

## Student Details:

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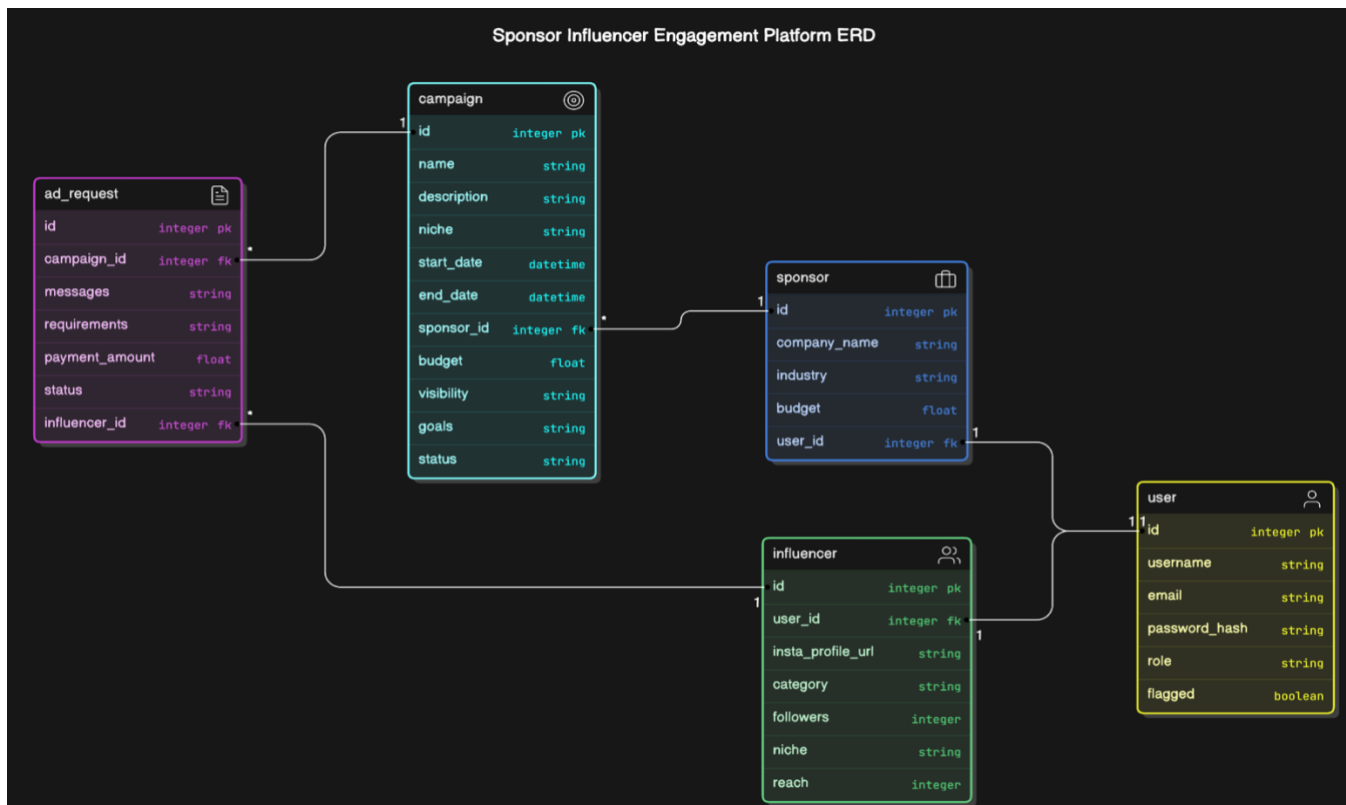
## Project Details:

- **Project Title:** Influencer Engagement and Sponsorship Coordination Platform
- The project involves building a web application that allows sponsors and influencers to manage their campaigns and ad requests effectively. The primary challenge was to design a system that could handle different user roles (Admin, Sponsor, Influencer) with specific functionalities like profile management, ad request processing, and user administration.
- **Approach:**
  - The application was structured using Flask as the backend framework, leveraging SQLAlchemy for database interactions. The core focus was on developing robust routes to handle various user actions, implementing role-based access control, and ensuring the integrity of the data. Filters and query optimizations were implemented to enhance user experience in viewing and managing data.

## Frameworks and Libraries Used:

- **Flask:** Web framework used to build the backend of the application.
- **Flask-RESTful:** Flask extension to build REST Api
- **SQLAlchemy:** ORM (Object-Relational Mapping) used for database interactions.
- **Jinja2:** Template engine for rendering HTML templates.
- **Bootstrap:** Used for designing responsive front-end layouts.
- **Werkzeug:** Provides password hashing and secure session management.

## ER Diagram:



## API Resource Endpoints

- **User API:**
  - **GET** `/api/users/<int:user_id>`: Retrieves user details by user ID.

- **Campaign API:**
  - **GET** `/api/campaigns`: Retrieves all campaigns.
  - **GET** `/api/campaigns/<int:campaign\_id>`: Retrieves a specific campaign by ID.
  - **POST** `/api/campaigns`: Creates a new campaign.
  - **DELETE** `/api/campaigns/<int:campaign\_id>`: Deletes a campaign by ID.
  - **PUT** `/api/campaigns/<int:campaign\_id>/complete`: Marks a campaign as completed and updates related ad requests.
- **Ad Request API:**
  - **GET** `/api/ad\_requests/<int:ad\_request\_id>`: Retrieves an ad request by ID.
  - **POST** `/api/ad\_requests`: Creates a new ad request.
  - **PATCH** `/api/ad\_requests/<int:ad\_request\_id>`: Updates an ad request by ID.
  - **DELETE** `/api/ad\_requests/<int:ad\_request\_id>`: Deletes an ad request by ID.
- **Search Influencers API:**
  - **GET** `/api/search/influencers`: Searches for influencers based on criteria such as name, niche, or followers.
  - **GET** `/api/search/influencers/<int:influencer\_id>`: Retrieves an influencer by ID.

#### Backend Routes:

- **Home:**
  - **/index/users** [GET]: View the home page of the platform.
- **Admin Management:**
  - **/admin/users** [GET]: View and filter sponsors and influencers.
  - **/admin/flag\_user** [POST]: Flag or unflag a user.
- **User Registration and Profile Management:**
  - **/register** [GET, POST]: Register a new user (Sponsor or Influencer).
  - **/profile/<int:user\_id>** [GET]: View the profile of a user.
  - **/edit\_profile/sponsor/<int:user\_id>** [GET, POST]: Edit a sponsor's profile.
  - **/edit\_profile/influencer/<int:user\_id>** [GET, POST]: Edit an influencer's profile.
- **Dashboard Management:**
  - **/sponsor/dashboard/<int:user\_id>** [GET]: Render the sponsor dashboard.
  - **/influencer/dashboard/<int:user\_id>** [GET]: Render the influencer dashboard.
  - **/admin/dashboard/<int:user\_id>** [GET]: Render the admin dashboard.
- **Campaign Management:**
  - **/campaigns** [GET]: Get all campaigns of the sponsor.
  - **/getCampaign/<int:campaign\_id>** [GET]: Get Details of a particular campaign.
  - **/create\_campaign** [POST]: Create a campaign by calling API.
  - **/delete\_campaign/<int:campaign\_id>** [POST]: Delete a campaign by calling API.
  - **/editCampaign/<int:campaign\_id>** [GET, POST]: Route for rendering and posting edit campaign form.
- **Ad Request Management:**
  - **/ad\_requests** [GET]: Get Ad Requests of an influencer.
  - **/acceptAdRequest/<int:adRequestId>** [POST]: Accept an ad request.
  - **/completeAdRequest/<int:adRequestId>** [POST]: Mark an ad request as completed.
  - **/rejectAdRequest/<int:adRequestId>** [POST]: Reject an ad request.
  - **/update\_payment\_terms** [POST]: Negotiate payment of an ad request.
- **User Session Management:**
  - **/logout** [GET]: Log out the current user.
  - **/login** [GET, POST]: Login the specific users.

#### Presentation Video:

- **Drive Link:**  
[https://drive.google.com/file/d/1Xc4yUea2oZRYFyhKz7aNL0PgHJOZjGJp/view?usp=drive\\_link](https://drive.google.com/file/d/1Xc4yUea2oZRYFyhKz7aNL0PgHJOZjGJp/view?usp=drive_link)