

INTRODUCTION

Project Title: Insight Stream – Navigate the News Landscape

Team ID: NM2025TMID30302

Team Leader: A.KANIMOZHI & kanimozhihs98@gmail.com

Team members: N.DURGADEVI

N.HEMA

V.HEMAVATHI

V.KANIMOZHI

PROJECT OVERVIEW

The Insight Stream Project is a news navigation and analysis platform developed as part of the Naan Mudhalvan initiative. In today's digital age, information is abundant but often unstructured. This project aims to provide a structured, real-time, and user-friendly interface to access and analyze news.

The project is built using Node.js for backend development and Visual Studio Code (VS Code) as the primary development environment. By integrating APIs, databases, and modern web technologies, the system ensures that users can navigate the news landscape effectively.

Tools & Technologies

Visual Studio Code (VS Code): Code editor used for project development.

Node.js: Backend JavaScript runtime environment.

Express.js: Framework for handling server-side routing.

MongoDB/MySQL: Database for storing and managing news data.

News APIs / RSS Feeds: For fetching live news updates.

Git & GitHub: Version control and collaboration.

FEATURES OF THE PROJECT

News Categorization: Groups news into sections like Politics, Sports, Technology, Health, etc.

Search and Filter Options: Users can find specific news topics.

Real-Time Updates: Displays latest news fetched from APIs.

User-Friendly Interface: Clean, responsive design for smooth navigation.

Scalable Backend: Powered by Node.js for performance and flexibility.

EXPECTED OUTCOMES

A functional platform that helps users navigate news efficiently.

Hands-on learning of Node.js development, database handling, and API integration.

Improved team collaboration and state management skills.

Exposure to real-world project development using VS Code.

BENIFITS

Provides structured access to daily news.

Enhances practical coding skills for students.

Encourages critical thinking about news and media content.

Creates a foundation for future enhancements like AI-based analysis.

FUTURE ENCHACEMENT

Personalized Recommendations: Suggest news based on user interest.

AI-based Sentiment Analysis: Classify news as positive, negative, or neutral.

Mobile Application Support: Build a cross-platform app for accessibility.

Multilingual Support: Deliver news in multiple Indian languages.

STATE MANAGEMENT

Local state

Handles UI elements such as search inputs and filters.

Stores temporary user interactions.

Global state

Manages application-wide data like fetched news and categories.

Ensures consistency across multiple components.

COMPOUND DOCUMENTATION

News Fetching Component: Retrieves data from APIs.

Filter Component: Allows keyword and category-based filtering.

Display Component: Renders structured news content.

Database Component: Stores historical data for analytics.

SETUP INSTRUCTIONS

1. Install VS Code on your system.
2. Install Node.js and verify using `node -v`.
3. Clone the project repository using `git clone`.
4. Run `npm install` to install dependencies.
5. Configure API keys for fetching news.
6. Start the server using `node index.js` or `npm start`.
7. Open `http://localhost:3000` in your browser to access the app.