



Group 6

Social Media Management System

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Group Members :

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Objective :

The objective of this project is to design and implement a database management system that manages social media accounts and its activity. The system will track the user activities like posts, likes, comments, shares, followers, views, etc patterns. It will also provide insights into user engagement trends, most active periods, interactions with other users, etc.

Application Users :

1. Surfer (Account owner)
2. Admin

Use Cases – Surfer

- Create and maintain social media account details.
- Create posts in the form of video,photo,etc and upload it.
- Engage with other users' posts.
- Analyse their activity.
- Save their favourite content.

Use Cases – Administration

- Manage user accounts.
- Track engagement activity.
- Monitor suspicious accounts and take action on them.
- Compare and analyse different users' accounts.
- Identify trends.

Use Cases Description :

Surfer(Account owner) :

- Users can sign up, create their profile and update personal information like username, email, etc.
- Users can upload posts (text,image,video) on their profiles, making them visible to their followers.
- They can like,comment and share content from others, developing interaction within the platform.

- They can also obtain information about their engagement on the platform.
- Users have the option to save posts , which they find interesting for later reference.

Admin :

- Admins manage user sign-ups, check profiles, and make sure everyone follows the platform rules.
- If a user violates community guidelines, admins have the authority to remove their account permanently.
- Admins can look over interactions, such as post likes, shares and comments, to supervise platform engagement.
- Suspicious or harmful accounts can be restricted, or banned based on reported violations.
- Admins can generate reports comparing user engagement levels, post frequency, and interaction trends.
- The system allows admin to identify popular content based on user behaviour patterns over time.

Tentative lists of reports (Queries) :

Account owner (User) :

- Create and update personal profiles with details like username,email,etc.
- Add a new post and update an existing post's content.
- Providing likes,comments,dislikes,reports,etc on other users' content.
- Find the most Active Hour of Posting
- Find the Most Active Followers
- Find the Time of Day a User Gets the Most Engagement

- Find Posts That Went Viral in Less Than 24 Hours
- See all saved posts

Admin :

- Find the Most Active Users
- Identify Suspicious Users
- Find the Most Reported Users and Their Violation Count
- Compare different users' Engagement Trends Over a particular period of time
- Find the Most Popular Type of Content Based on Engagement
- Find the Fastest-Growing Users (Users With Rapid Follower Gain)
- Detect Users Who Lost the Most Followers in a particular interval of time
- Identify the Most Controversial Posts (High Likes & Dislikes)
- Obtain any users personal information