

Flask Mockup 1



What is our GOAL for this MODULE?

The goal of this module is to brainstorm over the app we will build and then create the APIs for that app.

What did we ACHIEVE in the class TODAY?

- Brainstormed an app
- Discussed functionalities
- Built APIs for it

Which CONCEPTS/CODING BLOCKS did we cover today?

- Flask APIs
- Postman

How did we DO the activities?

1. We will be building a movie recommendation app. It will contain 2 screens:
 - Screen 1 - Where the user will select the movies they like
 - Screen 2 - Where we will recommend the movies to the user
2. We will only work on the first screen. The features of Screen 1 would be:
 - User will see a movie
 - User can mark the movie as liked
 - User can mark the movie as not liked
 - User can say that they did not watch a movie
3. Based on the functionality, we will be building the APIs:
 - **GET API** - For sending a movie's data to the user
 - **POST API** - For marking a movie as liked
 - **POST API** - For marking a movie as not liked
 - **POST API** - For marking a movie as did not watch
4. To store all the data, we can create 4 lists:
 - List 1 - List of all the movies
 - List 2 - List of movies the user liked
 - List 3 - List of movies that the user did not like
 - List 4 - List of movies that the user did not watch
5. We will ensure to keep only one entry of the movie at a time. This means that if a user likes a movie, we will remove that movie from the list of all the movies and then add it to the list of movies that the user liked. We will avoid duplicates using this.
6. Export the DataFrame that contains the newly formatted and added columns like **director** and **soup** into a CSV in Google Colab and download the CSV.

```
from google.colab import files
df2.to_csv('movies.csv')
files.download('movies.csv')
```

7. Add an extra "id" in the headers of the movie, right before the first comma.

```
1 id,index,budget,genres,
2 0,0,237000000,['action
```

8. Setup the basic Flask project in a virtual environment.
9. Read the data from the CSV to a python's list. This will be our list of movies. Also create 3 other empty lists.
10. Write the first API where we will send the data of a movie as a JSON response from the list of movies.

11. Write the second API for when the user likes a movie. Here, we remove the movie's entry from our list of movies and then add this entry into the list of liked movies.
12. Write the third API for when the user does not like a movie. Here, we again remove the movie's entry from our list of movies and then add this entry into the list of movies not liked by the user.
13. Write the fourth API for when the user did not watch the movie. Again, remove the movie's entry from our list of movies and then add this movie into the list of movies that the user did not watch.
14. Test the API with Postman.

What's NEXT?

In the next class, we will be working on the APIs of our second screen and then we will start building our App.