Programming for AI

Lab

Task 7



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Technology

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Flask News Application Documentation

Overview

This Flask application fetches and displays news articles about Tesla using the NewsAPI. The application retrieves news articles dynamically and renders them in an HTML template.

Prerequisites

Ensure you have the following installed:

- Python 3.x
- Flask
- Requests library

API Key Requirement

This application uses NewsAPI to fetch articles. You need a valid API key from <u>NewsAPI</u>. Replace the placeholder key in the script with your own API key.

Code Explanation

Importing Dependencies

from flask import Flask, render template

import requests

- Flask: The web framework used for the application.
- render template: To render HTML templates.
- requests: To send HTTP requests and fetch news data.

Initializing Flask App

```
app = Flask( name )
```

Creates an instance of the Flask application.

API Configuration

```
NEWS_API_KEY = 'your_api_key_here'

Artical_API = 'https://newsapi.org/v2/everything?q=tesla&from=2025-02-19&sortBy=publishedAt&apiKey='
```

• NEWS API KEY: Stores the API key required for NewsAPI.

• Artical_API: Base URL for fetching Tesla-related news.

Defining Routes

```
@app.route('/', methods=['GET'])
def News():
    parameter = f" {Artical_API} {NEWS_API_KEY}"
    response = requests.get(parameter)
    data = response.json()
    return render_template("index.html", articles=data.get("articles", []))
```

- The News function sends a GET request to the NewsAPI endpoint.
- The JSON response is extracted and passed to the index.html template for rendering.