

eLibrary

Problem Description

Project Goal

Building a bookkeeping application with the focus on increasing user engagement by including elements of game theory in the process. The application will maintain an inventory of books and a history of users reading them. It will then apply game theory to increase the reading habits of the users.

Features List

- 1. Login page for admins and readers. Users can log in via:
 - a. Email + Password
 - b. Gmail login
- 2. A dashboard where admin can:
 - a. See the list of all the books
 - i. Add a new book
 - ii. Edit book details name, author, edition
 - iii. Delete a book
 - b. See the list of all the readers
- 3. A registration form for readers to sign up
 - a. Form fields to be: name, email, password, confirm-password
 - b. An email verification should go out from the system to reader's email
 - c. Only after verification, the reader should be able to log in
 - d. System to send emails through
 - i. Gmail SMTP
 - ii. Amazon SES
- 4. A dashboard where readers can
 - a. See the list of all the books available
 - b. See the list of books read by him/her
 - c. Option to mark a book as read
- 5. Some gamification for better reading habits
 - a. Every week (on Sunday) send an email to the library user's highlighting books completed by the users that week.
 - b. If a user has read all the books of an author, send an email every time a new book of the user is added
 - c. If a user has not read any book for 15 days send a nudge email to the user. Send a list of newly added books to the user.
- 6. Advanced features
 - a. Admins can also add a book cover image when adding/editing a book

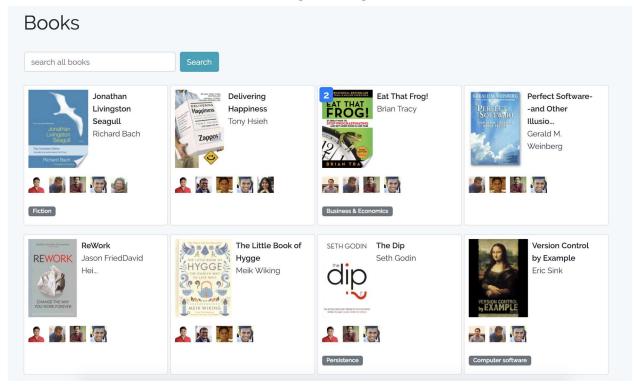


- b. Admins can manage book categories and assign categories to books when adding/editing. A book can have multiple categories.
- c. Readers can filter books based on available categories

Description

Create a PHP + MySQL application that covers all the features above and share the application link with the team.

ScreenShots - If possible or as we go along



Example Implementations: (If available)

None available right now.

Resources

- 1. Gmail SMTP server: https://www.saleshandy.com/smtp/gmail-smtp-settings/
- 2. Amazon SES: https://aws.amazon.com/ses/
- 3. Amazon EC2: https://aws.amazon.com/ec2/
- 4. Git and Version Control: https://www.atlassian.com/git/tutorials/what-is-version-control



- 5. Google login through Gmail OAuth: https://medium.com/@pablo127/google-api-authentication-with-oauth-2-on-the-example-of-gmail-a103c897fd98
- 6. Laracasts for PHP: https://laracasts.com/series/php-for-beginners

Tools

1. VS Code: https://code.visualstudio.com/download

2. Git: https://www.atlassian.com/git/tutorials/install-git

3. Github: https://github.com

Tech stack

1. PHP v7.4

2. MySQL v5.7+

3. Apache server 2.4

4. Bootstrap v4.3

5. jQuery

6. FontAwesome v5

Articles and Blogs

None available right now.

Mentors:

Vaibhav Rathore (vaibhav@coloredcow.com)
Pankaj Agarwal (pankaj@coloredcow.com)