Modern Application Development Project Report

Student details:

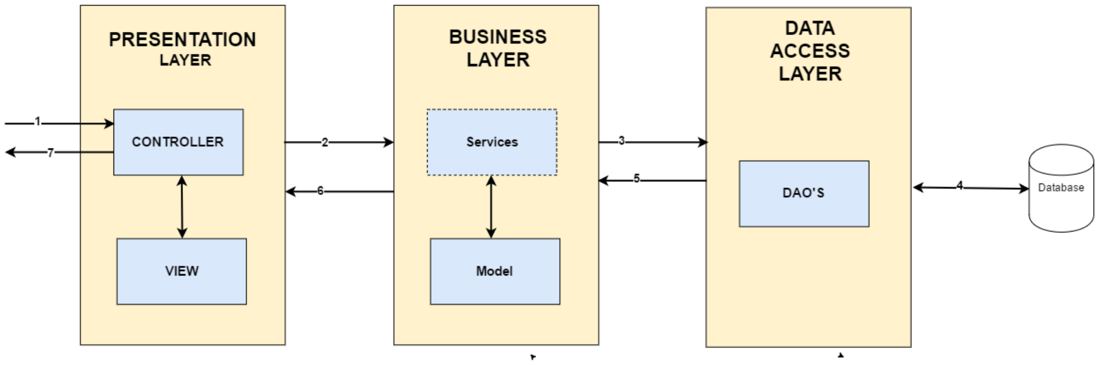
Name	**:**	**Tushti Goyal**
Roll No	**:**	**21f3003054**
Program	**:**	**BS Degree in Data Science and Application**
Level	**:**	**DIPLOMA**

Project Details:

Project Name	**:**	**Influencer Engagement and Sponsorship Coordination Platform**
Question Statement:		It's a platform to connect Sponsors and Influencers so that sponsors can get their product/service advertised and influencers can get monetary benefit.
Drive link of the presentation video:		video link

Approach to design and implementation of project:

Project has been design using 3-tier MVC (Model-View-Controller) architecture. Where view is implemented using HTML. Python, JavaScript & Bootstrap. Controller is using Python where controller contains the application control flow and business logic, model is creating using python having a façade for Database layer.



MVC structure.

- ***Model classes*** is a façade layer between the Functional classes and database.
- Only Model classes using ***db.Model*** are used for retrieving and adding the data on the database.
- ***Classes.py*** file consists of all the functional classes with the logic needed for functions in that.
- The ***Controlle***r file handles the app routes.
- **app.py** finally creates the file.
- **Static and Templates folder** for the View component of the structure.

Modern Application Development Project Report

Design considerations:

User class *is designed as an abstract class contained the base data and function of all the user classes. Further* ***Admin, Influencer and Sponsor*** are three inherited classes from user representing the three key roles in the application. ***Campaigns, Ads and requests*** being the other three key classes.

Functionalities implemented:

1. **Login page**: enables all the ***three key user*** to login and perform the functions allowed for each user in the application.
2. **Registration:** allows all the three users to register themselves in the application.
3. **Admin dashboard:** Allows admin to List, flag, and search functionalities.
4. **Sponsor**: having a dashboard, Search, Campaign creation, Ad creation, request for ad **to** influencer and negotiating the ad request with influencer. ***Sponsor can create a campaign*** after which they can ***create advertisement***. After creating an add, ***requests*** can be sent by looking up all the influencers on the system to ***multiple or one influencer*** at the same time with a different message to each.
5. **Influencer:** having a dashboard, running ads for multiple sponsors, negotiation of ad requests from sponsor et. Influencer will view the request and can ***negotiate the payment*** amount with a ***custom message*** to negotiate the terms. After which the request is ***sent back to the Sponsor*** where they can negotiate further. A request can be ***rejected or accepted*** at any point in time in the negotiations.

When a ***sponsor is deleted***, *all* ***its campaigns*** are deleted. When a ***campaign is deleted*** all ***its ads*** are deleted. When *an ad* is deleted ***all its requests*** are deleted.

Flagged and unflagged is not implemented this way yet. If a flagged user tries to login, the app asks them to contact the admin.

Under development:

1. Statistics screens are in the process of development.
2. Search functionality on user dashboards.

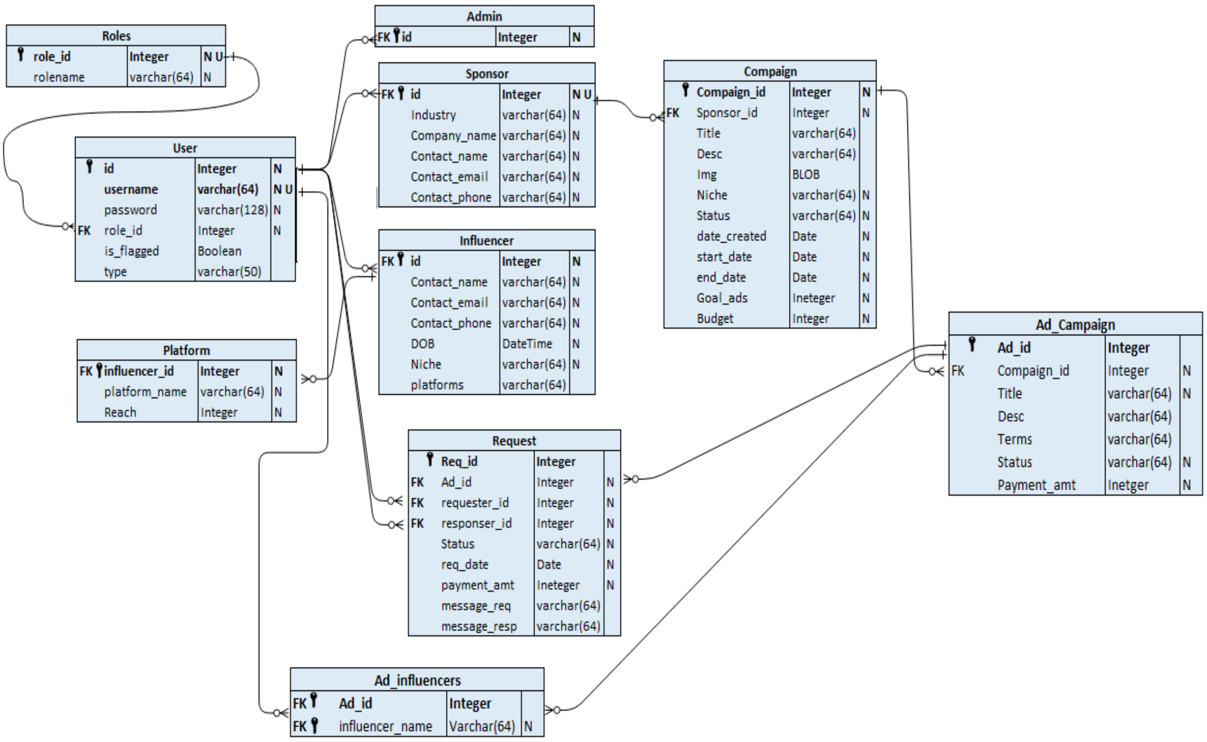
Frameworks and libraries used:

- Bootstrap 5-modal view
- JS: JQuery (non slim)
- jsdeliver – To handle posts requests on click
- Awesome-font- provides icons
- CSS-some manual styling
- Flask- to define app routes, create the application and the models and datetime
- SQLAlchemy-Database connection and management, matplotlib.

Modern Application Development Project Report

ER Diagram:

An **Entity Relationship** (ER) Diagram illustrates how tables (“entities”) relate to each other within a system. ER Diagrams are most often used to design the relational database.


Roles
role_id Integer N U
rolename varchar(64) N
Admin
FK id Integer N
Sponsor
FK id Integer N U
Industry varchar(64) N
Company_name varchar(64) N
Contact_name varchar(64) N
Contact_email varchar(64) N
Contact_phone varchar(64) N
Compaign
Compaign_id Integer N
FK Sponsor_id Integer N
Title varchar(64)
Desc varchar(64)
Img BLOB
Niche varchar(64) N
Status varchar(64) N
date_created Date N
start_date Date N
end_date Date N
Goal_ads Ineteger N
Budget Integer N
User
id Integer N
username varchar(64) N U
password varchar(128) N
FK role_id Integer N
is_flagged Boolean
type varchar(50)
Influencer
FK id Integer N
Contact_name varchar(64) N
Contact_email varchar(64) N
Contact_phone varchar(64) N
DOB DateTime N
Niche varchar(64) N
platforms varchar(64)
Platform
FK influencer_id Integer N
platform_name varchar(64) N
Reach Integer N
Ad_Campaign
Ad_id Integer
FK Compaign_id Integer N
Title varchar(64) N
Desc varchar(64)
Terms varchar(64)
Status varchar(64) N
Payment_amt Inetger N
Request
Req_id Integer
FK Ad_id Integer N
FK requester_id Integer N
FK responser_id Integer N
Status varchar(64) N
req_date Date N
payment_amt Ineteger N
message_req varchar(64)
message_resp varchar(64)
Ad_influencers
FK Ad_id Integer
FK influencer_name Varchar(64) N