CodeXIntern

Domain: *Python Internship*
Starting Date: *1st October, 2024*
Ending Date: *30th October, 2024*

Task List: *(Complete any 3 of them)*

1. Data Analysis with Pandas:

Use the Pandas library to load a CSV file and perform basic data analysis tasks (e.g., finding the average of a column).

2. Data Visualization with Matplotlib and Seaborn:

Load a dataset (e.g., from Kaggle) and create various visualizations (e.g., bar charts, scatter plots, heatmaps) to analyze the data. Use Matplotlib and Seaborn for plotting and provide insights based on the visualizations.

3. Automate Form Filling and Fetch Response using Python:

Write a Python script to automatically fill out a web form with given data using Selenium or BeautifulSoup, then submit the form and print the response.

Details:

Input Data: *You will have a list of people with details like Name, E-Mail, Gender, Date of Birth, Steps.*

(Use Selenium (or BeautifulSoup) to open a web form. Fill in the form fields with the provided data. Submit the form. Capture and print the response from the form submission.)

4. Text-to-Image Generator Using an API:

Create a Python script that uses an image generation API (like Stable Diffusion or DALL-E) to generate an image based on a text description and save the generated image to local storage.

Details:

Input: *A text description will be provided through the console (e.g., "A black dog is wearing a hat").*

Output: *Save the generated image in the local storage (.jpg or .png file).*

5. Command-Line E-Mail Sender:

A script that sends emails using SMTP, possibly with attachments.

6. <u>Command-Line Chat bot:</u>

Compose a Python program that interacts with users via text input in the terminal. It can handle simple conversations, answer predefined questions, or perform specific tasks like setting reminders or providing information. The chatbot can be implemented using basic conditional statements for rule-based responses or enhanced with natural language processing (NLP) techniques for more sophisticated interactions. This project is ideal for practicing text processing, user input handling, and building basic conversational AI in a lightweight environment.

*** Instruction****

1. ***You have to complete any 3 tasks from the above mentioned list.***
2. ***Store the code files in GitHub repo.***
3. ***Make videos of 2 tasks with a short duration (1 - 1.5 minutes) and upload it to your LinkedIn account.***