Front-End Development with React.js

  Title: InsightStream: Navigate the News Landscape

Project Documentation

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1. Project Overview

InsightStream is a news aggregation and analysis platform. It collects articles from multiple sources, organizes them, and provides tools for easy navigation, filtering, and insights. The goal is to help users stay informed without being overwhelmed by scattered news.

2. Features

🔍 News Aggregation – Fetches news from multiple sources (APIs, RSS, web scraping).

📰 Categorization – Sorts news into categories like Politics, Tech, Sports, Health, etc.

🏷️ Tagging & Filtering – Search and filter by keyword, source, or date.

📊 Insights Dashboard – Shows trending topics and sentiment analysis.

🌙 User-Friendly UI – Clean interface with dark/light mode.

📱 Responsive – Works on desktop and mobile.

3. Architecture

InsightStream follows a modular architecture:

1. Frontend (React.js) – Displays news feed, filters, and insights dashboard.

2. Backend (Node.js) – Handles API requests, authentication, and data processing.

3. Database (MongoDB ) – Stores articles, categories, user preferences.

4. News Fetcher Service – Periodically collects news via APIs/RSS.

5. NLP/Analysis Module – Extracts keywords, performs sentiment analysis, and identifies trends.

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4. Setup Instructions

Prerequisites

Node.js

Python

MongoDB

Git

5.Steps

1. Clone repository

Git  <https://github.com/nivi2167-bot/InsightStream-project>

2. Install backend dependencies

cd backend

npm install

3. Install frontend dependencies

cd frontend

npm install

4. Run backend

cd backend

npm run dev

5. Run frontend

cd frontend

npm run dev

6. Open in browser: [http://localhost:3000](http://localhost:3000/)

Folder Structure

insightstream/

│── backend/

│   ├── src/

│   │   ├── controllers/

│   │   ├── models/

│   │   ├── routes/

│   │   └── services/

│   └── server.js

│

│── frontend/

│   ├── components/

│   ├── pages/             │   ├── styles/

│   └── utils/

│

│── docs/

│── scripts/

│── .env.example/           │── README.md

Conclusion:

InsightStream makes it easy to navigate today’s fast changing news landscape.By combining multiple source,smart filtering,and Insights,it helps user quickly find trustworthy and revelant information.Its modular design ensure flexibility,scalability and ease of use both developers and End users.