

Project Documentation:

Project Title:InsightStream Navigate The News Landscape

1.Introduction:

- Project Title: InsightStream: Navigate The News Landscape •
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2.Project Overview:

Purpose:

InsightStream is a web-based news aggregation and recommendation platform.

It allows users to explore trending news, filter by categories, save articles, and personalise their News feed for a streamlined reading history

Features:

- Browse latest news by category (Politics, Tech, Sports, Entertainment, etc.)
- Search news by keywords
- Save favorite articles for later reading
- Personalized recommendations based on reading history •

Responsive, modern UI

3. Architecture:

- Frontend: React.js with Tailwind CSS / Bootstrap
- Backend: Node.js / Express (REST API)
- Database: MongoDB (for users, saved articles, preferences) •

External API: News API (for real-time news articles)

4. Technologies Used:

- React.js
- Node.js / Express

- MongoDB
- Tailwind CSS / Bootstrap
- News API
- Git & VS Code

5.Installation Steps:

#Clone the project

```
git clone https://github.com/your-repo/InsightStream.git
```

```
cd InsightStream
```

#Install dependencies

```
npm install
```

#Start the React frontend

```
npm run dev
```

In a separate terminal (backend):

```
cd server
```

```
npm install
```

```
npm start
```

Access at: <http://localhost:5173>

6.Folder Structure:

InsightStream/

- -- client/ # Frontend (React)
- ■ -- src/
- ■ -- assets/ # Images, icons
- ■ -- components/
- ■ -- pages/
- ■ -- App.jsx
- ■ -- main.jsx
- -- server/ # Backend (Node.js + Express)
- ■ -- routes/
- ■ -- models/
- ■ -- controllers/
- ■ -- server.js
- -- README.md

7. Running the Application:

- Frontend:

npm run dev

- Backend:

npm start

- Access: <http://localhost:5173>

8.API Documentation:

Articles:

- GET /api/articles → Get all articles
- GET /api/articles/:id → Get article by ID
- POST /api/articles/save → Save article
- DELETE /api/articles/:id → Delete saved article

Users:

- POST /api/users/register → Register new user
- POST /api/users/login → Login
- GET /api/users/:id → Get user details

Recommendations:

- GET /api/recommendations/:userId → Get personalized news feed

9.Authentication:

- Implemented using JWT (JSON Web Token)
- Passwords stored securely with hashing

10.User Interface:

- Landing Page (Trending News)

- Sidebar Navigation (Categories: Tech, Sports, etc.) • Article

Cards (title, image, description, source, save button)

- Personalized Feed (AI-driven recommendations)

- Saved Articles Page

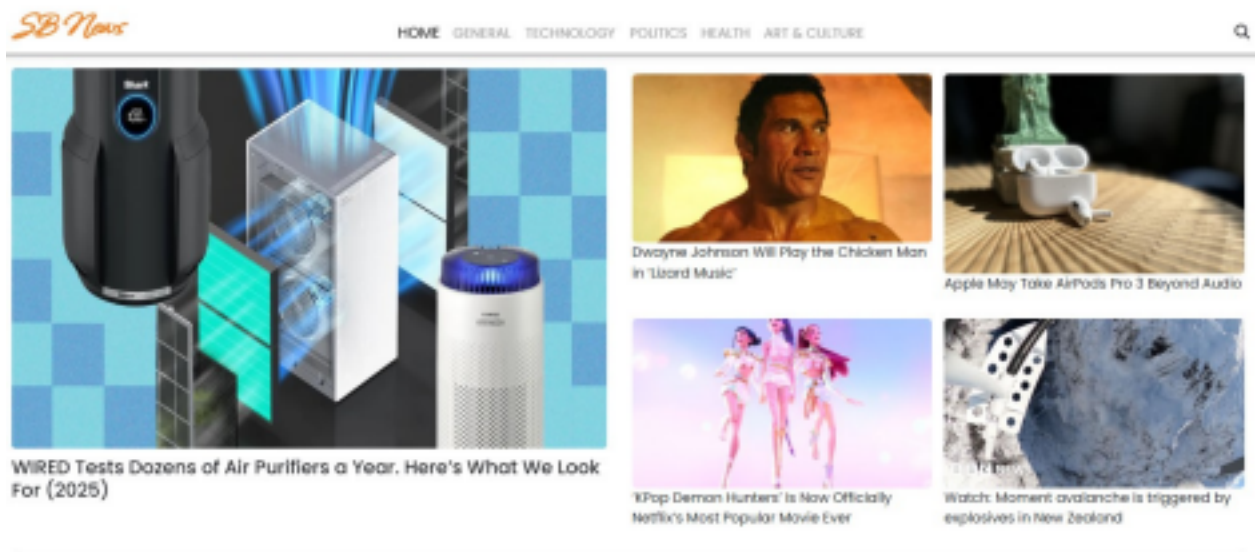
11.Testing:

- Manual Testing: Verified news fetching, search, and article saving •

Tools: Postman, Chrome Dev Tools, MongoDB Compass

12.Screenshots:

- Homepage:



- General:

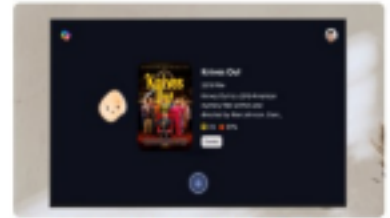
general



This Robot Only Needs a Single AI Model ...



Farage puts spotlight on Labour woes at ...



Microsoft's Copilot AI is now inside Sam...



• Technology:

technology



Dolby Atmos FlexConnect Lets You Place S...



How China's Propaganda and Surveillance ...



Musk Stakes Tesla Future on One Major Ga...



• Politics:

politics



Chris Mason: How Polanski's Green leader...



Seven claims made in new royal book from...



Elon Musk's gangster tech regulation com...



NEWS



NEWS



13.Known Issues:

- API request limits with free News API key
- Basic personalization model (not fully AI-driven yet)
- Saved articles only accessible online

14.Future Enhancements:

- Advanced AI-based recommendations (NLP sentiment analysis) •

Mobile App (React Native)

- Offline reading mode
- Multi-language news support
- Push notifications for breaking news