**Project Roadmap: Job Scraper & Notifier**

We will break the project into structured phases to ensure clarity:

1️⃣ **Project Setup** – Install dependencies and set up the environment.  
2️⃣ **Web Scraping** – Extract job listings from websites using BeautifulSoup or Selenium.  
3️⃣ **Data Storage** – Save job listings in CSV/JSON format.  
4️⃣ **Data Processing & Filtering** – Use pandas and NumPy to clean and process the data.  
5️⃣ **Email Notifications** – Send job updates to users based on their preferences.  
6️⃣ **Automation & Scheduling** – Automate the script to run at specific intervals.  
7️⃣ **(Optional) Database Integration** – Store job data in SQLite/PostgreSQL for better management.  
8️⃣ **(Optional) Web Interface** – Build a simple Flask/Django web app for user interaction.

I will provide documentation for each phase, including code snippets and explanations. Let’s start

### ****Step 1: Project Setup****

1. **Install Required Libraries:**  
   Open a terminal and install the dependencies:

pip install requests beautifulsoup4 selenium pandas numpy smtplib schedule

* + requests: Fetch webpage content.
  + beautifulsoup4: Parse HTML for web scraping.
  + selenium: Automate browser interaction (for JavaScript-heavy pages).
  + pandas: Process job data efficiently.
  + numpy: Handle numerical operations if needed.
  + smtplib: Send email notifications.
  + schedule: Automate job scraping at intervals.

**Step 2: Set Up a Project Directory:**

* Create a folder for the project:

mkdir job\_scraper\_notifier && cd job\_scraper\_notifier

* Inside, create Python files:

touch scraper.py data\_processing.py email\_sender.py main.py

**Step 3. Test Environment Setup:**

* Create a test script (test.py) and check if everything is installed properly:

import requests

import pandas as pd

import numpy as np

from bs4 import BeautifulSoup

import smtplib

import schedule

print("All libraries installed successfully!")

* Run it:

python test.py

https://chatgpt.com/share/67a1a103-e89c-8011-b004-02ffe0681b9f