

# Project Documentation

## A5B news

### 1. Introduction

- **Project Title:** InsightStream:Navigate The News Landscape

- **Team ID :** NM2025TMID40261

- **Team Leader:** Umasankari.G (hyntaff@gmail.com)

- **Team Members:**

- 1.Bharathi.V (bharathiv714@gmail.com)

- 2. Sherinprincy.M (msherinprincym@gmail.com)

- 3. Ashwini.P.S(pydiaswinips@gmail.com)

### 2. Project Overview

- **Purpose:** A5B News is a web application built using the MERN stack (MongoDB, Express, React, Node.js). It serves as a platform to display news articles from various categories and

- Features :** User registration and login system

- allows administrators to manage the content through an admin panel.
  - Admin panel to create, update, and delete news articles
  - View, search, and read news articles
  - User profile management

### 3. Architecture

- **Frontend:** React.js with Bootstrap and Material UI
- **Backend:** MongoDB stores user data, project information, applications, and chat messages
- **Database:** Node.js and Express.js managing server logic and API endpoints

### 4. Setup Instructions

- **Prerequisites:**

- Node.js
  - MongoDB

- Git
- Express.js - Mongoose - Visual Studio Code
- React.js

### Installation Steps:

- # Clone the repository git clone

client npm install

# Install server dependencies cd

../server npm install

## 5. Folder Structure

```
uma/
|-- client/           # React frontend
|   |-- public/
|   |-- src/
|       |-- components/
|       |-- pages/
|-- controllers/      # Backend logic
|-- models/           # Database schemas
|-- routes/           # API routes
`-- index.js          # Backend server entry point
```

## 6. Running the Application

### • Frontend:

cd client

npm start

### Backend:

cd server

start npm

- **Access:** Visit <http://localhost:3000>

## 7. API Documentation

### • User:

- /api/user/register
- /api/user/login

### • Projects:

- /api/projects/:id • **Applications:** /api/apply
- /api/projects/create

- **Chats:**

- 
- /api/chat/send  
/api/chat/:userId

## 8. Authentication

- JWT-based authentication for secure login
- Middleware protects private routes

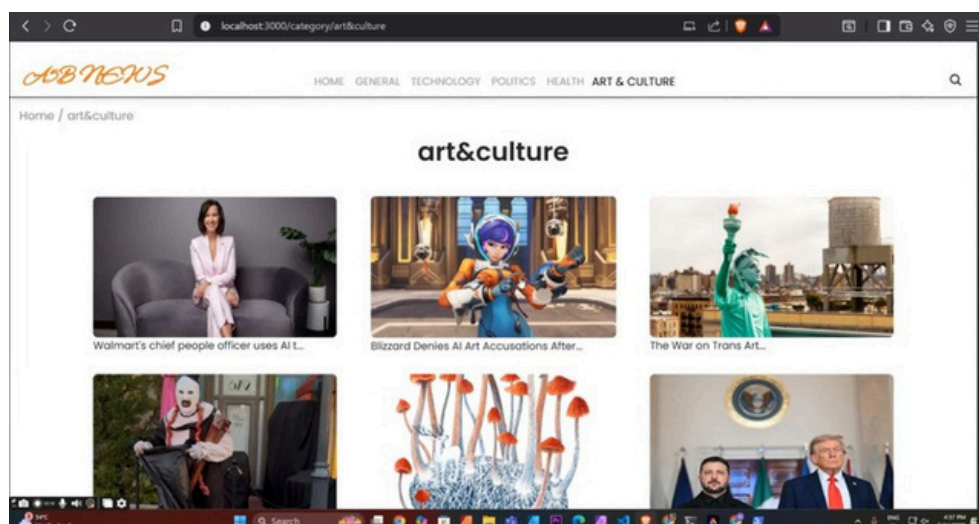
## 9. User Interface

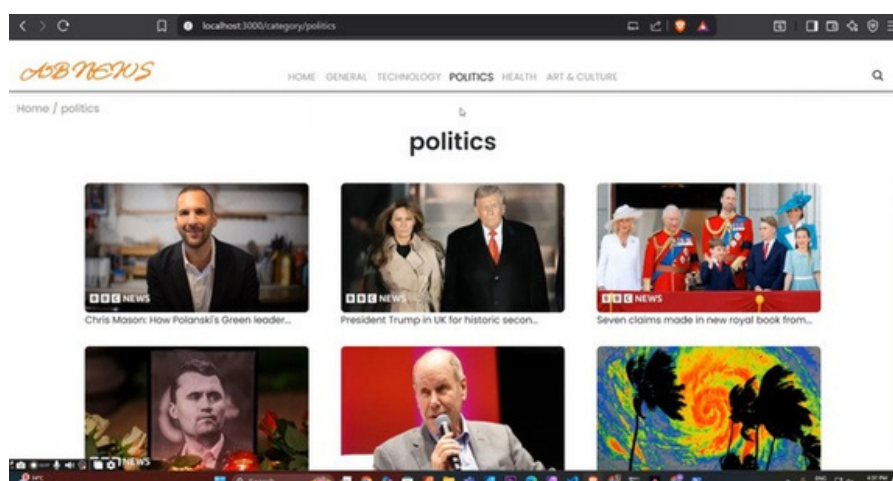
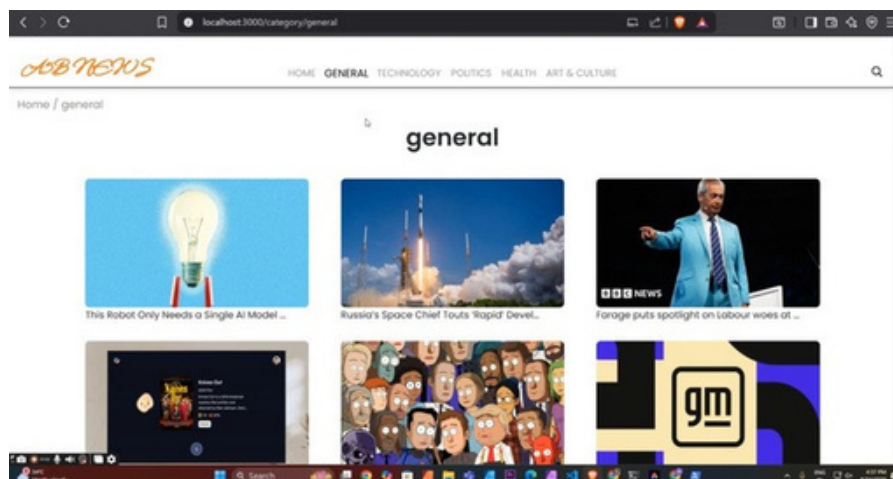
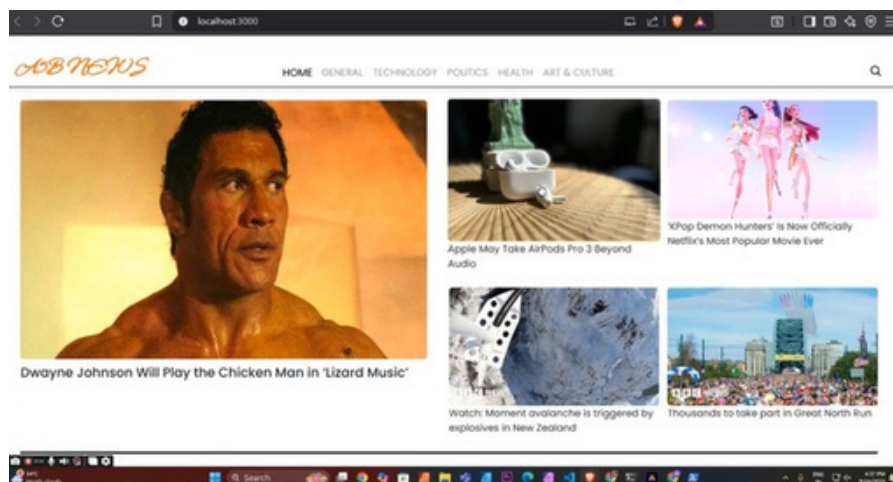
- Landing Page
- Freelancer Dashboard
- Admin Panel
- Project Details Page

## 10. Testing

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

## 11. Screenshots or Demo :





## 12. Known Issues:

- 
- 
- User Interface & Experience:
  - The application may not be fully responsive across all device sizes (e.g., mobile phones, tablets, and desktops).
  - User feedback for actions like successful login or failed post creation might be missing or unclear.
  - The user session may not persist after a page refresh, requiring the user to log in again.
- Functionality:
  - The search feature could be case-sensitive or may not handle partial words or special characters correctly.
  - Error handling might be incomplete; for instance, if the database connection fails, the application might crash instead of showing a user-friendly error message.
- Security & Validation:
  - Input fields (like registration forms or comment sections) may lack sufficient validation, potentially allowing for invalid data submission.

## 13. Future Enhancement :

- 
- User-Focused Features:
  - Article Bookmarking: Allow logged-in users to save or bookmark articles to read later, which would be accessible from their profile.
  - Advanced User Profiles: Expand user profiles to include options for a profile picture, a short biography, and a view of their activity (e.g., articles posted by them if they are an author).
  - Social Sharing: Implement buttons on article pages to allow users to easily share news on social media platforms like X (formerly Twitter), Facebook, or LinkedIn.
- Content Management & Organization:
  - Categorization and Tagging: Add a system for admins to assign categories (e.g., "Technology," "Sports," "Politics") and tags to news articles, allowing users to filter content based on their interests.
  - Pagination: Introduce pagination on the homepage and category pages to manage and display a large number of articles without cluttering the user interface.
  - Advanced Search: Improve the search functionality with filters, enabling users to search by date range, category, or author.
- Technical Improvements:
  - API Integration: Connect to a third-party news API to automatically fetch and display news content, supplementing the manually added articles.
  - Unit & Integration Testing: Develop a testing suite using frameworks like Jest and React Testing Library to ensure application stability and prevent regressions.
  - Deployment: Create deployment scripts and instructions for hosting the application on cloud platforms like Vercel, Netlify, or AWS.