

INSIGHTSTREAM: NAVIGATE THE NEWS LANDSCAPE

**PROF.DHANAPALAN COLLEGE OF SCIENCE & MANAGEMENT
KELAMBAKKAM**



- **SUBMITTED BY:**
M.ABINAYA
P. PRIYADHARSHINI
V.PRIYADHARSHINI
G. AARTHI
K. KEERTHANA

- **INTRODUCTION:**

The News App is a web application that fetches and displays news articles from an API. It allows users to browse news by category, search for articles, and read summaries.

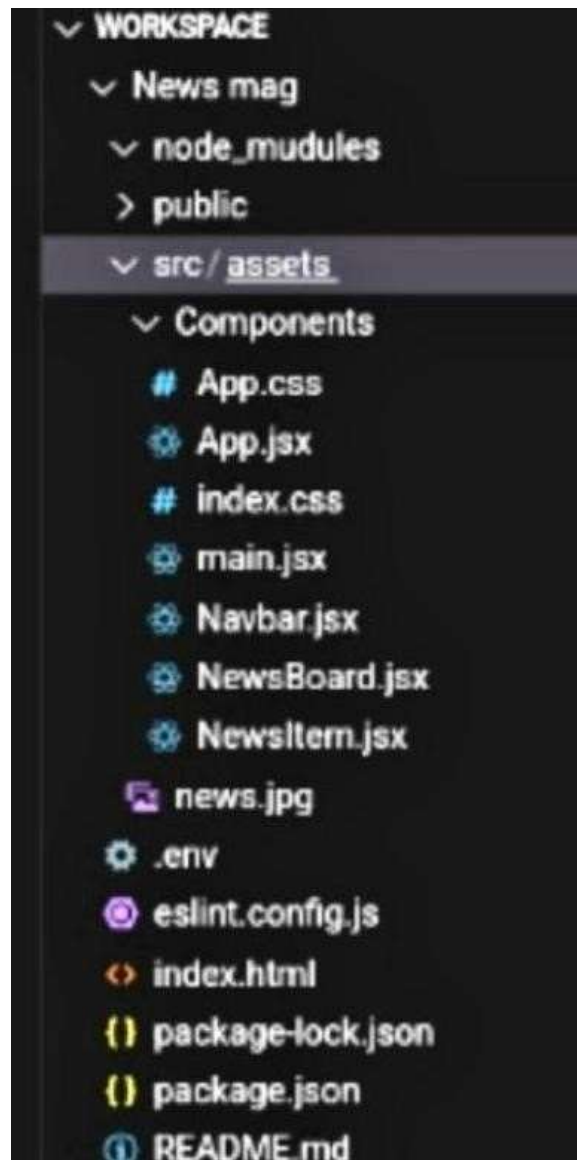
- **FEATURES OF NEWS APP:**

- 1. Easy to use.**
- 2. Filter news by category (e.g., Technology, Sports, Business)**
- 3. Suitable design for mobile and desktop.**
- 4. Get information immediately at Anywhere.**
- 5. This App is Very Secure.**

- **SOFTWARE REQUIREMENT:**

- 1. Frontend: React.js, HTML, CSS.**
- 2. API: News API (e.g., NewsAPI.org)**
- 3.State Management: React Hooks (useState, useEffect)**
- 4. Styling: CSS / Bootstrap.**

- **PROJECT STRUCTURE:**



This folder structure belongs to a React project using Vite, where Components contains reusable UI elements, public holds static assets, and configuration files manage dependencies, styling, and environment settings.

- **CODING EXPLANATION:**

1.App.jsx:

```
import { useState } from "react"
import Navbar from "../Components/Navbar"
import NewsBoard from "../Components/NewsBoard"

const App = () => {
  const [category, setCategory] = useState("general")

  return (
    <div>
      <Navbar setCategory={setCategory}/>
      <NewsBoard category={category}/>
    </div>
  )
}

export default App
```

This App.jsx file manages the news category state using useState. The Navbar component updates the category, and NewsBoard displays news based on the selected category. This allows dynamic updates without reloading the page.

2.main.jsx:

```
import { StrictMode } from 'react'
import { createRoot } from 'react-dom/client'
import './index.css'
import App from './App.jsx'

createRoot(document.getElementById('root')).render(
  <StrictMode>
    <App />
  </StrictMode>,
)
```

How It Works:

Imports:

- StrictMode (helps find potential issues in React).
- createRoot (creates the React root for rendering).
- Index.css (global styles).
- App (main component).

Rendering:

`createRoot(document.getElementById('root'))` selects the HTML element (`<div id="root">`)..`render(<StrictMode><App /></StrictMode>)` mounts the App component inside StrictMode for better debugging. This initializes the React app and renders App inside the root div.

3.Navbar.jsx:

```
const Navbar = ({setCategory}) => {
  return (
    <nav className="navbar navbar-expand-lg bg-body-tertiary" data-bs-theme="dark">
      <div className="container-fluid">
        <a className="navbar-brand" href="#"><span className="badge bg-light text-dark fs-4">NewsMag</span>
        </a>
        <button className="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target
          ="#navbarNav" aria-controls="navbarNav" aria-expanded="false" aria-label="Toggle navigation">
          <span className="navbar-toggler-icon"></span>
        </button>
        <div className="collapse navbar-collapse" id="navbarNav">
          <ul className="navbar-nav">
            <li className="nav-item">
              <div className="nav-link" onClick={()=>setCategory("Technology")}>Technology</div>
            </li>
            <li className="nav-item">
              <div className="nav-link" onClick={()=>setCategory("Business")}>Business</div>
            </li>
            <li className="nav-item">
              <div className="nav-link" onClick={()=>setCategory("Health")}>Health</div>
            </li>
            <li className="nav-item">
              <div className="nav-link" onClick={()=>setCategory("Science")}>Science</div>
            </li>
            <li>
            <li className="nav-item">
              <div className="nav-link" onClick={()=>setCategory("Sports")}>Sports</div>
            </li>
            <li className="nav-item">
              <div className="nav-link" onClick={()=>setCategory("Entertainment")}>Entertainment</div>
            </li>
          </ul>
        </div>
      </div>
    </nav>
  )
}
```

This Navbar component is a Bootstrap-styled navigation bar that allows users to select different news categories. When a category is clicked, it updates the `setCategory` state in `App.jsx`, dynamically changing the displayed news.

4.NewsBoard.jsx:

```
import { useEffect } from "react";
import { useState } from "react";
import NewsItem from "../NewsItem";

const NewsBoard = ({category}) => {
  const [articles,setArticles] = useState([]);

  useEffect(()=>{
    let url = `https://newsapi.org/v2/top
-headlines?country=us&category
=${category}&apiKey=${import.meta.env
.VITE_API_KEY}`;
    fetch(url).then(response=> response.json
()).then(data=> setArticles(data
.articles));
  },[category])
  return (
    <div>
      <h2 className="text-center">Latest
      <span className="badge bg
      -danger">News</span></h2>
      {articles.map((news,index)=>{
        return <NewsItem Key={index}
        title={news.title}
        description={news
        .description} src={news
        .urlToImage} url={news.url}/>
      })}
    </div>
  )
}

export default NewsBoard
```

The NewsBoard component fetches and displays news articles based on the selected category. It uses `useEffect` to fetch data from the News API whenever the category changes and updates the articles state. The news articles are then mapped into `NewsItem` components for display.

4.NewsBoard.jsx:

```
import image from '../assets/news.jpg'
const NewsItem = ({title, description, src,
url}) => {
  return (
    <div className="card bg-dark text
    -light mb-3 d-inline-block my-3 mx-3
    px-2 py-2" style={{maxWidth
    : "346px"}}>
      <img src={src?src:image} style
      ={{height: "200px",width: "330px"}}
      className="card-img-top" alt="..." />
      <div className="card-body">
        <h5 className="card-title">{title
        .slice(0,50)}</h5>
        <p className="card-text">
        >{description?description.slice(0
        ,90): "News is a Current event. It
        is information about something
        that has justt happened."}</p>
        <a href={url} class="btn btn
        -primary">Read More</a>
      </div>
    </div>
  )
}

export default NewsItem
```


The NewsItem component displays individual news articles using Bootstrap cards. It shows the title, description (with truncation), an image (defaulting to news.jpg if none is provided), and a “Read More” button linking to the full article.

- OUTPUT:

