News Pulse Global News Trend Analyzer Using AI

Project Overview

Objective: Build an Al-powered platform that collects, analyzes, and visualizes global news trends in realtime.

Approach: Use Natural Language Processing (NLP) and Machine Learning for: Trending entities & topics

- Sentiment analysis Geographical insights
- Impact: users to understand emerging global narratives

at a glance. Simplify information overload and provide actionable insights.



Purpose: Collect news data from global news sources (APIs, RSS feeds, or scraping)

Module 1: Data Collection

Source: Structured news data including title, source, summary for further AI analysis.

Tools & Tech Stack:

APIs: GNews Backend Programming: Python (Flask, Flask CORS)

Frontend: Basic Html

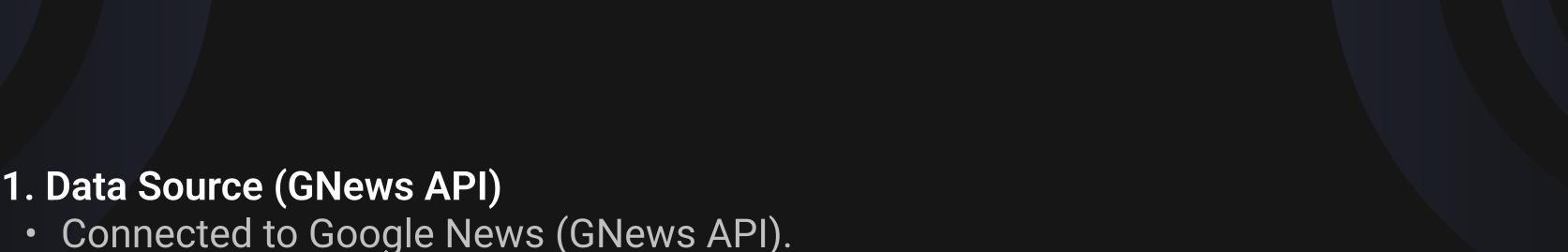
Database: MySQL

Python Code

Workflow:

Data Source

(GNews)



Libraries & SDKs

Sources

Contact

Data

collection in

MySQL

Frontend

Code for UI

(basic html)

Final Output

(Latest News

Data)

Get API key

Sign in

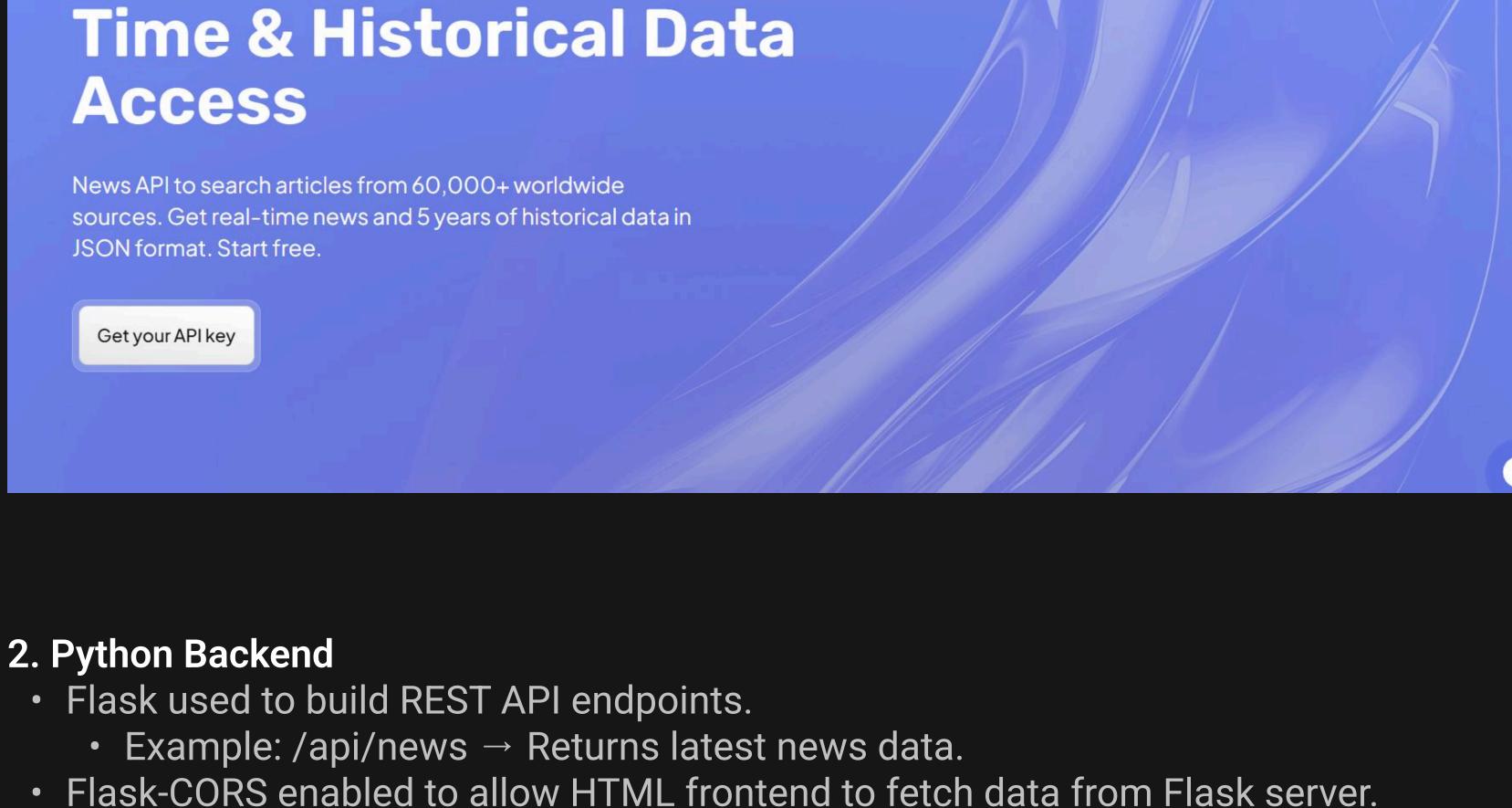
G GNews Documentation

- Fastest News API for Real-

Fetched latest global news in JSON format.

Extracted fields: title, source, summary, date, time & URL.

Pricing



Tech Stack:

Python.py > search_news

from flask import Flask, request, jsonify

Fetched news from GNews API.

Flask, Flask-CORS, mysql.connector, requests, json

API served data directly from DB → JSON.

Stored structured data in MySQL DB (news_data table).

Fetch News Function

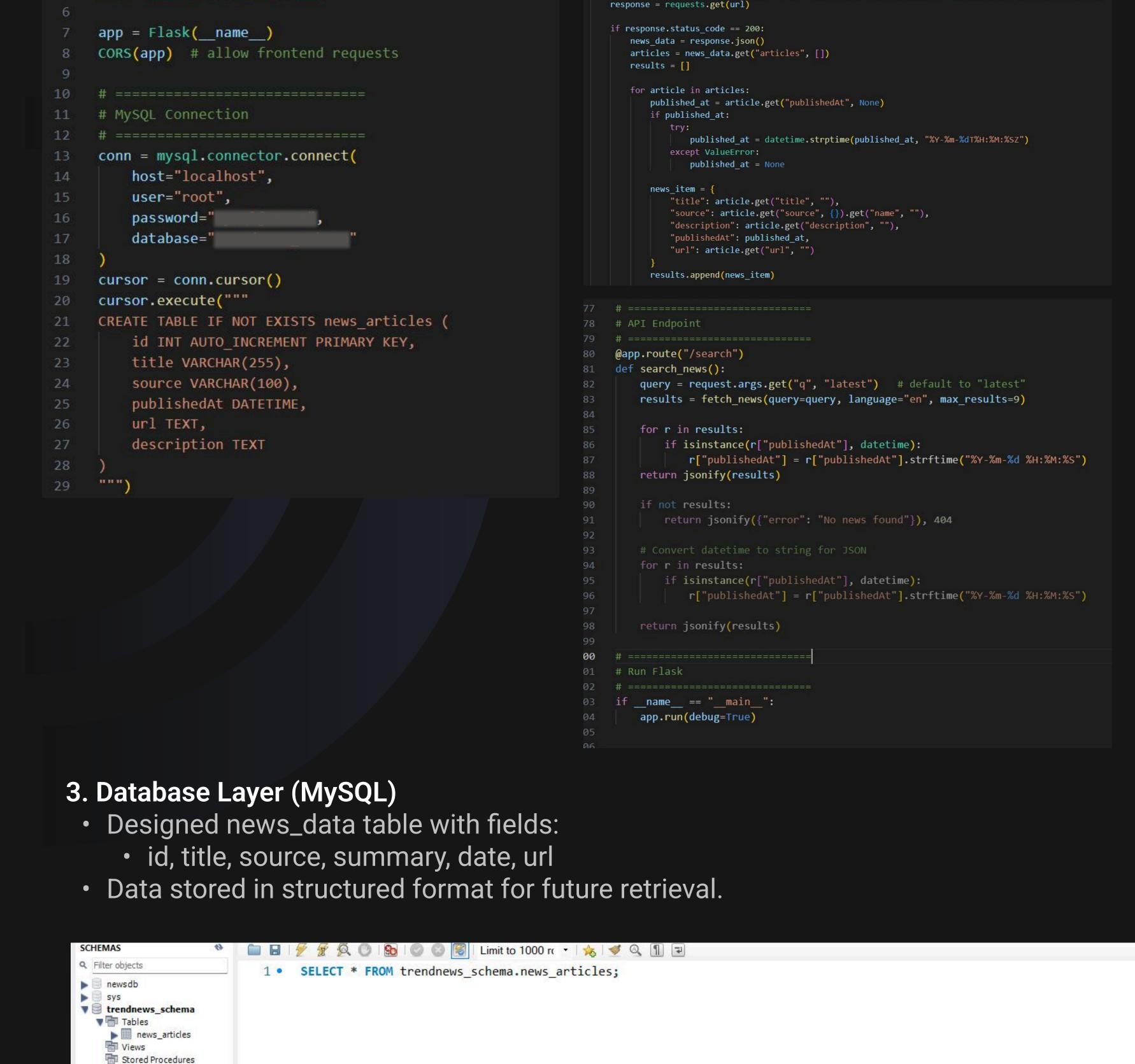
def fetch news(query="latest", language="en", max results=10):

url = f"https://gnews.io/api/v4/search?q={query}&lang={language}&max={max_results}&apikey={api_key}'

import requests import mysql.connector from datetime import datetime

from flask cors import CORS

MySQL Connection:



Edit: 🕍 🖶 | Export/Import: 🖫 🐻 | Wrap Cell Content: 🔣

source

PM Modi backs US President Donald T... The Economic Ti... 2025-09-30 18:43:00

Probe begins after children die of 'toxi... The Economic Ti... 2025-09-30 18:42:00

Fans go wild as Deepti Sharma's all-ro... The Cricket Times 2025-09-30 18:45:03

Indian Cricket's gen-next are fast bec... The Economic Ti... 2025-09-30 18:29:00

publishedAt

2025-09-30 18:43:00

2025-09-30 18:41:00

2025-09-30 18:29:20

2025-09-30 18:23:59

2025-09-30 18:23:25

2025-09-30 18:29:20

2025-09-30 18:23:59

2025-09-30 18:23:25

2025-09-30 18:04:00

2025-09-30 18:02:00

2025-10-02 05:40:23

2025-10-02 05:09:13

url

https://economictimes.indiatimes.co...

https://economictimes.indiatimes.co...

description

Prime Minister Narendra Modi welcom...

India's drug regulator is investigating ...

https://timesofindia.indiatimes.com/g... Goa News: Panaji: Tajikistan provides...

https://www.india.com/sports/deepti-... Deepti Sharma used her experience ...

https://crickettimes.com/2025/09/fa... India began their ICC Women's Worl...

https://www.hindustantimes.com/cri... India overcame a shaky start to win t...

https://economictimes.indiatimes.co... With Virat Kohli and Rohit Sharma reti...

https://www.lokmattimes.com/cricke... India Women Begin ICC World Cup 2...

https://www.devdiscourse.com/articl... In a thrilling cricket match, India defe...

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https://www.devdiscourse.com/articl... In a thrilling cricket match, India defe...

https://timesofindia.indiatimes.com/b... India Business News: Mumbai: India I...

https://timesofindia.indiatimes.com/b... India Business News: MUMBAI: Global ...

https://timesofindia.indiatimes.com/s... International Sports News: UFC faces ...

https://timesofindia.indiatimes.com/s... Science News: The European Space ...

https://www.hindustantimes.com/wo... The Global Sumud Flotilla, carrying se...

https://timesofindia.indiatimes.com/w... Europe News: A Russian strike on Sla...

https://timesofindia.indiatimes.com/w... Middle East News: The Israeli navy int...

https://timesofindia.indiatimes.com/w... Pakistan News: Pakistani Senator Mus...

https://www.lokmattimes.com/entert... Here's why Priyanka Chopra is thanki...

9 India Clinches Victory Against Sri Lank... Devdiscourse 10 Fans go wild as Deepti Sharma's all-ro... The Cricket Times 2025-09-30 18:45:03 11 World Cup: Deepti, Amanjot help Indi... Hindustan Times 12 Indian Cricket's gen-next are fast bec... The Economic Ti... 2025-09-30 18:29:00 13

Functions

30

<input</pre>

type="text"

id="searchInput"

News Pulse

change

TRENDING TOPICS

Elizabeth Taylor Lyrics

India Vs West Indies

Schwarzenegger's 'action hero'

pope says don't give up on climate

Rest of World News: Pope Leo XIV urged people

</button>

<section class="bg-white py-6 shadow-sm">

<div class="max-w-xl mx-auto relative">

<main class="max-w-6xl mx-auto mt-8 px-4">

placeholder="Search trending news..."

♥

Start typing and press Enter to search for news...

<div id="newsContainer" class="grid gap-6 sm:grid-cols-2 lg:grid-cols-3">

<button

India Women Begin ICC World Cup 2... Lokmat Times 14 India Clinches Victory Against Sri Lank... Devdiscourse Administration Schemas 15 Indian corporates weather global hea... Times of India Information Air cargo demand extends growth str... Times of India 16 17

title

id

2

5

23

24

Top 10 shocking facts about modern... Times of India 2025-09-30 18:00:00 18 India is a strategic space power we w... Times of India 2025-09-30 17:33:00 No object selected 19 Italy's navy to stop Gaza flotilla amid r... Hindustan Times 2025-09-30 16:52:40 20 long blackout at Chornobyl nuclear pl... Times of India 2025-10-02 06:32:00 21 Water cannons, deportations, global ... Times of India 2025-10-02 06:19:00 22 Israel intercepts boats carrying Gaza ... Times of India 2025-10-02 05:57:00

Here's why Priyanka Chopra is thanki... Lokmat Times

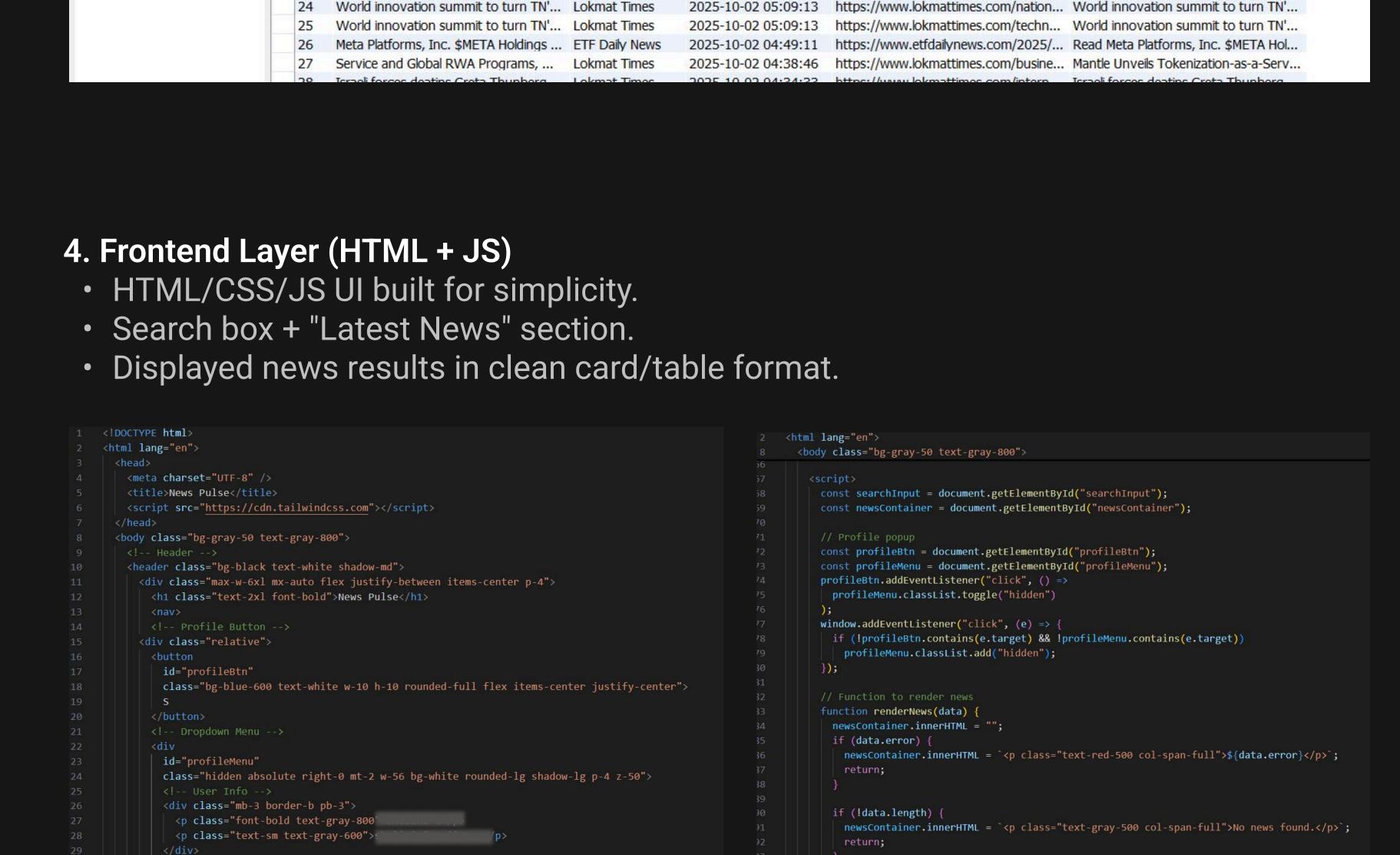
World innovation summit to turn TN'... Lokmat Times

ACL2: FC Goa target first win against ... Times of India

Deepti Sharma's all-round brilliance p... India.com

World Cup: Deepti, Amanjot help Indi... Hindustan Times

India Women Begin ICC World Cup 2... Lokmat Times



data.forEach(news => {

<body class="bg-gray-50 text-gray-800">

day: "numeric", hour: "numeric",

minute: "2-digit", hour12: true

newsContainer.innerHTML +=

// Format published time with AM/PM

t nublished = news nublishedA

function renderNews(data) {

data.forEach(news => {

<html lang="en">

const published = news.publishedAt

? new Date(news.publishedAt).toLocaleString("en-US", {

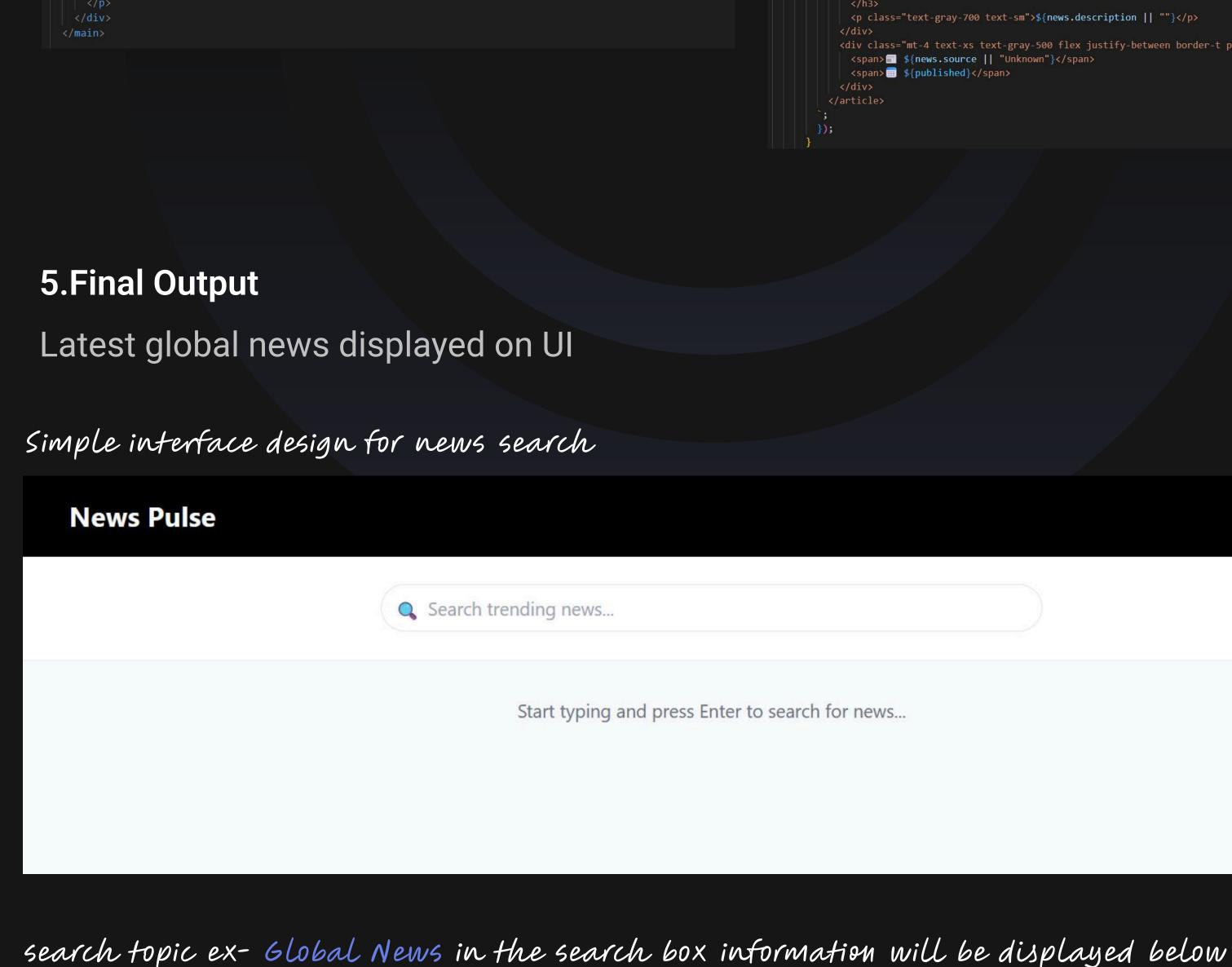
<h3 class="font-bold text-lg text-blue-700 mb-2">

\${news.title}

\${news.description || ""}

? new Date(news.publishedAt).toLocaleString("en-US", {

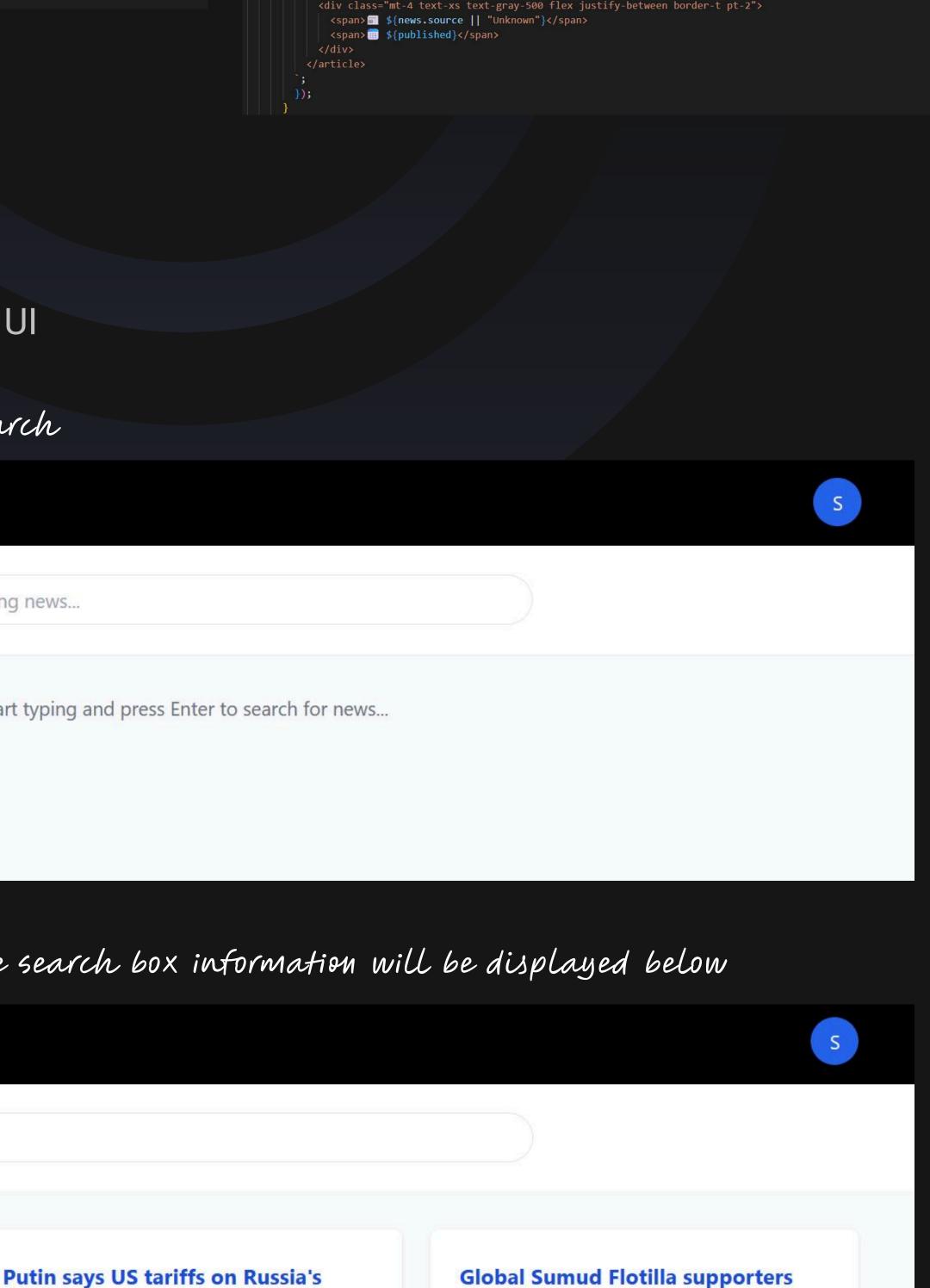
<article class="bg-white p-6 rounded-lg shadow hover:shadow-lg transition flex flex-col justify-between">



Global News

class="w-full text-left px-3 py-2 rounded hover:bg-gray-100 text-gray-800">

class="w-full pl-10 pr-4 py-2 border rounded-full focus:outline-none focus:ring-2 focus:ring-blue-600"



rally around the world

Supporters of the Global Sumud Flotilla took to

Deadly rampage at Michigan

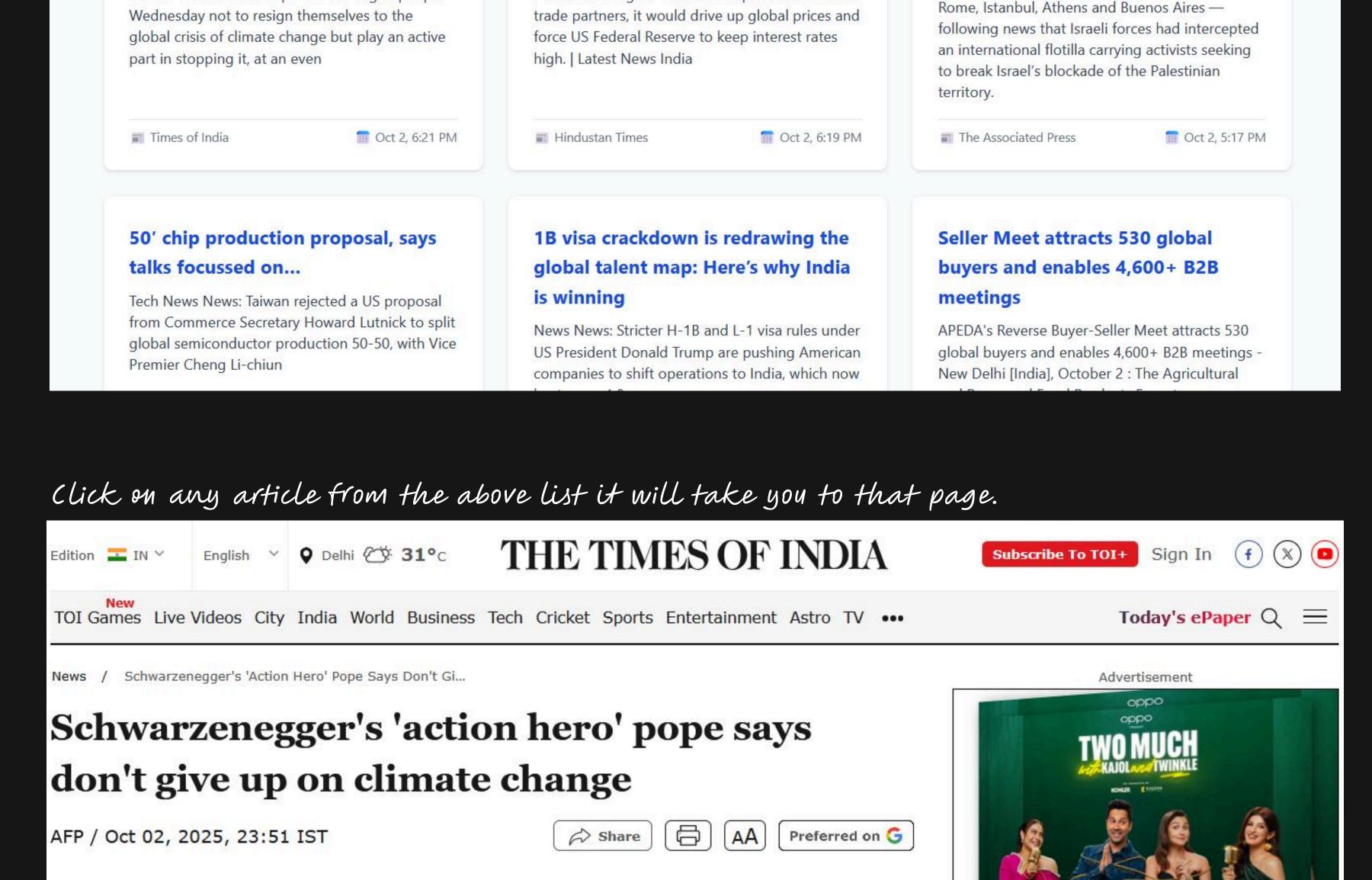
Mormon church by ex Marine

Massive crowd surge and the

horror that unfolded in Karur

Photos

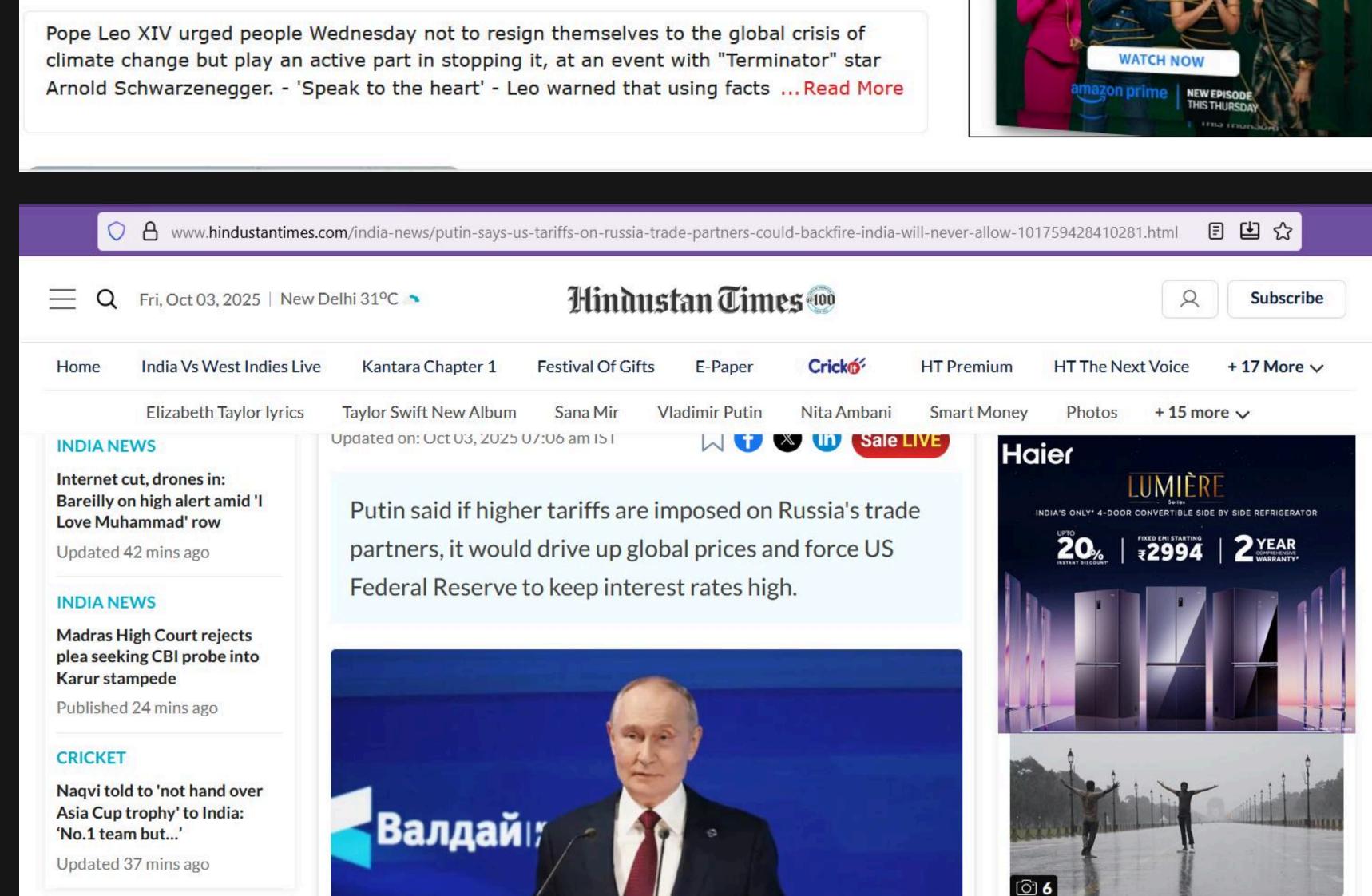
the streets in several major cities — including



trade partners could backfire: 'India

Putin said if higher tariffs are imposed on Russia's

will never allow...'



Валдай Весерования

annual international conference in Sochi, Russia.(via REUTERS)

Russia's President Vladimir Putin delivers a speech during the Valdai Discussion Club