InsightStream: Navigate the News

1. Introduction

Project Title : InsightStream: Navigate the News

TEAM ID: NM2025TMID45057

TEAM LEADER: S.KARUNYA ROLE-(Project Coding and Demo Video)

EMAIL ID: karunyaakash90@gmail.com

NM ID: 016A3F1B0BC5901BAAC4CF5B8F673842

Team Members :

R.KEERTHANA-ROLE-(Project Coding and Demo Video)

EMAIL ID: keerthanajayanthi2007@gmail.com

NM ID: 1EBCCEEFB68E774970B45D4FE6C1960A

T.KEERTHANA-ROLE-(Project Coding)

EMAIL ID: keerthanathangaraj2006@gmail.com

NM ID: 6B59B6A3024E96D986549AC925E00CB5

D.KEERTHIGA-ROLE-(Project Documentation)

EMAIL ID: keerthiga6144@gmail.com

NM ID: B938180E056BF7196A24DACD45E346A9

M.KOWSIKA-ROLE-(Project Documentation)

EMAIL ID: kowsikakowsika777@gmail.com

NM ID: 0953D96BE8DF7FDB0F64C9C59353A0F8

2. Project Overview

Purpose :

The primary objective of InsightStream is to establish a user-friendly platform tailored for individuals who are passionate about staying informed, exploring diverse news topics, and accessing the latest updates.
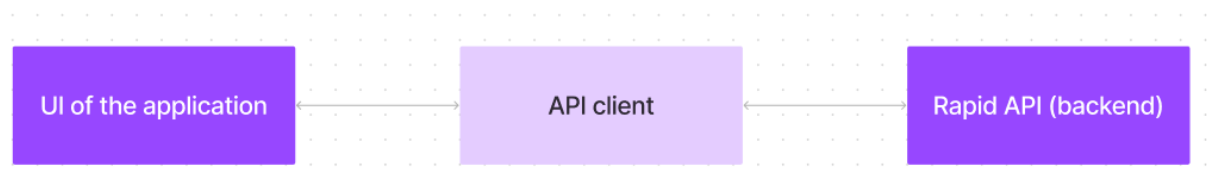
Our key goals include:

- **User-Friendly Experience:** Develop an interface that is intuitive and easy to navigate, ensuring users can effortlessly access, save, and share their preferred news articles.
- **Comprehensive News Management:** Provide robust features for organizing and managing news content, incorporating advanced search options for a personalized news experience.
- **Technology Stack:** Employ cutting-edge web development technologies, such as React.js, to ensure an efficient and enjoyable user interface.

Features of InsightStream:

- **News from API Sources: Access a vast library of global news spanning various categories and interests, ensuring a well-rounded coverage of current affairs.**
- **Visual News Exploration:** Discover breaking stories and explore different news categories through curated image galleries, enhancing the visual appeal of news discovery.
- **Intuitive Design:** Navigate the application seamlessly with a clean, modern interface designed for optimal user experience and clarity in information presentation.
- **Advanced Search Feature:** Easily access news articles on specific topics through a powerful search feature, providing users with tailored news content based on their interests.

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. Join InsightStream to embark on an informative journey and experience the future of news consumption.

3. Architecture:

The user experience starts with the InsightStream web application's UI, likely built with a framework like React or Vue.js for a smooth, single-page experience. This UI interacts with an API client specifically designed for InsightStream. This client handles communication with the

backend, but with a twist: it leverages Rapid API, a platform providing access to various external APIs. This suggests InsightStream might integrate external data feeds or functionalities through Rapid API, enriching the user experience without building everything from scratch.

4. Setup Instructions

Pre-Requisites:

Here are the key prerequisites for developing a frontend application using React.js:

- Node.js and npm: Node.js is a powerful JavaScript runtime environment that allows you to run JavaScript code on the local environment. It provides a scalable and efficient platform for building network applications.
    - Install Node.js and npm on your development machine, as they are required to run JavaScript on the server-side.
    - Download: https://nodejs.org/en/download/
    - Installation instructions: https://nodejs.org/en/download/package-manager/
- React.js: React.js is a popular JavaScript library for building user interfaces. It enables developers to create interactive and reusable UI components, making it easier to build dynamic and responsive web applications.

    Install React.js, a JavaScript library for building user interfaces.

- Create a new React app:

        npx create-react-app my-react-app

        Replace my-react-app with your preferred project name.

- Navigate to the project directory:

        cd my-react-app

- Running the React App:

        With the React app created, you can now start the development server and see your React application in action.

- Start the development server:

        npm start

This command launches the development server, and you can access your React app at http://localhost:3000 in your web browser.

- HTML, CSS, and JavaScript: Basic knowledge of HTML for creating the structure of your app, CSS for styling, and JavaScript for client-side interactivity is essential.
- Version Control: Use Git for version control, enabling collaboration and tracking changes throughout the development process. Platforms like GitHub or Bitbucket can host your repository.

- Git: Download and installation instructions can be found at: https://git-scm.com/downloads
- Development Environment: Choose a code editor or Integrated Development Environment (IDE) that suits your preferences, such as Visual Studio Code, Sublime Text, or WebStorm.
  - Visual Studio Code: Download from https://code.visualstudio.com/download
  - Sublime Text: Download from https://www.sublimetext.com/download
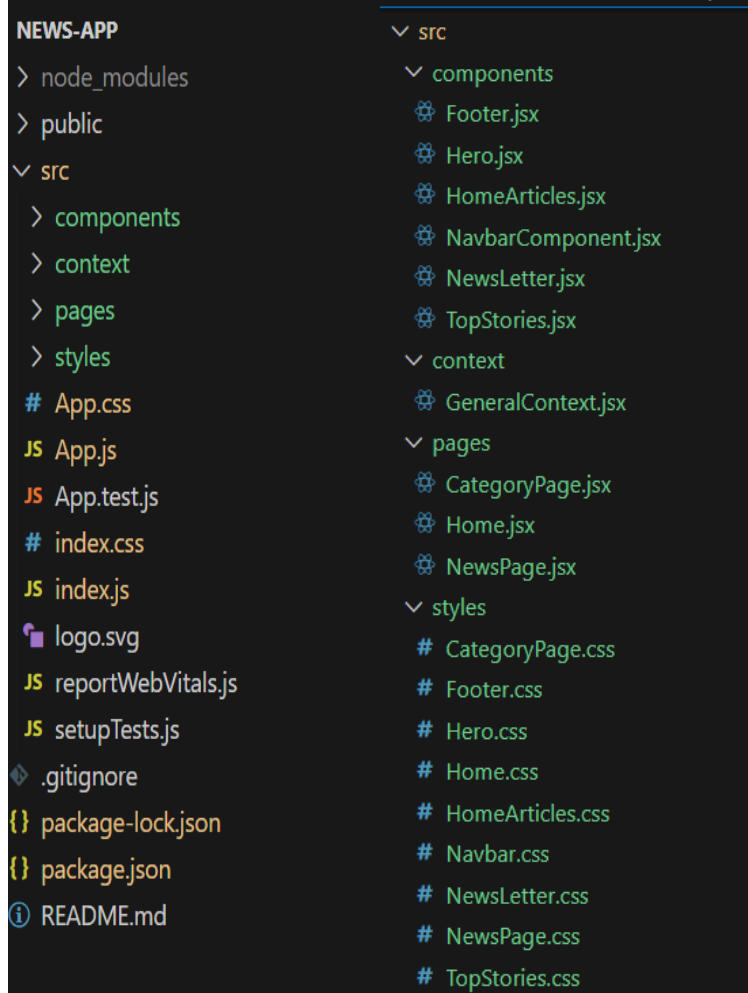 - WebStorm: Download from https://www.jetbrains.com/webstorm/

To clone and run the Application project from GitHub:

Follow below steps

- Install Dependencies:
  - Navigate into the cloned repository directory and install libraries:

      cd news

      npm install

- Start the Development Server:
  - To start the development server, execute the following command:

      npm start

- Access the App: Open your web browser and navigate to http://localhost:3000.

You have successfully installed and set up the application on your local machine. You can now proceed with further customization, development, and testing as needed.

5. Folder structure

```
NEWS-APP                      ∨ src
> node_modules                  ∨ components
> public                          ⚙ Footer.jsx
∨ src                             ⚙ Hero.jsx
  > components                    ⚙ HomeArticles.jsx
  > context                       ⚙ NavbarComponent.jsx
  > pages                         ⚙ NewsLetter.jsx
  > styles                        ⚙ TopStories.jsx
  # App.css                     ∨ context
  JS App.js                       ⚙ GeneralContext.jsx
  JS App.test.js                ∨ pages
  # index.css                     ⚙ CategoryPage.jsx
  JS index.js                     ⚙ Home.jsx
  🔒 logo.svg                      ⚙ NewsPage.jsx
  JS reportWebVitals.js         ∨ styles
  JS setupTests.js                # CategoryPage.css
  ◈ .gitignore                    # Footer.css
  {} package-lock.json            # Hero.css
  {} package.json                 # Home.css
  ⓘ README.md                     # HomeArticles.css
                                  # Navbar.css
                                  # NewsLetter.css
                                  # NewsPage.css
                                  # TopStories.css
```

In this project, we've split the files into 4 major folders, *Components, Context, Pages and Styles.* In the pages folder, we store the files that acts as pages at different URLs in the application. The components folder stores all the files, that returns the small components in the application. The context Api will be coded in the context folder. All the styling css files will be stored in the styles folder.

6. Project setup and configuration

- **Installation of required tools**:

    2. Open the project folder to install necessary tools
       In this project, we use:
       - React Js
       - React Router Dom
       - React Icons
       - Bootstrap/tailwind css
       - Axios

- For further reference, use the following resources
    - https://react.dev/learn/installation

- https://react-bootstrap-v4.netlify.app/getting-started/introduction/
- https://axios-http.com/docs/intro
- https://reactrouter.com/en/main/start/tutorial

7.Project Development

- **Project Development**

- Setup the Routing paths

Setup the clear routing paths to access various files in the application.

Ex:

```
<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>
```

- Develop the Navbar and Hero components
- Code the popular categories components and fetch the categories from *newsapi*.
- Also, add the trending news in the home page.
- Additionally, we can add the component to subscribe for the newsletter and the footer.
- Now, develop the category page to display various news articles under the different categories.
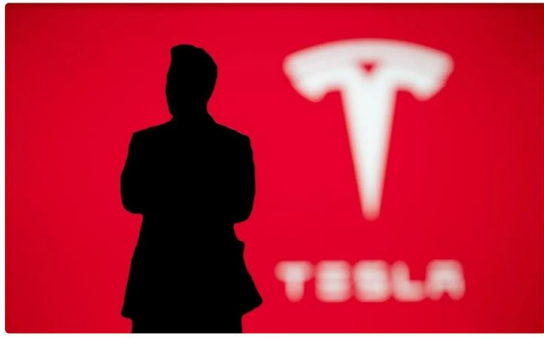
8. Running Application

Start the Development Server:

o   To start the development server, execute the following command:

npm start

9. Screenshots or Demo

- Hero components

Sorry Elon: Chinese Company Overtakes Tesla as Most Popular Electric Carmaker

NPR's most popular self-help and lifestyle stories of 2023

This is the most popular day for work meetings

Hideo Kojima Documentary Connecting Worlds Will Stream Exclusively on Disney+

Generating AI Images Uses as Much Energy as Charging Your Phone, Study Finds

- Popular categories

Top Stories

Sam Altman's Weird Eyeball Scanning Cryp...

The top 10 most popular podcasts of 2023...

Netflix is adding the GTA Trilogy to its...

Apple Music's year-end Rewind is here to...

Business

View all

GM wants you to know that it's also unhappy with the slow pace of its EV business

OpenAI will pay to train its models on Business Insider and Politico articles

Amazon's Answer to ChatGPT Is a Workplace Assistant Called Q

Technology

View all

- Newsletter

Subscribe to the newsletter

Get a weekly digest of our most important stories direct to your inbox.

Enter Your Email

Subscribe

Place some disclaimer text here about how subscriber's email, Privacy Policy and all that.

General   Lifestyle   Business   Geo-Politics

- Category/Search result page

politics

Aleksandar Vucic: The man who remade Ser...

Rockstar Games co-founder Dan Houser's n...

Inspector general investigating the deci...