PROJECT REPORT

TITLE: Influencer Engagement & Sponsorship Co-ordination Platform

PRESENTED BY:

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DESCRIPTION:

The Influencer Engagement & Sponsorship Coordination Platform is a comprehensive solution designed to streamline interactions between influencers and sponsors, enhancing the efficiency and effectiveness of marketing campaigns. This platform provides a centralized environment where influencers and sponsors can manage their collaborations, monitor campaign performance, and optimize advertising strategies.

TECHNOLOGIES USED:

The Influencer Engagement & Sponsorship Coordination Platform leverages a modern technology stack to provide a robust, scalable, and user-friendly experience for both influencers and sponsors. The key technologies used in this platform include:

1. Backend Development:
    - Python: The primary programming language used for backend development. Python's simplicity and readability make it an ideal choice for developing web applications.
    - Flask: A lightweight and flexible web framework for Python that facilitates rapid development. Flask is used to build the server-side logic and manage HTTP requests and responses.
2. Frontend Development:
    - HTML (HyperText Markup Language): Used for structuring the content of web pages and ensuring semantic organization of information.
    - CSS (Cascading Style Sheets): Responsible for styling the web pages, including layout, colors, fonts, and overall design, to ensure a visually appealing user interface.

- JavaScript: Provides interactivity and dynamic functionality to the web application, enhancing user engagement and experience.

3. Database Management:
    - SQLite: A lightweight, serverless, and self-contained SQL database engine used to store and manage application data. SQLite is chosen for its simplicity and efficiency in handling smaller datasets, making it well-suited for this platform.

DB SCHEMA DESIGN:

The database schema is designed to manage user data, campaign and ad information, and interactions between influencers and sponsors within the Influencer Engagement & Sponsorship Coordination Platform. Each table is structured to support efficient data retrieval and management.

1. Users Table

The Users table contains information about all users of the platform, including sponsors and influencers, and defines their roles.

- **id**: An integer that serves as the primary key for the user.
- **name**: A string representing the user's name, which cannot be null.
- **role**: A string indicating the role of the user (e.g., sponsor, influencer, admin), which cannot be null.
- **password**: A string for the user's password, which cannot be null.

2. Sponsors Table

The Sponsors table stores data about sponsors who create campaigns and ads on the platform.

- **id**: An integer that serves as the primary key for the sponsor.
- **name**: A string representing the sponsor's name, which cannot be null.
- **password**: A string for the sponsor's password, which cannot be null.
- **industry**: A string representing the sponsor's industry, which cannot be null.
- **budget**: An integer representing the sponsor's total budget, which cannot be null.
- **flag**: A string indicating the status of the sponsor, used for account verification or suspension.

3. Influencers Table

The Influencers table contains information about influencers involved in the platform's campaigns.

- **id**: An integer that serves as the primary key for the influencer.
- **name**: A string representing the influencer's name, which cannot be null.
- **password**: A string for the influencer's password, which cannot be null.
- **category**: A string representing the influencer's category, which cannot be null.
- **niche**: A string representing the influencer's niche, which cannot be null.
- **media**: A string indicating the primary media or platform, which cannot be null.
- **followers**: An integer representing the influencer's number of followers, which cannot be null.
- **flag**: A string indicating the status of the influencer's account.

4. Campaign Table

The Campaign table stores information about marketing campaigns created by sponsors.

- **camp_id**: An integer that serves as the primary key for the campaign.
- **spon_id**: An integer referencing the sponsor who created the campaign, linking to the sponsors table.
- **name**: A string representing the campaign's name.
- **description**: A string describing the campaign.
- **start_date**: A string indicating the campaign's start date.
- **end_date**: A string indicating the campaign's end date.
- **budget**: An integer representing the budget allocated for the campaign.
- **visibility**: A string defining the campaign's visibility (e.g., public, private).
- **goals**: A string describing the campaign's goals.
- **niche**: A string representing the target niche of the campaign.
- **status**: A string indicating the campaign's current status (e.g., active, completed).
- **flag**: A string for additional status indicators for the campaign.

5. Ads Table

The Ads table stores information about individual advertisements within campaigns.

- **ad_id**: An integer that serves as the primary key for the ad.

- **camp_id**: An integer referencing the campaign the ad belongs to, linking to the campaign table.
- **spon_id**: An integer referencing the sponsor who created the ad, linking to the sponsors table.
- **influ_id**: An integer referencing the influencer associated with the ad, linking to the influencers table.
- **name**: A string representing the ad's name, which cannot be null.
- **description**: A string describing the ad content, which cannot be null.
- **terms**: A string indicating terms and conditions for the ad.
- **messages**: A string containing additional messages or notes for the ad.
- **payment**: An integer representing the payment offered for the ad, which cannot be null.
- **status**: A string indicating the ad's current status (e.g., pending, approved).
- **influ_name**: A string for the influencer's name associated with the ad for easy reference.

ARCHITECHTURES & FEATURES:

1. User Management
   - Role-Based Access: Users can register and log in as sponsors, influencers, or admins. Each role has specific access rights and functionalities tailored to their needs.

2. Sponsors
   - Campaign Creation: Sponsors can create and manage marketing campaigns, including setting goals, budgets, and target audiences.
   - Ad Management: Sponsors have the ability to create ads for their campaigns, define terms, and specify influencer requirements.

- Budget Tracking: Sponsors can set and track campaign budgets, ensuring effective allocation of resources.
- Influencer Collaboration: Sponsors can send ad requests to influencers, review their profiles, and manage influencer relationships.

3. Influencers
   - Profile Customization: Influencers can showcase their expertise, niche, and social media platforms, attracting potential sponsorships.
   - Campaign Participation: Influencers can browse available campaigns, accept or reject ad requests, and negotiate terms with sponsors.
   - Follower Analytics: Influencers can track their follower growth and engagement metrics to highlight their impact.

4. Admin Dashboard
   - User Management: Admins can manage user accounts, approve or reject new registrations, and enforce platform policies.
   - Flagging and Reporting: Admins can flag suspicious activities, handle reports, and take appropriate actions against violators.

5. Statistics and Analytics
   - Dashboard Visualizations: A dedicated statistics page provides visual representations of campaign performance, ad reach, and user engagement through pie charts, bar charts, and graphs.
   - Campaign Insights: Sponsors and influencers can access detailed insights into campaign effectiveness, including click-through rates, impressions, and conversions.
   - Trend Analysis: Users can analyze trends over time to optimize strategies and improve future campaigns.
   - Performance Metrics: The platform offers metrics for evaluating the success of campaigns and ads, aiding in data-driven decision-making.

6. Communication and Interaction

- Messaging System: The platform includes a messaging system that enables direct communication between sponsors and influencers to discuss campaign details and negotiate terms.
- Notifications: Users receive notifications about new ad requests, campaign updates, and other relevant activities to stay informed.

7. Security and Privacy

- Data Protection: The platform ensures user data is securely stored and handled according to best practices in data protection.
- Authentication: Secure login mechanisms and password encryption safeguard user accounts and sensitive information.

API DESIGN

The API for the Influencer Engagement & Sponsorship Coordination Platform facilitates the management of users, campaigns, and flagged entities. It includes endpoints for creating, updating, and deleting users and campaigns. Additionally, it supports managing flagged users and campaigns by updating their statuses or removing them from the system. These operations ensure efficient handling of platform activities and data integrity.

Conclusion

The Influencer Engagement & Sponsorship Coordination Platform leverages a robust API design to streamline user, campaign, and ad management. The platform's API supports essential operations, including user registration, campaign creation, and the handling of flagged entities. By providing clear and efficient endpoints, the API ensures effective coordination between sponsors

and influencers, enhancing overall platform functionality and user experience. This design is pivotal for maintaining a seamless and organized interaction within the platform.

Presentation video link:

https://drive.google.com/file/d/13CihtpcbOHzXi0QS77LhsnW-0x_TBgQu/view?usp=drive_link