PROJECT REPORT

InsightStream: Navigate the News Landscape

YEAR   : **2024 – 2025**

COLLEGE NAME   : **K.C.S KASI NADAR COLLEGE OF ARTS & SCIENCE**

CODE   : UNM203

DEPARTMENT   : **COMPUTER APPLICATION**

PROGRAM   : **BCA COMPUTER APPLICATION**

SEMESTER   : **VI**

PROJECT SUBMITTED TO: UNIVERSITY OF MADRAS / NAAN MUDALVAN

Course Name   : **Front End Development and Database Administration**

TEAM LEADER   : Harish V

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InsightStream: Your Gateway to Smarter News Consumption (React Application)

Introduction

Welcome to **InsightStream**, a next-generation web application designed to enhance the way users discover and engage with news. With an intuitive design, advanced search features, and a diverse range of news categories, InsightStream ensures that staying informed is effortless and engaging. Whether you're a news enthusiast or an industry professional, InsightStream transforms the news experience into something dynamic, interactive, and highly personalized.

Description

1. **Explore News Like Never Before**

   InsightStream is an innovative platform designed to streamline news discovery and presentation. With a sleek, user-friendly interface and powerful features, it redefines how users interact with news articles and global events.

2. **Seamless and Engaging Interface**

   Navigate through a curated selection of articles with ease. InsightStream delivers the most relevant stories in an organized manner, ensuring effortless exploration across various news categories.

3. **News for Everyone**

   From breaking headlines to in-depth reports, InsightStream caters to all kinds of readers. It fosters a community of informed individuals who value staying up-to-date with current affairs while encouraging discussion and engagement.

4. **Stay Connected to the World**

   InsightStream ensures that every click brings you closer to essential global insights. With a well-structured and interactive platform, keeping up with the world has never been easier.

5. **Your Trusted News Companion**

   With InsightStream, every headline is a gateway to well-researched, reliable information. Stay informed and ahead with a platform designed for modern news consumption.
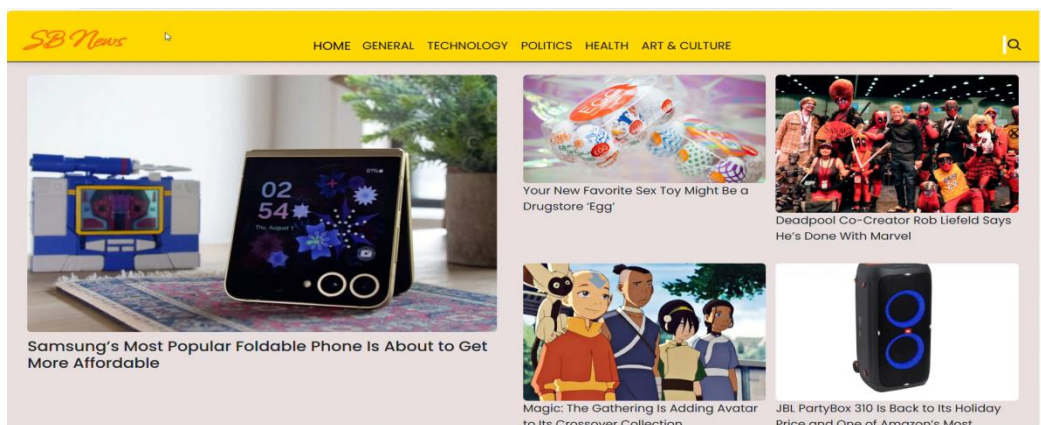
Key Features

1. **Real-Time News Updates**: Access a broad spectrum of news sourced from trusted APIs, ensuring comprehensive and up-to-date coverage of global affairs.
2. **Enhanced Visual Experience**: Explore news in a visually engaging format with images and organized galleries, making the browsing experience more immersive.
3. **User-Friendly Interface**: The application boasts an intuitive design, ensuring seamless navigation and a streamlined reading experience.
4. **Smart Search & Filters**: Easily find articles on specific topics using powerful search capabilities and filtering options to personalize your news feed.

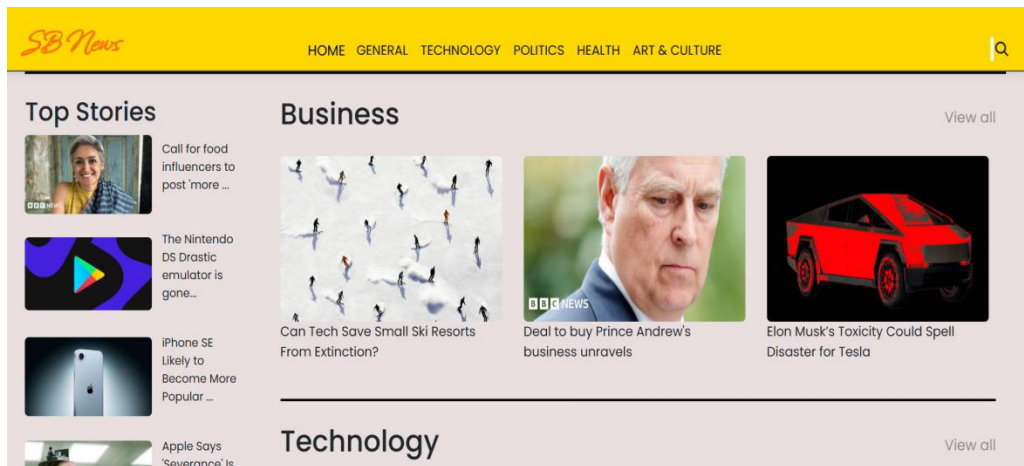---

Project Overview

Project Execution & Structure

1. Hero Section

This section highlights trending news articles, ensuring users stay informed about the most significant headlines. A search bar is also incorporated, allowing for quick access to various articles and categories.
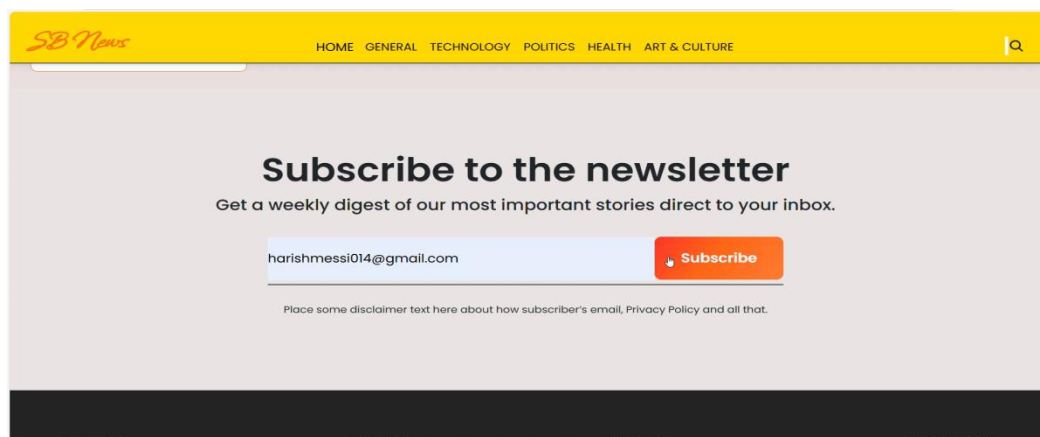

2. Popular Categories

Users can navigate through a wide array of news topics, easily discovering articles that align with their interests.
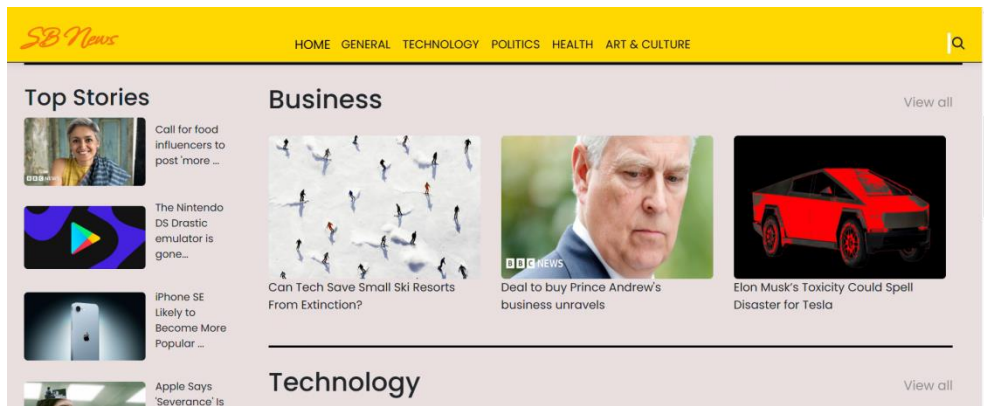
3. Newsletter Subscription

Stay informed effortlessly! A simple signup form enables users to subscribe to daily news updates. With a single click, subscribers receive curated articles directly in their inbox.

4. Category/Search Results Page

This section presents a neatly organized list of articles based on selected categories or user searches. Each listing includes a headline, summary, and an optional image, with filtering options to refine results further.

5. Article Page

Dive deep into the news with complete articles retrieved from their original sources. This page may also offer suggestions for related articles, encouraging broader exploration and deeper engagement.

Project Demo Link

[Click here to access the demo](#)

InsightStream is built for those who want to stay informed in an efficient, engaging, and interactive way. Start exploring today and redefine how you consume news!

```javascript
import { Route, Routes } from 'react-router-dom';
import './App.css';
import Home from './pages/Home';
import CategoryPage from './pages/CategoryPage';
import NewsPage from './pages/NewsPage';
import NavbarComponent from './components/NavbarComponent';
import Footer from './components/Footer';


function App() {

  return (
    <div className="App">
      <NavbarComponent />
      <Routes>
        <Route exact path="/" element={<Home/>} />
        <Route exact path="/category/:id" element={<CategoryPage/>} />
        <Route exact path="/news/:id" element={<NewsPage/>} />
      </Routes>
      <Footer />
    </div>
  );
}

export default App;



import { render, screen } from '@testing-library/react';
import App from './App';
```

```
test('renders learn react link', () => {

  render(<App />);

  const linkElement = screen.getByText(/learn react/i);

  expect(linkElement).toBeInTheDocument();

});


@import 'bootstrap/dist/css/bootstrap.min.css';

@import
url('https://fonts.googleapis.com/css2?family=Poppins:wght@200;300;400;500;600;700;800
;900&family=Whisper&display=swap');

body {

  margin: 0;

  font-family: 'Poppins', sans-serif;

  -webkit-font-smoothing: antialiased;

  -moz-osx-font-smoothing: grayscale;

  -ms-overflow-style: none;  /* IE and Edge */

  scrollbar-width: none;

}

body::-webkit-scrollbar {

  display: none;

}


code {

  font-family: source-code-pro, Menlo, Monaco, Consolas, 'Courier New',

    monospace;

}


.spinners{
```

```
  display: flex;

  justify-content: center;

  align-items: center;

  gap: 10px;

}


import React from 'react';

import ReactDOM from 'react-dom/client';

import './index.css';

import App from './App';

import reportWebVitals from './reportWebVitals';

import { BrowserRouter } from 'react-router-dom';

import GeneralContextProvider from './context/GeneralContext';


const root = ReactDOM.createRoot(document.getElementById('root'));

root.render(

  <BrowserRouter>

     <GeneralContextProvider>

        <App />

     </GeneralContextProvider>

   </BrowserRouter>

);


// If you want to start measuring performance in your app, pass a function

// to log results (for example: reportWebVitals(console.log))

// or send to an analytics endpoint. Learn more: https://bit.ly/CRA-vitals

reportWebVitals();
```

```
const reportWebVitals = onPerfEntry => {

  if (onPerfEntry && onPerfEntry instanceof Function) {

    import('web-vitals').then(({ getCLS, getFID, getFCP, getLCP, getTTFB }) => {

      getCLS(onPerfEntry);

      getFID(onPerfEntry);

      getFCP(onPerfEntry);

      getLCP(onPerfEntry);

      getTTFB(onPerfEntry);

    });

  }

};


export default reportWebVitals;




// jest-dom adds custom jest matchers for asserting on DOM nodes.

// allows you to do things like:

// expect(element).toHaveTextContent(/react/i)

// learn more: https://github.com/testing-library/jest-dom

import '@testing-library/jest-dom';
```