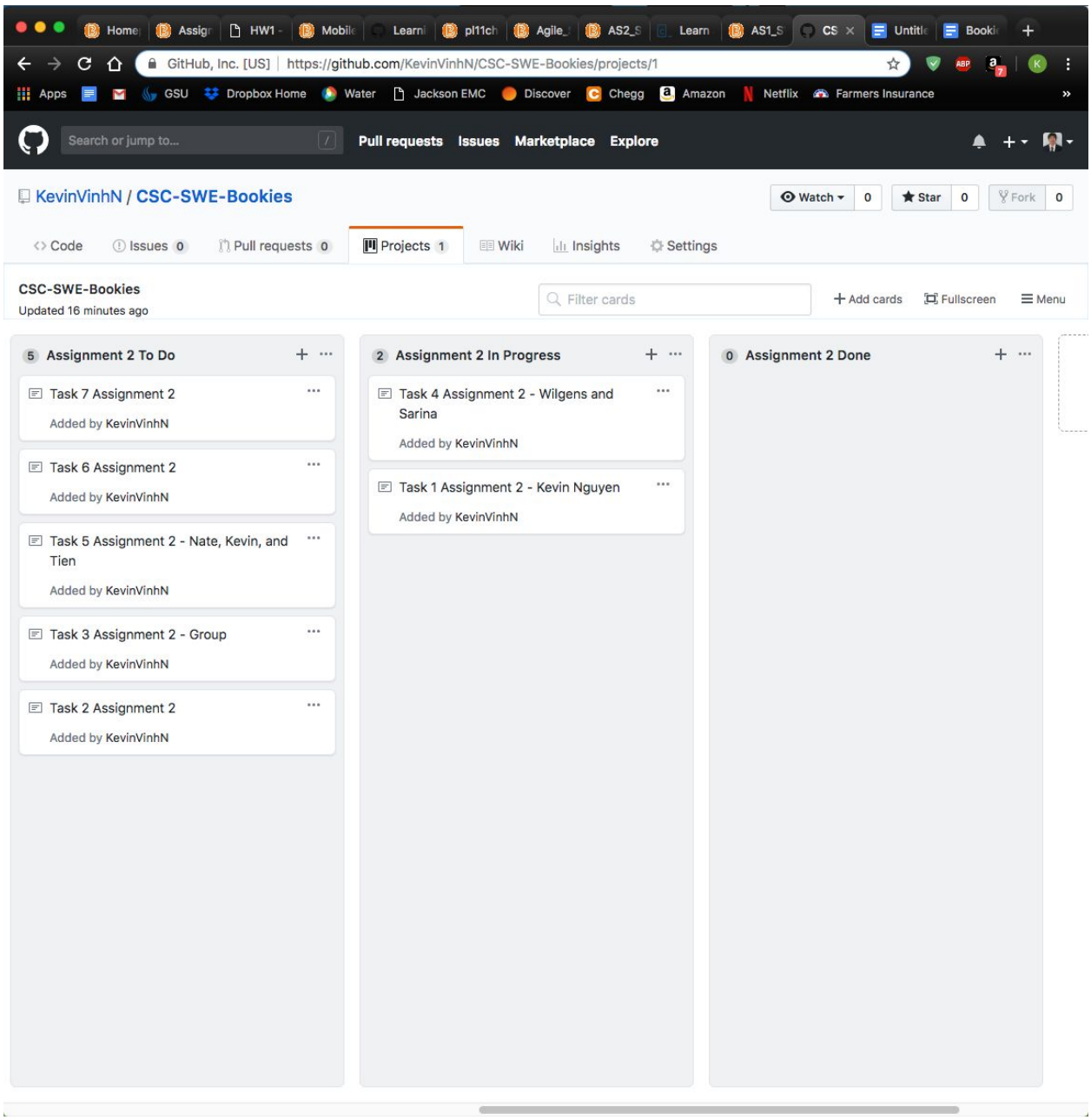
2. For this project we will use Firebase as the platform for this project because it is easy to connect to the mobile application, which we are creating for this project. Real time is Firebase's original database. It's an efficient, low-latency solution for mobile apps that require synced states across clients in real time.

Class Diagram



Appendix

Github screenshot:



Youtube video: https://youtu.be/vVFnmJs9Dkg