

## **Insight Stream : Navigate the News Landscape.**

### **1. Introduction**

**Project Title: Insight Stream Navigate the News Landscape**

**Team Members:**

**Mail Id :**

**S.SHALINI**

**shalinisakkaravarthi@gmail.com**

**D.SHANMUGA PRIYA**

**shanmugapriya3364@gmail.com**

**C.SHARMILA**

**anithasharmila1234@gmail.com**

**M.SRINITHI**

**srinithi360@gmail.com**

### **2. Project Overview**

**Purpose :**Insight Stream is a modern news aggregation platform that delivers curated, real-time news updates to users. The goal is to provide a seamless and interactive experience for navigating news articles from various categories and sources.

#### **Features:**

Dynamic news feed with categorized articles (e.g., Home,Politics, Technology, Sports,healthcare)

Search functionality for finding specific news articles

Bookmarking and saving favorite articles

Responsive UI for mobile and desktop

Dark/Light mode switching

### **3A. rchitecture**

#### **Component Structure**

**Header:** Navigation bar with search functionality

**NewsFeed:** Displays a list of news articles

**Article:** Detailed view of an article

**Bookmarks:** Section for saved articles

**ThemeToggle:** Switch between light and dark mode

### **State Management:**

Context API for global state management (e.g., user preferences, bookmarks)

React Query for API data fetching and caching

### **Routing:**

React Router is used to navigate between pages:

/ → Home (Latest news)

/category/:category → News by category

/article/:id → Detailed article view

/bookmarks → Saved articles

## **4. Setup Instructions**

### **Prerequisites:**

Node.js (v16 or later)

npm or yarn

React.js

### **Installation:**

### 1. Clone the repository:

<https://github.com/S7010165058/News-app-project->

### 2. Install dependencies:

npm install

### 3. Start the development server:

npm start

## 4. Setup Instructions

### Prerequisites:

Node.js (v16 or later)

npm or yarn

React.js

## 5. Folder Structure

navigate-news/

```
| — public/      # Static assets
| — src/
|   | — components/ # Reusable components
|   | — pages/      # Page components (Home, Article, Bookmarks)
|   | — context/    # Context API files
|   | — hooks/      # Custom React hooks
|   | — styles/     # Global styles and themes
|   | — utils/      # Utility functions
|   | — App.js      # Main App component
|   | — index.js    # Entry point
| — package.json   # Project metadata
```

## 6. Running the Application

**Start the frontend server locally:**

npm start

## 7. Component Documentation

### Key Components:

**NewsCard:** Displays individual news articles

**NewsList:** Renders a list of news articles

**SearchBar:** Allows users to search for articles

**ThemeToggle:** Enables light/dark mode

### Reusable Components:

**Button:** Custom button component

**Loader:** Loading spinner

**Modal:** Displays article details in a popup

## 8.State Management

### Global State:

Managed using Context API (e.g., Theme context, Bookmark context)

### Local State:

Controlled within components using useState and useReducer

## 9. User Interface

Interactive UI with Material UI components

Screenshots of key features (Home page, Article view, Bookmarks)

## **10. Styling**

### **CSS Frameworks/Libraries:**

Tailwind CSS for responsive design

Styled-components for dynamic theming

### **Theming:**

Supports Dark Mode & Light Mode

## **11. Testing**

### **Testing Strategy:**

Unit tests using Jest & React Testing Library

Integration tests for API calls using Mock Service Worker (MSW)

### **Code Coverage:**

Ensured through Jest coverage reports

## **12.Screenshots or Demo**

**Screenshots:** Showcase UI features (news list, dark mode, search, bookmarks)

**Demo Link:** [https://drive.google.com/file/d/11Y51t-JY\\_rA76H6c7GuwFoSQu9CN90W1/view?usp=drivesdk](https://drive.google.com/file/d/11Y51t-JY_rA76H6c7GuwFoSQu9CN90W1/view?usp=drivesdk)

## **13. Known Issues**

API rate limits may affect news fetching

Some articles may have incomplete metadata

#### **14. Future Enhancements**

User authentication for personalized news feeds

Push notifications for breaking news

Multi-language support

