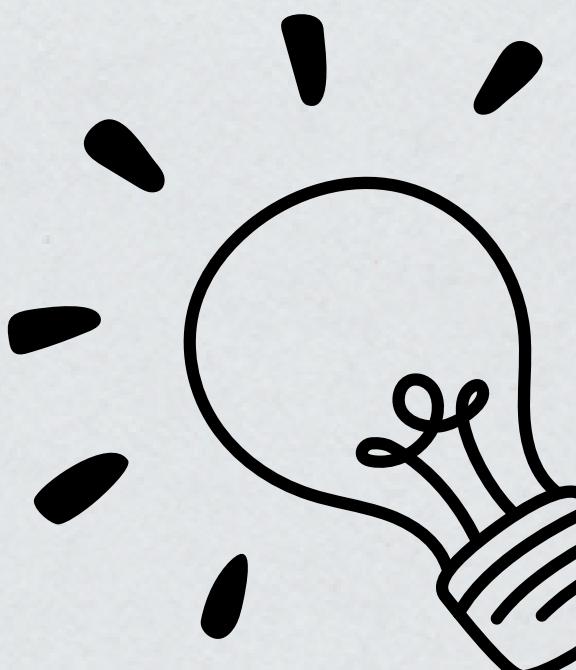


DATA ANALYSIS USING DJANGO

INNOV8ORS



PROJECT OVERVIEW

- Download H1B data (2016-2019) in CSV format from the provided source.
- Ingest the data into a PostgreSQL database by creating tables and writing Python code for data insertion.
- Create a Django-based API with data models and endpoints for statistical calculations.
- Perform data analysis using SQL queries and custom Python functions.
- Implement performance measurement in the Django app and optimize code for better response times and query performance.

PROJECT GOALS

No of Results: the total number of records in database.

Mean Salary: Calculating the mean salary of H1B applicants.

Median Salary: Calculating the median salary of H1B applicants.

25 percentile salary: Calculating the 25th percentile salary.

75 percentile salary: Calculating the 75th percentile salary.

PROCESS

STEP 1

Data is analyzed at first and required data is extracted out of it.

An Employer Model is created and 5 major attributes are saved into it.

The attributes are: Job title, employer name, employer country, salary and salary type.

STEP 2

Creating API in Django with new file as views which have written queries for the question asked to do data analysis for.

STEP 3

Fetching those API'S path with module named to the frontend through axios.get via async and await.

GROUP RESULT

RESULT 1

Created A Designer UI in Next.js using react component making landing page as first page containing the complete access to all the query's Analyzer.

RESULT 2

At Backend we use django for api routes and making models for the dataset given and passed this to the postgres which makes the required tables in it with filtering and than migrating the data from Postman.

THANK YOU