InsightStream - News Web Application

1. Introduction

Project Title: InsightStream – News App

Team Members:

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2. Project Overview

Purpose

InsightStream is a web-based news application designed to deliver real-time news updates from various categories. The project aims to provide users with the latest news articles, enabling seamless navigation and filtering through different news categories.

Features

- Trending News Display
- Category-Based Filtering
- Newsletter Subscription
- Clickable News Links Redirecting to Original Source
- Responsive Design

3. Architecture

Component Structure

- **NavbarComponent.jsx:** Provides navigation across different pages.

- **HeroSection.jsx:** Displays featured news articles.

- **CategoryPage.jsx:** Lists news articles filtered by category.

- **Newsletter.jsx:** Handles newsletter subscription.

- **NewsList.jsx:** Renders news articles dynamically.

State Management

Local state is managed using the **useState** hook, while API data is fetched using **Axios**.

Routing

Navigation is handled using **React Router DOM** for seamless page transitions.

4. Setup Instructions

Prerequisites

- Node.js

- Visual Studio Code

- Git

Installation

1. Clone the repository:

2. git clone
   https://github.com/Sona4suriya/InsightStream_NewsApp.git

3. Navigate to the project directory:

4. cd InsightStream_NewsApp

5. Install dependencies:

6. npm install

7. Start the application:

8. npm start

9. Access the application at **http://localhost:3000**.

5. Folder Structure

- **public:** Contains static files and the _redirects file.

- **src**: Main source folder with components, pages, and styles.

- **components**: Reusable React components like Navbar and Newsletter.

- **pages**: Pages containing category-based news rendering.

- **package.json:** Configuration file with project dependencies and scripts.

6. Running the Application

To run the application locally, use the command:

npm start

7. Component Documentation

Key Components

- **NavbarComponent.jsx:** Navigation bar for page switching.

- **HeroSection.jsx:** Displays trending news.

- **CategoryPage.jsx:** Renders filtered news articles.

- **Newsletter.jsx:** Manages email subscription form.

Reusable Components

- **NewsList.jsx:** Renders news cards dynamically.

8. State Management

Local State

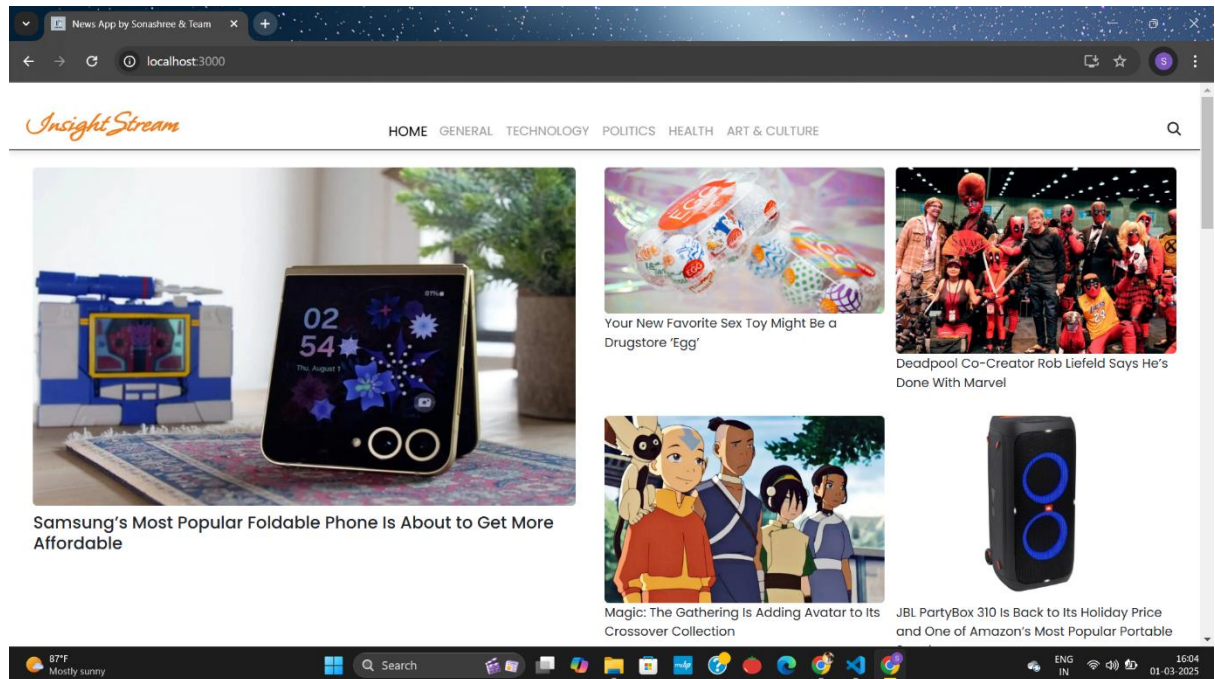State is managed using the **useState** and **useEffect** hooks.

9. User Interface

The application is styled using **Bootstrap** and **CSS**, ensuring a responsive layout on both desktop and mobile devices.
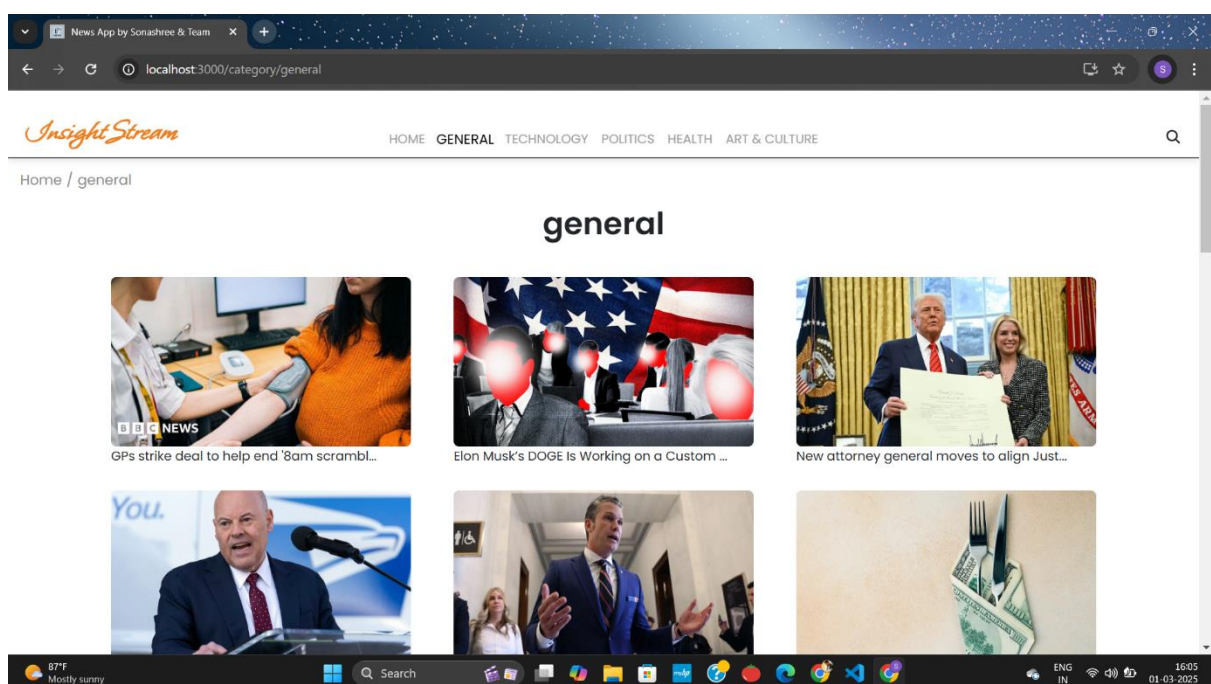
10. Styling

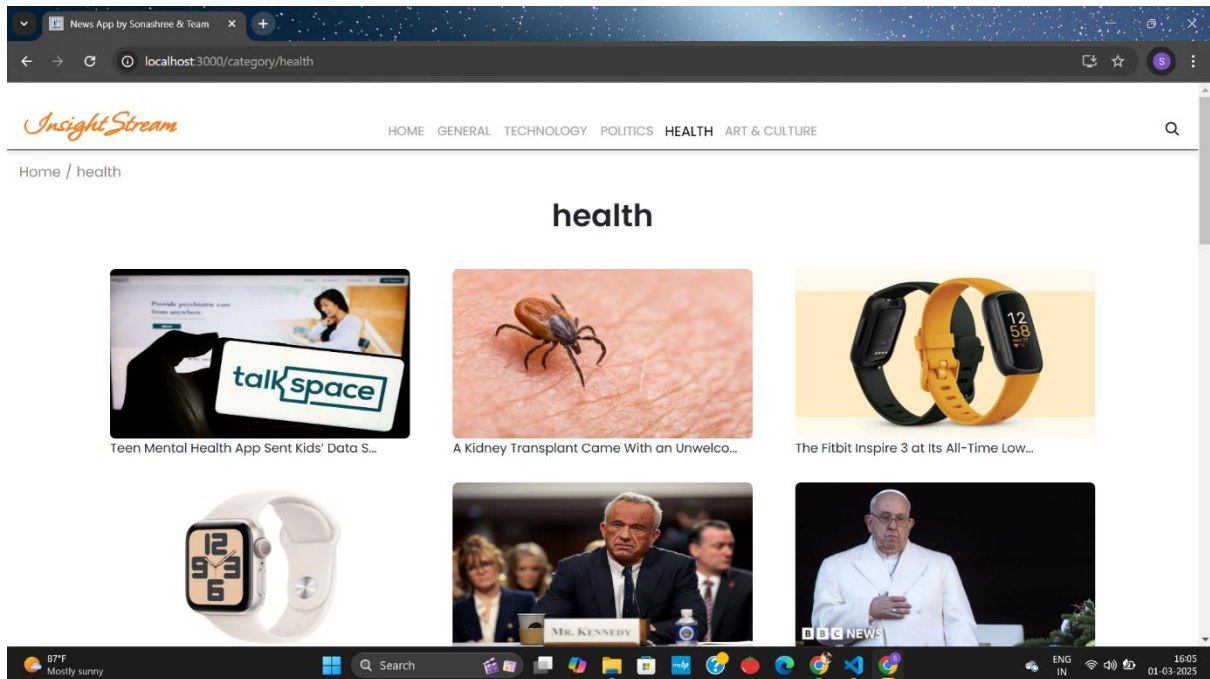- **CSS Framework:** Bootstrap

- **Custom Styles:** Plain CSS
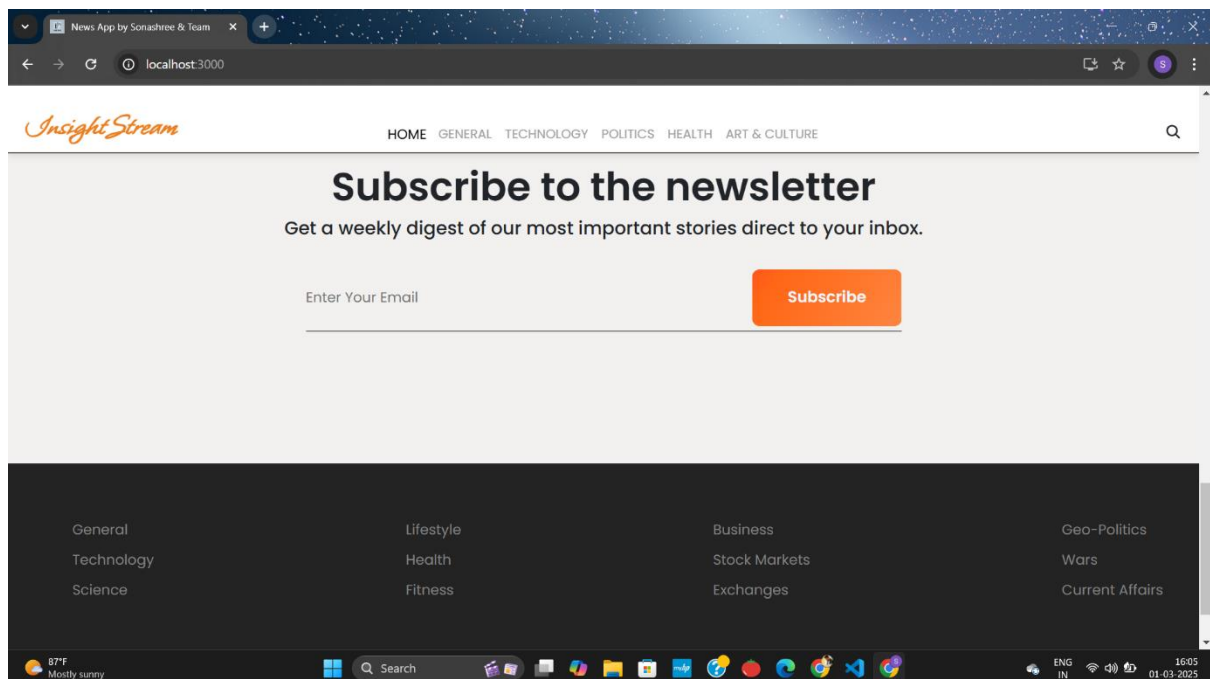
11. Screenshots

- ## Home Page

- ## Category Page

- ## Newsletter Subscription Page

12. Known Issues

- News API blocks certain hosting platforms like Netlify.
- Occasional API request failures due to API key limits.

13. Future Enhancements

- User Authentication
- Dark Mode
- Multi-Language Support
- Advanced Filtering Options

14. Acknowledgement

We would like to express our gratitude to our project guide and institution for their continuous support throughout the project.

Submitted By:

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