Backend Engineering

Project Report

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Frontend Overview:

The frontend of the social media web platform focuses on delivering a seamless and engaging user experience. It incorporates various features to enable users to sign up, log in, follow other users, post pictures, and manage their interests.

Frontend Technologies Used:

- Framework: React Js

- Languages: HTML, CSS, JavaScript

Key Features:

1. User Authentication:

- Sign Up: Users can create accounts with a unique username and password.

- Log In: Existing users can log in securely.

2. User Profile:

- Profile Page: Each user has a dedicated profile page displaying their information, posts, and followers.

- Edit Profile: Users can update their profile information and profile picture.

3. Social Features:

- Follow/Unfollow: Users can follow and unfollow other users.

- News Feed: The home page displays a personalized feed based on the user's interests and the people they follow.

4. Content Sharing:

- Post Pictures: Users can upload and share pictures with captions.

- Like and Comment: Users can interact with posts by liking and commenting.

5. Interests Management:

- Add/Remove Interests: Users can manage their interests to customize their feed.

6. Responsive Design:

- Mobile Compatibility: The platform is responsive to ensure a consistent user experience across devices.

Future Enhancements:

- Real-time updates and posts on feed.

Backend Overview:

The backend of the social media web platform manages data storage, user authentication, and communication with the frontend.

Backend Technologies Used:

- Server-side Language: Node.js, Express js

- Database: MongoDB

- Authentication: JWT

- Framework: Rest API

Key Components:

1. User Management:

- User Registration: Handles the creation of new user accounts.

- Authentication Middleware: Ensures secure access to authenticated routes.

- User Data Storage: Manages user profiles, posts, and follower/following relationships.

2. Post Management:

- Post Creation and Retrieval: Manages the creation and retrieval of user posts.

- Likes and Comments: Handles user interactions with posts.

3. Interest Management:

- Interest CRUD Operations: Manages user interests for personalized feeds.

4. Security Measures:

- Password Hashing: Ensures secure storage of user passwords.

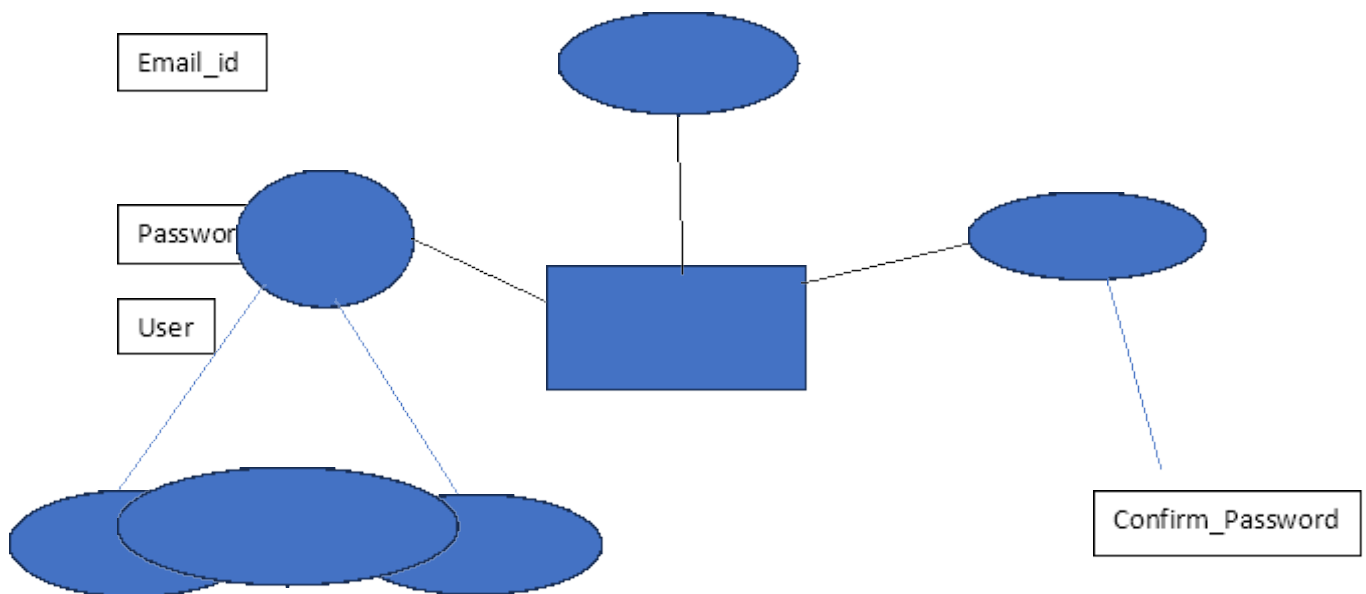- Authorization Checks: Ensures users can only modify their data.

5. API Design:

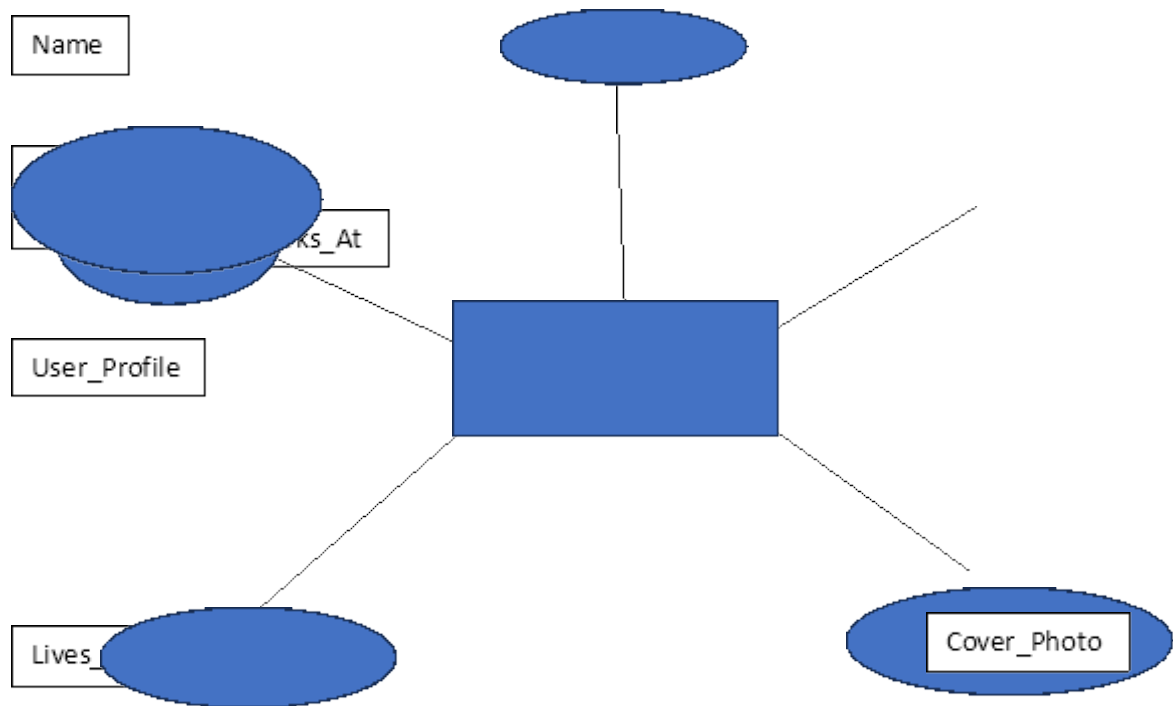- RESTful API: Follows best practices for a clear and consistent API design.

Future Enhancements:

- Enhanced security features

This report provides a high-level overview of both the frontend and backend aspects of your social media web platform.

Sign Up:

Name

ks_At

User_Profile

Lives_

Cover_Photo

Functionalities:

User

can

Like

Update_Profile