Modern Application Development II Project Report (IESCP)

Author

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Description

Adfluence is an innovative platform designed to connect brands with influencers, streamlining collaboration for marketing campaigns. It offers a robust system for managing user roles, with distinct profiles for sponsors and influencers. Sponsors can create and manage campaigns, set budgets, and monitor ad performance, while influencers can browse ad requests and submit proposals. The platform features detailed user and campaign management tools, ensuring seamless interactions and efficient ad placements. Admins can view stats and flag inappropriate sponsors and campaigns. Influencers benefit monetarily upon successfully completing ad requests.

Technology used

1. **Python**: Used for backend development.
2. **Flask**: Framework for building web applications and handling APIs.
3. **SQLAlchemy**: ORM for database interactions.
4. **SQLite**: Database system for storing application data.
5. **Werkzeug**: WSGI utility library used with Flask.
6. **Flask-Security**: Provides token-based authentication.
7. **Flask-RESTful**: Extension for building REST APIs.
8. **Redis-Server**: Used for caching data.
9. **Mailhog**: Testing email functionalities.
10. **Flask-SMTPMail**: Sending emails.
11. **Celery**: Managing batch jobs and background tasks.
12. **Vue.js**: Frontend framework for building user interfaces.
13. **Axios**: HTTP client for API requests.
14. **Vue Router**: Managing application routing.
15. **Bootstrap**: CSS framework for responsive design.
16. **Chart js :** For displaying responsive dynamic analytics
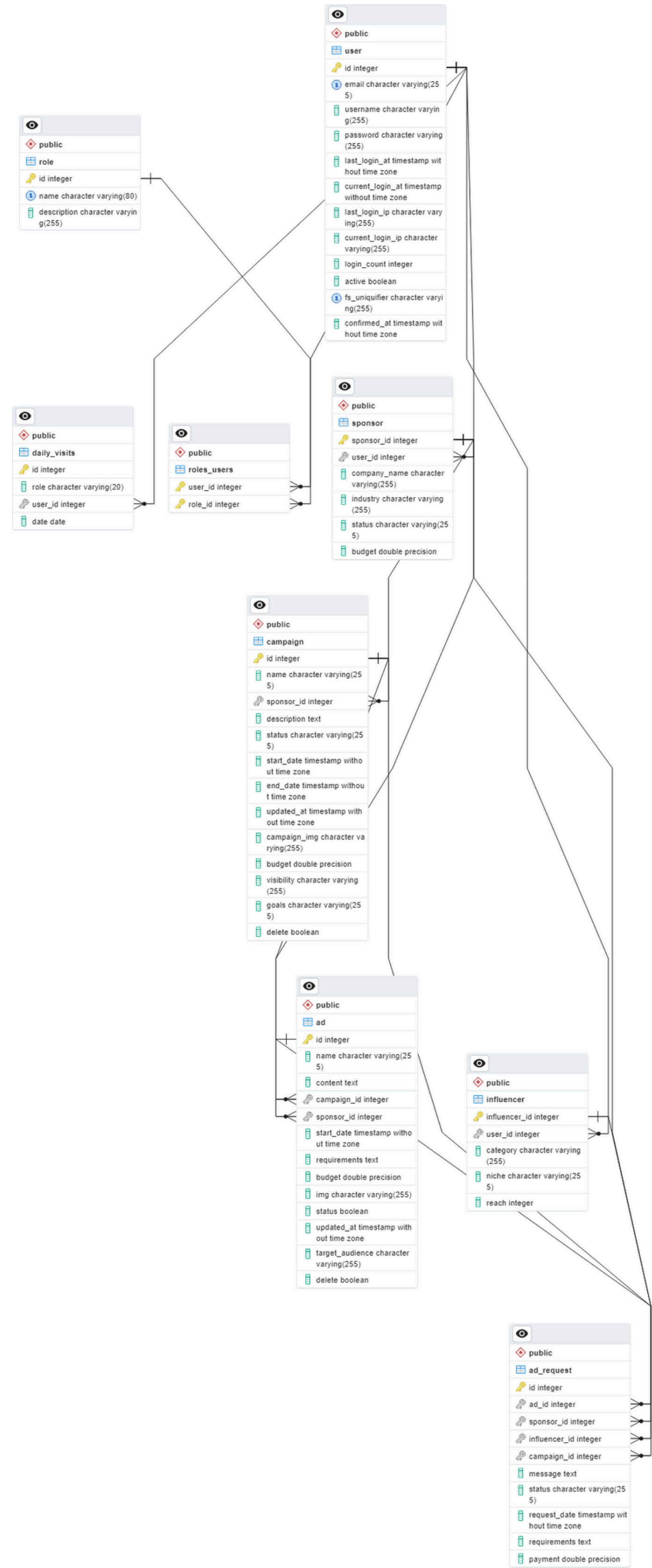
Approach to Problem Statement:

We approached the problem by first understanding the core requirements for connecting sponsors and influencers. The backend was built using Flask and SQLAlchemy to ensure a robust and scalable infrastructure. The frontend was developed with Vue.js for dynamic and interactive user interfaces. We used Axios for API interactions and Vue Router for seamless navigation. Additional tools like Flask-Security for authentication, Redis for caching, and Celery for task management were integrated to enhance functionality and performance. Testing and email functionalities were supported by Mailhog and Flask-SMTP.

Usage

The application connects sponsors with influencers for advertising campaigns. Sponsors create and manage campaigns, while influencers complete ad requests to earn monetary benefits. Admins monitor platform activity, flag inappropriate content, and view statistics. The system ensures secure, efficient coordination and execution of advertising tasks, enhancing engagement between sponsors and influencers.

ER DIAGRAM

API

- '/api/login'
- '/api/register'
- '/api/campaign'
- '/api/campaign/<int:id>'
- '/api/campaignUpdate/<int:id>'
- '/api/Ad/<int:id>'
- '/api/Ad'
- '/api/Ad_delete/<int:id>'
- '/api/toggle_user_status/<int:id>'
- '/api/users'
- '/api/category_delete/<int:id>'
- '/api/influencers'
- '/api/sponsors'
- '/api/influencer/<int:id>'
- '/api/sponsor/<int:id>'
- '/api/user/<int:id>'
- '/api/export-csv'
- '/api/ad_request'
- '/api/ad_request/<int:id>'

VIDEO LINK :

https://drive.google.com/file/d/1Ixms85dPeLusWxERN3wfYjw8olivFxbF/view?usp=sharing