Project Report

Student Details

- **Name:** Nitish Rishi
- **Student Email:** 22f3000645@ds.study.iitm.ac.in

Introduction

"Easy Connect" is a web application designed to seamlessly connect sponsors and influencers for managing ad campaigns. The project involves developing a comprehensive system where sponsors can create campaigns, and influencers can manage ad requests, all within a secure and user-friendly interface. Key features include robust user authentication, role-based access control, and efficient handling of CRUD operations for campaigns and ad requests. Additionally, the system ensures proper validation, entity relationships, and administrative oversight to manage flagged users and campaigns effectively.

Project Details

- **Title:**Easy Connect
- **Question Statement:**
  - Develop a web application to connect sponsors with influencers for ad campaigns, allowing both parties to create and manage ad requests.
- **Approach:**
  - Designed the database schema to efficiently manage users, sponsors, influencers, campaigns, and ad requests.
  - Implemented user authentication and role-based access control.
  - Developed CRUD operations for campaigns and ad requests.
  - Ensured proper validation and relationships between entities.
  - Added features to manage flagged users, campaigns for admin oversight.

Frameworks and Libraries Used

- **Backend:**
  - Flask: Lightweight web framework for building the application.
  - SQLAlchemy: ORM for database interactions.
  - Werkzeug: For secure password hashing.
- **Frontend:**
  - Bootstrap: CSS framework for responsive design.
  - Jinja2: Templating engine used with Flask.
- **Database:**
  - SQLite: Lightweight database for storing data.

UserRole Table: Stores the roles available in the application, like sponsor and influencer, with each role having a unique `role_id` and name.

User Table: Contains user-specific details, including their role, username, email, password, and flag status, linking each user to a role via `role_id`.

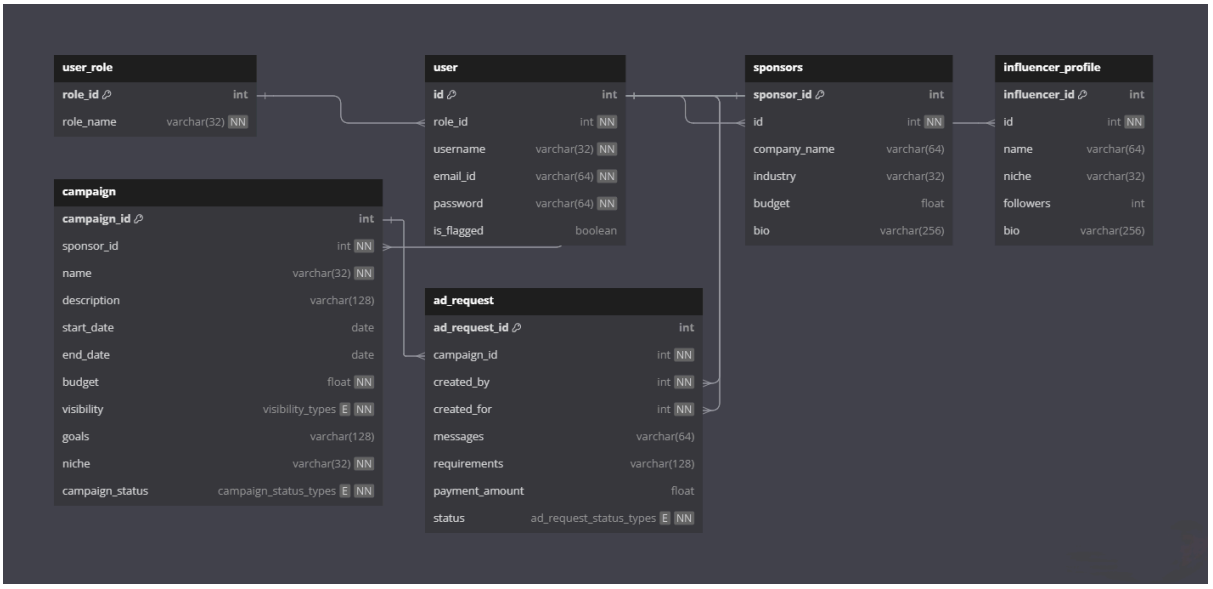
Sponsor Table: Holds information specific to sponsors, such as company name, industry, budget, and bio, and links each sponsor to a user through `id`.

InfluencerProfile Table: Contains details related to influencers, including their name, niche, followers, and bio, and associates each influencer with a user via `id`.

Campaign Table: Manages campaign data created by sponsors, including campaign name, description, budget, visibility, goals, niche, and status, and links each campaign to a sponsor through `sponsor_id`.

AdRequest Table: Tracks ad requests made within campaigns, capturing details like campaign ID, creator, recipient, messages, requirements, payment amount, and status, and links each request to both a campaign and users through `campaign_id`, `created_by`, and `created_for`.

Below ER diagram gives a apt representation of the all the tables and their relations



Drive link of the presentation video: [video link]