User Requirements Document

Introduction

Overview of Archivr

This project is a media index website that tracks various forms of media, such as movies, TV shows, and other entertainment content. Users can interact with the platform by rating, liking, and reviewing content. The website will also feature trending media and personalized recommendations.

Business Goals

- Create an interactive platform for users to explore and keep up with trending and relevant media.
- Provide a user-friendly interface for both casual users and administrators.
- Encourage engagement through user interactions like ratings, comments, and likes.

Project Objectives

- Implement secure user authentication using salting and encryption to protect stored credentials.
- Build a database to store user, media, and interaction data.
- Provide a dynamic homepage that showcases trending and top-rated media.
- Ensure a "catchy" and modern UI for optimal user experience.
- Include an administrator login feature to manually manage media data and moderate users.

Features

1. **User Authentication**: Secure user authentication using salting and encryption to protect passwords. The user will be presented with text fields for entering their username and password. Users will be redirected to the homepage on success, otherwise the login screen will display an invalid credentials message.

2. **Homepage with Top Media**: The homepage will feature top movies, shows, video games, and books. Each category will be separated vertically by margins and each category will display 3-5 media to the user depending on their screen size (mobile vs desktop). The categories will be displayed as carousels which the user can scroll horizontally to reveal more media from that respective category.
3. **Likes and Rating System**: Users can rate and like media items, with likes affecting trending content. Upon navigating to the page for the media item, users are presented with all the information for it including cover image, title, description, likes, and rating. The likes will be a button with a thumbs-up icon and integer indicating the number of likes. Clicking it leaves a like or removes it. Similarly, the ratings are displayed on a 5-star scale. Users can leave a rating on a 0.5 scale (e.g. 4.5 stars) by filling in the stars.
4. **User Reviews and Comments**: Users can leave comments or reviews on media entries. Comments will be displayed in a list at the bottom of the page for the media item and are ordered with the most recent ones at the top. Reviews are for more long-form thoughts/discussions about the media item and will be tied to a rating.
5. **Admin Portal**: Admins can log in through a dedicated page. This will give them access to an admin page to allow manually edit media entries & manage users.
6. **Side Navigation Bar**: Icon-based side navigation for easy access to different media categories. Icons will be buttons and should be lit up and disabled when the current page is the one matching that icon.
7. **Recommendations**: Optional feature for backend-generated media recommendations. This will take into account users' ratings, likes, and history of interactions (most interacted genres/media types) to create personalized recommendations. These will be displayed to the user under their personal page under a section labeled “Your next picks.”
8. **Trending Content**: Display trending media based on user interaction (e.g., likes). We will consider the likes in the past 7 days to determine what to display on trending. This will be displayed on each category’s page as a subsection.

Integration Requirements

- **External API (media data)**: We will need to integrate third-party APIs to retrieve relevant metadata for media. The current lineup we plan on using are TMDB+OMDB (movies & tv shows), OpenLibrary API (books), and IGDB (video games). This is subject to change as development progresses.

User Interface

- **Homepage**: As described earlier, this will display the top media for each category.
- **Category Page**: Discover page for a media category. There will be one for movies, tv shows, video games, and books. Each will have sub sections for top, trending, and other future sections.
- **Media Page**: Page dedicated to a specific media entry. Most prominent will be the cover image of the media as well as the title. Under will be a description along with likes/rating. At the bottom will be the comment section and reviews.
- **User Page**: Page dedicated to the user. Navigable through a profile icon at the top right of the screen in a header. It will have a navbar taking them to 3 different pages. The first is where they can edit their profile. The second is where view their recommendations and media (watched/read/played) split by category. The third section is a list of all of the user's reviews and the media it is linked to.

Constraints

- **Budget**: Due to a lack of budget, we will keep our scope small and target only a small amount of supported concurrent users (~50)

Use Cases

1. User Authentication and Login

- **Title**: User Authentication
- **Description**: A user can create an account or log in using their credentials.
- **Actors**: User
- **Steps**:
    1. The user accesses the login page.
    2. The user enters their username and password.
    3. The backend authenticates the user by checking the encrypted password and salt.
    4. If valid, a session is created, and the user is logged in.
- **Expected Outcome**: The user is logged in and redirected to the homepage or displayed an error message.

2. Adding New Media (Admin)

- **Title**: Admin Adds New Media
- **Description**: An admin adds a new movie, TV show, or other media to the database.
- **Actors**: Admin
- **Steps**:

1. The admin logs into the portal.
2. The admin fills out the media details using the provided HTML form.
3. The admin submits the form, and the backend updates the database.

- **Expected Outcome**: The new media is successfully added and displayed on the website.

3. Liking and Rating Media

- **Title**: User Likes and Rates Media
- **Description**: A user can like and rate media items.
- **Actors**: User
- **Steps**:
    1. The user views a media page.
    2. The user clicks the "like" button.
    3. The user rates the media on a scale (0-5 stars).
    4. The like is processed and reflected in the media's overall trending score.
- **Expected Outcome**: The user's like and rating are stored in the DB.

Priorities

1. **High Priority**:
    - User authentication
    - Homepage with top media display
    - Database creation and connectivity
2. **Medium Priority**:
    - User reviews and comments
    - Likes and rating system
3. **Low Priority**:
    - Recommendations feature
    - Side navigation with icons

Milestones

- **Milestone 1**: Create the database
- **Milestone 2**: Complete user authentication system and secure login functionality.
- **Milestone 3**: Create the homepage with top media.
- **Milestone 4**: Build and test the admin portal for media management.
- **Milestone 5**: Implement the like and rating system.
- **Milestone 6**: Develop the recommendation engine.