

ML 4

Q) what is an API and how it works?

Ans. API(application programming interface) is a set of rules which makes a link (source of communication) between the two machines .

Some examples of API include cloud application communicating with a server, servers pinging each other , or application interacting with an operating system.

eg→ customer→waiter→chef.....here waiter plays the role of an API and let customer and chef be the two machines.

TO LINK YOUR API IN PYTHON

- 1) <https://www.themoviedb.org/settings/api> → make your own api key here
- 2) <https://developer.themoviedb.org/reference/intro/getting-started> → this will display all the content of that particular api through which it has been linked in the form of json
- 3) <https://jsonviewer.stack.hu/> this is the site to view the json file . this converts the json text to the human readable format .

```
import pandas as pd
import requests
response= requests.get("https://api.themoviedb.org/3/movie/top_100")
df=pd.DataFrame(response.json()['results'])[["id", "title", "release_date", "popularity"]]
df
```

Framing a machine learning program

- 1) Transaction Business problem to ML problem : increase our revenue and decrease the churn rate
- 2) Identify the problem : UI not navigate, internet issue , subscription discount
- 3) current solution: overall churn rate prediction in last year
- 4) getting data : required exact date | recommendation click| publish date
- 5) getting the matrix: follow checkpoints and rectify the correct matrix
- 6) Online vs Batch ML: focus on our training model and retaining model. OLTP system(online transactional processing) in data warehouse.

real time execution of large number of databases , transaction by large number of people .

- 7) check assumptions : check one machine learning model work as all condition , region and country .