

Influencer-Sponsor Connect Platform Project Report

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Project Overview

The Influencer-Sponsor Connect Platform is an innovative web application designed to bridge the gap between sponsors and influencers, facilitating seamless collaboration in digital marketing campaigns. Built using modern web technologies, the platform provides a comprehensive solution for campaign management, communication, and user interaction.

Technology Stack

1. **Backend:** Python, Flask
2. **Frontend:** Vue.js
3. **Database:** SQLite
4. **Caching:** Redis
5. **Background Jobs:** Celery
6. **ORM:** SQLAlchemy

Database Schema Design

The database schema for the Influencer-Sponsor Connect Platform is thoughtfully designed to capture the essential information and complex relationships between the different entities. At the core is the User table, which serves as the central authentication mechanism, storing user details like username, hashed password, email, role, and account status.

Branching out from the User table, the Influencer and Sponsor tables extend user profiles with category-specific and company-level details respectively. The Campaign table represents the central interaction point, containing comprehensive metadata like title, description, budget, status, and dates. Complementing this, the AdRequest table tracks the interactions between sponsors and influencers, recording request status, negotiation terms, and communication logs.

Careful implementation of foreign key constraints maintains the intricate relationships between these tables, ensuring data integrity and enabling sophisticated querying capabilities. This robust schema forms the foundation for the platform's comprehensive functionality, allowing seamless management of users, campaigns, ad requests, and other critical entities.

Architecture and Features

The application follows the Model-View-Controller (MVC) architectural pattern:

- Models: Handle database interactions and data management
- Views: Provide the user interface using Vue.js components
- Controllers: Manage the business logic and data flow

Key features of the platform include:

- Role-based user access (Admin, Sponsor, Influencer)
- Campaign creation, management, and tracking
- Ad request handling with negotiation capabilities
- Influencer search and profile management
- Comprehensive admin dashboard for platform oversight

Advanced Implementations

1. **Caching with Redis**

- Improved performance for frequently accessed data
- Reduced database load
- Faster response times

2. **Background Jobs with Celery**

- Automated email reminders
- Campaign data export to CSV
- Asynchronous task processing

3. **Authentication & Security**

- Secure password hashing
- Role-based access control
- JWT token-based authentication

Video Demonstration: [Link](#)