Author: Achin Aggarwal Roll number: 22f1001390 Student email: 22f1001390@ds.study.iitm.ac.in About Me: I am a passionate student pursuing computer science with a keen interest in software development.

Project Overview The project involves creating a platform for managing advertising campaigns, connecting sponsors and influencers. This system will support three main roles: Admin, Sponsors, and Influencers. Each role will have distinct functionalities that cater to their requirements, with the platform facilitating smooth management of campaigns and ad requests.

Technologies and Frameworks Used

- Backend Framework: Flask (API development)
- Database: SQLite (for data storage)
- Frontend: VueJS (UI development); VueJS Advanced with CLI (if needed)
- HTML Styling: Bootstrap
- Template Engine: Jinja2 (if required)
- Caching: Redis
- Asynchronous Jobs: Redis and Celery

Core Functionalities

1. User Roles and Access Control:

- o Admin: Root access, can monitor users/campaigns, and flag inappropriate content. Admin login will be authenticated using Flask security or JWT.
- o Sponsors: Can create and manage campaigns, send ad requests, track campaign performance, and accept/reject ad requests.
- o Influencers: Can search for campaigns, accept or reject ad requests, and negotiate terms. Profiles can be updated and are publicly visible.

2. Database Schema Design:

- o User: Stores login details, role information.
- Campaign: Contains campaign specifics, such as name, description, dates, and budget.
- Ad Request: Tracks requests made by sponsors to influencers, including payment, status, and specific requirements.

3. Key Features:

- o Admin Dashboard: Displays statistics such as active users, ongoing campaigns, and flagged accounts.
- Campaign Management for Sponsors: Creation, update, and deletion of campaigns.
- o Ad Request Management: Sponsors can create, edit, and delete ad requests; influencers can accept, reject, and negotiate.
- o Search Functionalities: Sponsors can find relevant influencers, and influencers can search for public campaigns based on niche, budget, etc.

4. Scheduled and Async Jobs:

 Daily Reminders: Alerts sent to influencers who haven't engaged with pending ad requests.

- Monthly Activity Report: Generates and sends email reports to sponsors summarizing campaign activities, budget usage, etc.
- o CSV Export: Sponsors can export campaign details in CSV format.

5. Performance and Caching:

o Implement caching mechanisms to enhance performance with cache expiry strategies.

Video Link :-

https://drive.google.com/drive/folders/10qKZq07WxDI0DvmI3zpUEjxUXZnhZCWV?usp = sharing