Project Synopsis

Project Name: Social media

Abstract:

This social media application offers a multifaceted platform for user interaction and community building. Its key features include:

Personalization: User accounts facilitate registration and sign-in, allowing individuals to establish their online presence.

Content Engagement: Users can actively respond to others' content through likes, dislikes, and comments.

Content Management: Individuals have control over their own content, with the ability to upload, edit, and delete posts, enabling self-expression and information sharing.

Profile Management: Users can personalize their profiles with profile pictures, potentially adding details to introduce themselves to the community.

Social Connections: The application empowers users to forge social connections by following and unfollowing other users, building personalized networks.

Profile Discovery: Users can explore and access other users' profiles and potential connection-building.

Advantages:

Connect with friends and family: Stay in touch with loved ones, regardless of distance, through comments, posts and shared content.

Build new relationships: Expand your social circle by following others with similar interests or discovering new profiles through suggested connections.

Expression: Users can express themselves freely through posts, comments, and profile updates, enabling them to share their thoughts, opinions, and experiences with a wide audience.

Build your online presence: Create a profile that reflects your personal brand and professional goals.

Accessibility: Free to use and accessible from various devices, making it widely available.

Personalization: The ability to update profile information and follow/unfollow other users allows individuals to personalize their experience

Project Scope:

User Accounts
Users can create accounts with name, username, password, email, and also user can create their

account With google Authentication.

Sign-in functionality with secure password storage and authentication. Password stored in hash format using bcrypt password-hash.

Profile Management

Allow users to update their profile information and upload profile photos.

Post management

Enable user to create and delete posts .users can also like ,unlike, and comments posts.

Social Interaction

Implement features to follow / unfollow other users and view their profiles.

Software Requirements:

- **Frontend:** HTML ,CSS **,**JavaScript ,React.js ,Bootstrap
- **Backend**: Node.js, Express.js ,MongoDB
- **Authentication**: JSON Web Tokens [JWT] for user authentication and authorization.
- **Additional Libraries/Frameworks**: Mongoose , Axios , bcrypt , React-toastify.

Hardware Requirement:

- Processor   AMD Ryzen or Intel based
- Storage   SSD Storage for faster read/write operations improved overall performance
- RAM   8gb

Limitation:

Scalability Concerns: As the user base grows it may face scalability challenges in handling increased traffic ,data storage requirements and concurrent interactions.

Performance Issues: It may encounter performance issues such as slow response times, lagging user interface or delays in data processing.

Security Vulnerabilities: Social media platforms are prime targets for cyber threats, including hacking, data breaches, and identity theft.

Privacy Concerns: Users may have concerns about their privacy and data handling practices.

Future Enhancement:

We have decided to integrate real time communication between follow user. Track all users activity like likes ,comment ,following users, profile Photo etc.