Bee-Roll

Group 35 - Project Backlog
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Project Statement:

Today, in the world of connectivity and social media abundance, there is no place where true movie enthusiasts can share their own thoughts and connect with each other. Our project seeks to create a place where everybody can communicate their past movie experiences. Apart from the "Typical Social Media" functionalities, like commenting or liking a post, Bee-Roll also provides an AI service, where the user gets a personalized watchlist recommendations based on their preferences. This unique idea of combining the "connectivity" aspect of social media and AI based service is guaranteed to place Bee-Roll into its own niche position.

Background info:
- **Audience:**
  - Our platform is tailored towards movie enthusiasts or all ages and backgrounds. Providing a dedicated space for sharing their experiences and thoughts, we aim to spark discussions based around the content that our users watch. With our AI-driven movie recommendations, Bee-Roll also caters to those that have trouble choosing their next movie.
- **Similar Platforms:**
  - IMDB, Rotten Tomatoes and Letterboxd are some of the existing platforms that have specific segments of what we want to achieve through our platform. In particular, IMDB and Rotten Tomatoes are both known to focus on providing information about movies such as the rating and details about the cast. Letterboxd is more about social media as its users are able to write reviews, comment on other people's reviews, and share their ratings of films on other social media platforms.
- **Limitations:**
  - However, while these sites are useful, both IMDB and Rotten Tomatoes are only informational, and apart from writing comments, they do not have social media functionality. On the other hand, Letterboxd does both provide information and serves as a hub for movie lovers, but it doesn't have a recommendation system for users to find their next movie.

Functional Requirements:

1. As a user, I want to
    1.1. register and login on our website
    1.2. Follow other users and stay updated about their activity
    1.3. have a personal page with my information

1.4. modify my personal information at any time after registration too
1.5. have a profile picture and be able to modify it
1.6. have a following and followers page
1.7. search for movies by using keywords
1.8. have a feed of posts from people I follow
1.9. have a feed of posts from forums I follow
1.10. follow forums I am interested in
1.11. have a personal chat with other people (if time allows)
1.12. send images through the chat (if time allows)
1.13. send voice messages through the chat (if time allows)
1.14. send documents through chat (if time allows)
1.15. see when a user is online
1.16. see when a user was last time online
1.17. have group chats with other users (if time allows)
1.18. write and delete a post
1.19. repost other user's posts
1.20. have a wishlist and have ability to add / remove movies from wishlist
1.21. Drop a like on other posts, replies or comments
1.22. comment on other users' posts
1.23. put categories on the posts (like flares on reddit) (if time allows)
1.24. have dedicated forum pages (/r on reddit)
1.25. be a moderator on a forum page
1.26. search for other users by their username
1.27. be recommended movies pertaining to my taste
1.28. search for people with similar interests in movies.
1.29. search for people with similar movies in their watchlist to watch with them.
1.30. create a public or private watchlist.
1.31. share my public watchlist through forum posts.
1.32. follow public watchlists that others have made.
1.33. receive notifications when my profile or posts are interacted with. (if time allows)
1.34. Get an alert if a review I make contains a spoiler. (Maybe the user tags the post as "contains spoilers")
1.35. rate a movie and see it's rating
1.36. see a movie's main cast and description by hovering on the thumbnails
1.37. see where a movie can be streamed when I click on the thumbnail
1.38. modify my "forum" alias
1.39. Play a solo guessing game where the user is given two movies and must guess which one has a better IMDB ranking based on their synopsis (if time allows)
1.40. Play the guessing game with multiple other users (if time allows)
1.41. Have my rank increase for each correctly guessed movie (if time allows)
2. As an admin, I want to
    2.1. have a warning system to moderate
    2.2. Delete and flag users' posts
    2.3. Warn people for violation of ToS.

3. As a moderator, I want to
   3.1. Ban other people from my forum
   3.2. Make forum public/private
   3.3. Make posting free / restricted (through moderation) / restrict posting (if time allows)
   3.4. Pin posts
   3.5. Delete other posts on my forum
   3.6. Make other people moderators on my forum
   3.7. Grant different permissions on my forum

Non-Functional Requirements:

- **Architecture/Performance:**
  - Our application is going to utilize distinct frontend and backend architecture that will effectively allow us to have a flexible approach to developing Bee-roll. The backend will be using a microservice-based architecture using Express.js and Python to create efficient RESTful APIs. We are looking at an optimal response time of about 500ms for any API request. The backend should also be able to handle at least 5000 simultaneous requests without degradation in performance. High availability will be achieved through 24/7/365 runtime. Through separation of frontend and the backend we streamline the workflow, minimizing compatibility problems and allowing for enhancements and integrations. The design of the application focuses on scalability and on-demand growth while allowing for high-performance of both web-service and development through separate frontend and backend.

- **Security:**
  - Security for Bee-Roll is extremely important, especially since we will be managing user authentication information and other sensitive data. Various roles and permissions will be assigned to user accounts, to ensure that standard users and admins can only access the information and capabilities that are relevant to their respective roles.

- **Usability:**
  - The usability of our website is a top priority as it will distinguish us from our competitors in the space. Most other platforms that exist in the same realm are unintuitive and outdated. By focusing on creating an interface that is user-friendly and easy to navigate, we aim to make Bee-Roll accessible to anyone from any background. Due to our diverse set of features, it is essential to design an intuitive user interface that enhances rather than complicates the user experience which is a pitfall that many social media websites fall into. The website should be compatible across any device, be it a phone or desktop. It should be accessible and usable on all screen sizes and resolutions and browsers.

- **Development/Hosting/Deployment:**
  - Because of the independence of our frontend and backend with their communication relying on RESTful APIs, both can be developed and deployed individually. Our team is going to develop a CI/CD pipeline to allow for regular code deployment after a handful of tests before pushing the changes on the production pipeline. Both backend and frontend are going to be hosted on AWS EC2 instances.