REVOLUTIONIZE YOUR PYTHON BACKEND WITH FASTAPI

FastAPI

API

How to Build API with Python

WHAT PROBLEM WE'RE FACING

MAKING APIS FAST WITH DATA

Writing the API server functions that query the database and provide the data in JSON format requires many steps, and lot of coding and time

SERIES OF PROBLEM

- **API END POINT TO BE FUNCTION**
- **FUNCTION TO QUERY THE DATABASE**
- **ORM TO READ AND WRITE TO DATABASE**
- **SECURE LOGIN PROCESS**
- **EASY INTERFACE TO TEST THE FUNCTIONS**

PYTHON ECOSYSTEM : FASTAPI

HOW TO GET IT INTO MY OS?

- Install Python
- The do "pip install FASTAPI"
- Having Pydantic + SQLAlchemy will help

WHERE CAN I LEARN ABOUT STREAMLIT

- FASTApi Site

https://fastapi.tiangolo.com/

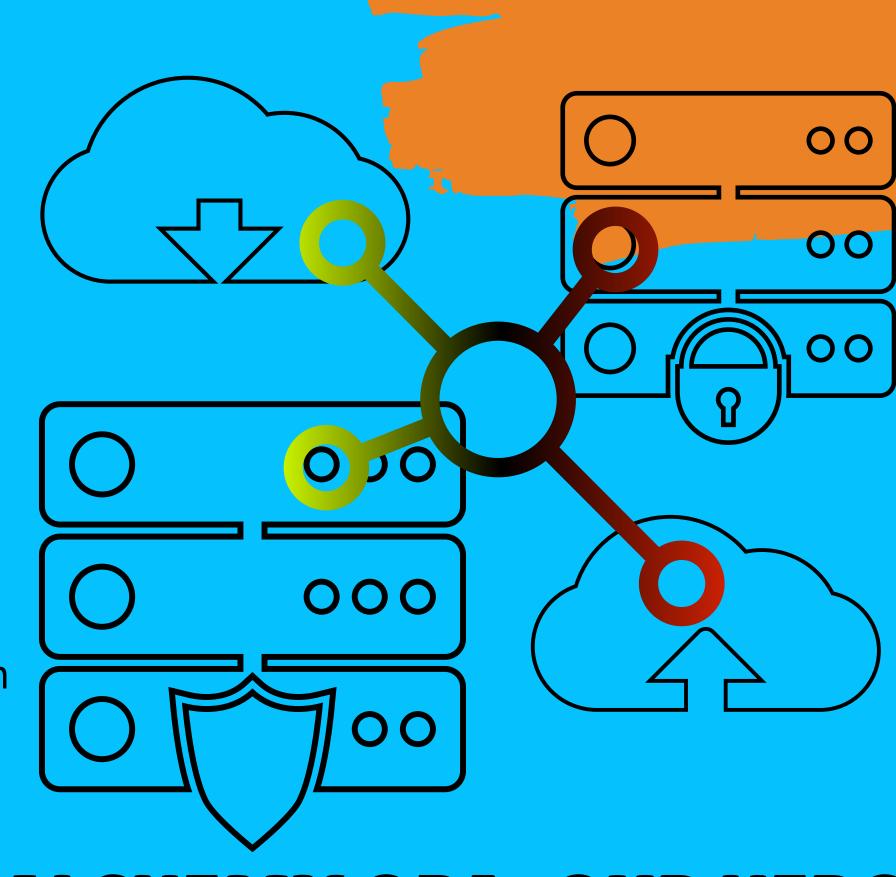- This Video

GUEST STARRER PSYCOPG2, UVICORN

API STARTER

01 CREATE API OBJ

- USE the API object as decorator
- Write regular python functions
- The return data needs to be in JSON format

02 USING SUPPORT LIBRARY

- Databases querying through the python function using Psycopg2
- Starting the server and keeping it running using uvicorn

SQLALCHEMY OBJ : OUR HERO

HOW DOES FASTAPI HELP

01 HAS ITS OWN ECOSYSTEM

- Uvicorn helps to run the server.
- Provides web interface to test the API end-points
- Works well with ORMs and Validators

02 DECIDE THE ENDPOINTS

- Supports Get/Post/Update/Delete
- Design the data that will be shared

03 DESIGN THE ORM AND VALIDATORS

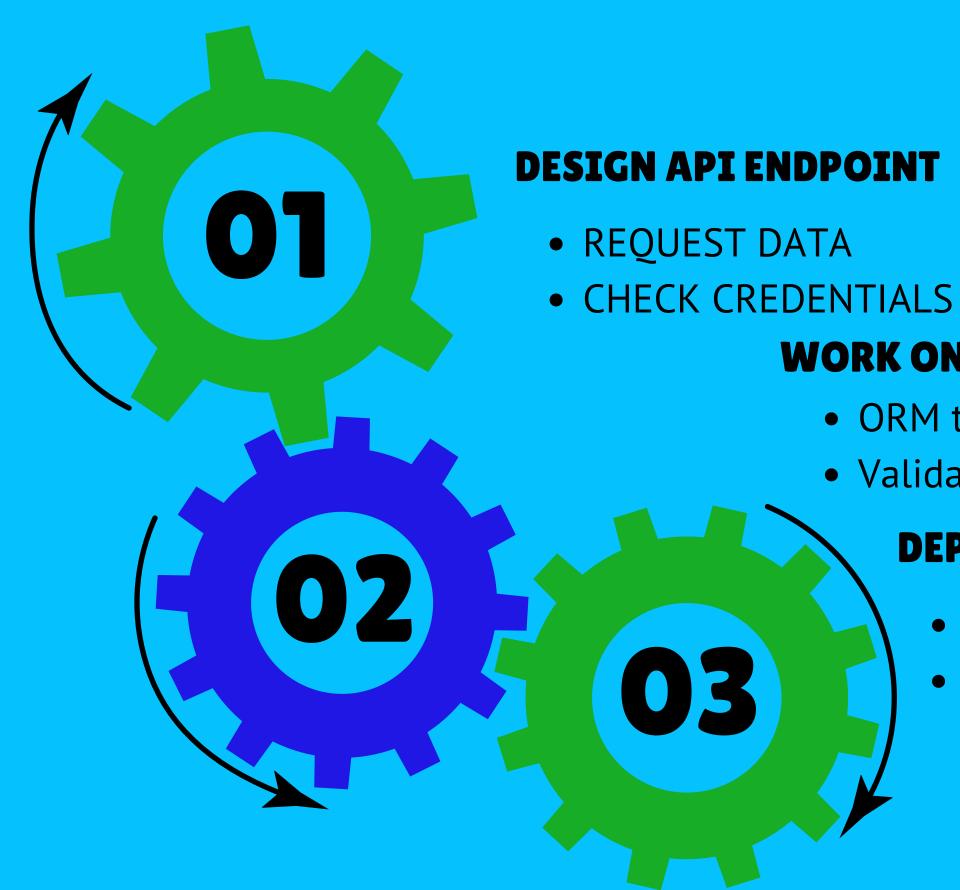- If DB is required, then use ORM to create Table.
- Then the objects can be converted to JSON

04 DEPLOYMENT

- Can be deployed using gunicorn and connect with the DNS
- NGINX can help in providing HTTPS proxy support

FASTAPI DEPLOYMET PROCESS

DESIGN API ENDPOINT

- REQUEST DATA
- CHECK CREDENTIALS

WORK ON DATA

- ORM to connect with DB
- Validator to connect with DB & FE
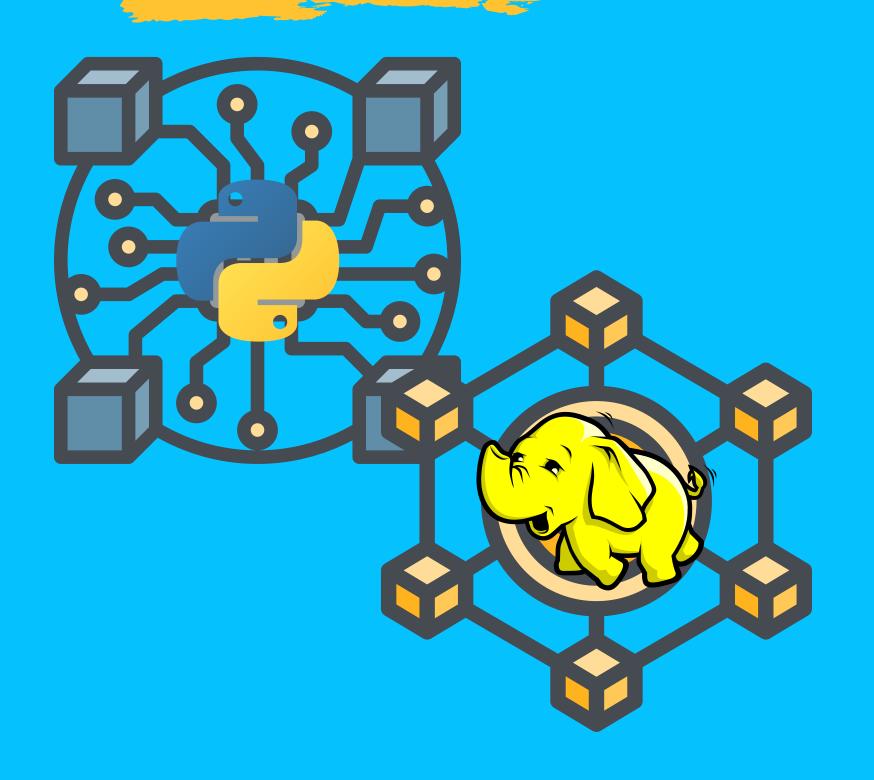
DEPLOY ON SERVER

- Gunicorn
- Nginx

01

02

03

HEAD TO JUPYTER

QUESTIONS AND COMMENTS