INSIGHT STREAM:NAVIGATE THE NEWS LANDSCAPE

Project Documentation

1.Introduction

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2. PROJECT OVERVIEW

To develop a dynamic and intelligent news platform that helps users navigate today's overwhelming and often polarized news ecosystem by offering context, credibility indicators, and personalized insights.

Features:

• Political bias meter (left, center, right) for each article/source.

• Source reliability rating based on third-party audits (e.g., Media Bias/Fact Check).

• Fact-check tag integration (e.g., PolitiFact, Snopes).

• AI-driven bias detection for subtle framing or emotional language.

3.Architecture:

Assuming its goal is something like:

•   Collect & stream news from many sources

•   Process and "navigate" through them: filter, classify, cluster, visualize, find insights/trends

- Possibly personalised or thematic (topics, geography, bias, ownership)

- Provide UI/UX to explore the "news landscape" in real time or for historical time

Step of instruction

- Trend detection: e.g. automatically detect sudden rises in topic mentions, detect events

- Bias / source comparison: how different outlets cover same event (tone, sentiment, framing)

- Topic drift over time: how a topic evolves

- Credibility scoring: integrate fact-checking or use external databases

- Summarization: generate short summaries or "TL;DR"s for clusters of articles

- User personalization: recommending based on reading history, topics of interest

Folder structure

Gitinore

Package

Package-lock

README

Public

Favicon

Index

Logo192

Logo512

Manifest

Robots

Src

App

App.js

App.test.js

index

index.js

logo

reportWebVitals.js

setupTests.js

components

context

pages

styles

6.running the application

Frontend

Npm start

Runs the development server locally

7.component documentation

- Connect to APIs (RSS feeds, newswire APIs, social platforms).

- Handle scraping when APIs are unavailable.

- Normalize input formats.

- Push raw content into message queues for downstream processing.

8.statement management

- Managing the lifecycle of news articles ("statements" of information).

- Includes ingestion, storage, updates, versioning, archiving.

- Ensures traceability of each news item → source, date, transformations applied

9.user interface

- Trend graphs: topic popularity over time.

- Geo maps: where events are happening, source country.

- Network graphs: relationships between entities, sources, events.

- Sentiment timelines: public mood on a topic.

10.styling

Css framework/libraries:tailwind CSS for styling;styled components for custom themes.

Theming:supports light/dark theme toggle for better user experience.

11.testing

Testing strategy:

Unit testing with jest,component testing with react testing library, and end to end testing with cypress.

Code coverage:

Ensuring adequate test coverage with jest reports.