API Automation Script

This project automates the process of fetching country data using a GraphQL API, posting selected country details to a REST API, and saving the data to a CSV file. It includes robust error handling and uses JavaScript for implementation.

Features

- Fetches data from a GraphQL API.

- Posts data to a REST API.

- Handles HTTP errors like 403 Forbidden and 500 Internal Server Error with logging and retry mechanisms.

- Saves country details into a CSV file.

- Fully automated workflow.

Approach

1. **Fetching Data**:
   o The script queries the Countries GraphQL API to retrieve country data, including names, capitals, and currencies.
2. **Posting Data**:
   o The first country's details are posted to the REST API at https://jsonplaceholder.typicode.com/posts with the required payload format.
3. **Error Handling**:
   o Handles 403 Forbidden by skipping the request.
   o Handles 500 Internal Server Error by implementing an exponential backoff retry mechanism.
   o Log all errors to the console.
4. **Data Saving**:
   o All fetched country data is saved to a CSV file named countries.csv.
5. **Automation**:
   o The script automates the entire workflow, chaining data fetching, processing, posting, and saving.

Prerequisites

- **Node.js**: Ensure you have Node.js (v14 or above) installed on your system.
- **Dependencies**: The script uses node-fetch for API requests and fs for file handling.

Installation and Usage

1. Clone or Copy the Script

Save the script as **script.js**.

2. Install Dependencies

Run the following command to install the required package:

npm install node-fetch@2

3. Run the Script

Execute the script using Node.js:

node script.js