Project Documentation

1. Introduction

Project Title: Insight Stream: Navigate the News Landscape

Team ID: NM2025TMID36739

Team Leader: [S.PREETHIKA ishukavi0711@gmail.com]

Team Members:

– [pragadeshwari.R pragadeshwari14@gmail.com]

– [nivetha.C [nivethanivetha1332@gmail.com](mailto:nivethanivetha1332@gmail.com)]

\_[ramya.B ramyaaruni1512@gmail.com]

2. Project Overview

Purpose:

Insight Stream is designed to help users navigate the modern news landscape by filtering, categorizing, and presenting credible news sources.

Features:

– News aggregation from multiple sources

– AI-powered credibility analysis

– Category-based filtering (Politics, Technology, Health, etc.)

– Personalized dashboards

– Fake news detection alerts

3. Architecture

Frontend: React.js with Material UI and Bootstrap for user interface

Backend: Node.js and Express.js for APIs and data management

Database: MongoDB for storing news articles, user data, and analytics

External APIs: Integration with news APIs (e.g., NewsAPI, RSS feeds)

4. Setup Instructions

Prerequisites:

– Node.js

– MongoDB

– Git

– React.js

Installation Steps:

1. Clone repository

2. Install client dependencies (cd client && npm install)

3. Install server dependencies (cd server && npm install)

4. Configure environment variables (API keys, DB connection)

5. Folder Structure

InsightStream/

|-- client/ # React frontend

| |-- components/

| |-- pages/

|-- server/ # Node.js backend

| |-- routes/

| |-- models/

| |-- controllers/

6. Running the Application

Frontend: cd client && npm start

Backend: cd server && npm start

Access: Visit http://localhost:3000

7. API Documentation

User:

– /api/user/register

– /api/user/login

News:

– /api/news/latest

– /api/news/category/:id

Analytics:

– /api/insight/trends

8. Authentication

JWT-based authentication for secure login

Middleware for protecting private routes

9. User Interface

Landing Page

Personalized News Dashboard

Category-based Filters

Admin Panel

10. Testing

Manual testing during development

Tools: Postman, Chrome Dev Tools

11. Screenshots or Demo

(To be added after implementation)

12. Known Issues

Limited API request quotas

Some bias detection algorithms need improvement

13. Future Enhancements

Advanced AI-based fake news detection

Multi-language news support

Mobile app version

---