Navigate the News Landscape Project Documentation

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# 1. Project Title

Navigate the News Landscape – InsightStream

# 2. Project Overview

Purpose:  
InsightStream is a revolutionary web application designed to redefine how people discover and consume news. It offers an intuitive interface, dynamic search, and a vast range of news categories for all types of users.  
  
Features:  
- Intuitive user interface for seamless navigation  
- Dynamic search functionality for quick access to news  
- Categorized news sections for diverse interests  
- Real-time updates to keep users informed  
- Personalized news recommendations based on user preferences

# 3. Architecture

- Frontend: React.js with Bootstrap and Material UI  
- Backend: Node.js and Express.js handling server logic and API endpoints  
- Database: MongoDB for storing user data, news articles, and preferences

# 4. Setup Instructions

Prerequisites:  
- Node.js  
- MongoDB  
- Git  
- React.js  
- Express.js  
- Mongoose  
- Visual Studio Code  
  
Installation Steps:  
1. Clone repository: git clone [repository-url]  
2. Install client dependencies:  
 cd client  
 npm install  
3. Install server dependencies:  
 cd ../server  
 npm install

# 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 application via: http://localhost:3000

# 7. API Endpoints

- User Registration & Login:  
 - POST /api/user/register  
 - POST /api/user/login  
  
- News Articles:  
 - GET /api/news  
 - GET /api/news/:id  
  
- User Preferences:  
 - GET /api/preferences  
 - POST /api/preferences

# 8. Authentication

- JWT-based secure authentication  
- Middleware protects private routes

# 9. User Interface

- Landing Page  
- News Dashboard  
- Article Details Page  
- User Profile and Preferences

# 10. Testing

- Manual testing during milestones  
- Tools: Postman, Chrome Dev Tools

# 11. Future Enhancements

- Integration with third-party news APIs  
- Advanced search filters and sorting options  
- User-generated content and comments  
- Mobile application development