CS4610 Project Management Plan

Recommended Reads

Website for Readers and Book Recommendations

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Introduction

Project Overview

Recommended Reads is a user-driven website that allows people to recommend books to other readers. A user can browse through books by genre and see the rating as well as other users' reviews of the book. They will also be able to rate and leave a review of a book they have already read to let other people know their opinion. This website aims to create an easy-to-use space for book lovers to exchange their appraisals or criticisms of books they read.

Project Deliverables

The website should deliver:

1. Entity-Relationship model database and diagrams for users, listings, and reviews.
2. User Registration
    a. User will sign up using a valid email address and password.
    b. User will be asked their favorite book genre, current favorite author, and how many books they read on average in a year.
3. User Login
    a. User will have to log in into their account to use the website.
    b. The server will validate if the inputted log in values match an equivalent account in the database.
4. Book List and Recommendations
    a. Books will be listed by genre.
    b. Each book will show a rating based on how users have rated it.
    c. Each book will have user-written reviews that other users can read.

   d. If a book does not exist and remains unrated, a user can add a new book by specifying the genre, title, author, and synapsis (if time allows).

5. User Profile
   a. Displays user information, i.e., name, email, and book preferences.
   b. Will display a list of books that the user has rated or reviewed on the website.

Project Organization

Tools and Techniques

Static web content, such as HTML, CSS, and JavaScript, will be stored on an EC2 instance running Apache Web Server. The web content will be developed with HTML, CSS, and JavaScript and will utilize Bootstrap framework and jQuery for modularity and functionality. Depending on domain name availability, the domain name will be www.recommendedreader.com or a similar alteration of it and will be connected to the IP address of the Apache Web Server EC2 instance. In the case no domain name is assigned, the website will be reachable by using the IP address of the Apache Web Server EC2 instance. The Apache Web Server EC2 instance will depend on another EC2 instance that will be running Apache Tomcat for Java servlets and MySQL for database functionality. The database will store persistent data collected from users of the site. The servlets will interact with the database and return dynamic content to the user. The Eclipse IDE will be used to develop the Java servlets and Notepad++ or Sublime text editors will be used for most other development purposes.

Project Management Plan

Tasks

1. Create an ER model for the project.

   Description: Create an ideal ER diagram that describes the database tables for the users, listings, and reviews.

   Deliverables: Entity-Relationship model diagrams for project database.

2. Create the Sign-up Page

   Description: Create sign-up page where users can sign up with their account information. Users will sign-up using a valid email, password, and a few questions about their book preferences.

   Deliverables: Static content, as well as storage of new user information in a user database, will be implemented. A Java servlet will also be needed.

3. Create the User Login Page.

   Description: Users can input their email and password to log in and use the website. Users must already have an account in order to log in. If not, they must sign up.

   Deliverables: The inputted log in information will be validated with the user database to connect a user to their personal account. Static content and a Java servlet will be implemented.

4. Create Book Listings Page

   Description: Books present in the database will be listed by genre for the user to browse through. Each book will have ratings and reviews attached to it. The user can opt to view the books listed by rating.

Deliverables: A book database will be created to hold the digital library of books and their rating and reviews. Static content and a Java servlet will also be implemented.

5. Create Rating and Review Functionality

   Description: A user will be able to give a numerical rating to a book and will be able to write a review for a book. This user-generated content will be sent to both the book and user databases.

   Deliverables: The dynamic functionality and connection to the necessary databases will be implemented as well as a necessary Java Servlet.

6. Create User Profile

   Description: A user will be able to view personal information about their account on their profile page. It will display login credentials, book preferences, and ratings and reviews that the user has made.

   Deliverables: The static content and a necessary Java servlet will be needed to show personal information collected from the user database.

7. Create Add a Book to Recommend Option (if time allows)

   Description: A user will be able to add a book they have read to the website if it currently does not exist. They must specify the title, author, genre, and synopsis of the book so other users can rate and review the book themselves.

   Deliverables: Book recommendations created by users will be added to the book database. The static content and a necessary Java servlet will be needed to create book listings.

8. Construct Project Report and Deliverables Package and Prepare In-class Demo

   Description: Construct the final report with the necessary information. Gather all necessary diagrams, code, and instructions for the deliverables package to be ready to submit. Prepare for in-class presentation and demo.

   Deliverables: The project report and a presentation in class.

Timetable

Week of October 18th: Do task 1.

Week of October 25th: Do task 2.

Week of November 1st: Do task 3.

Week of November 8th: Start task 4.

Week of November 15th: Finish task 4. Start task 5.

Week of November 22nd: Finish task 5. Start task 6.

Week of November 29th: Finish task 6. Do task 7 if time allows.

Week of December 6th: Finish any other uncompleted work. Do task 8.