

2. QUESTION

[AMBITIOUS]

Create a Progressive Web App that allows readers to keep up with all topics, news, and events they care about, from one single place. The platform should bring news and stories from around the world together in a magazine format.

Source Code GIT Repository:

Web Browser Link:

<https://github.com/Ajay-Kumar-Aspiring-Minds-Round-2/newsapp>

GIT Clone Link:

<https://github.com/Ajay-Kumar-Aspiring-Minds-Round-2/newsapp.git>

Technology Stack:



Key Features of News App – News can be viewed of nearly 54 Countries.

1

Business News

2

Technology News

3

General News

4

Health News

5

Science News

6

Entertainment News

7

Sports News

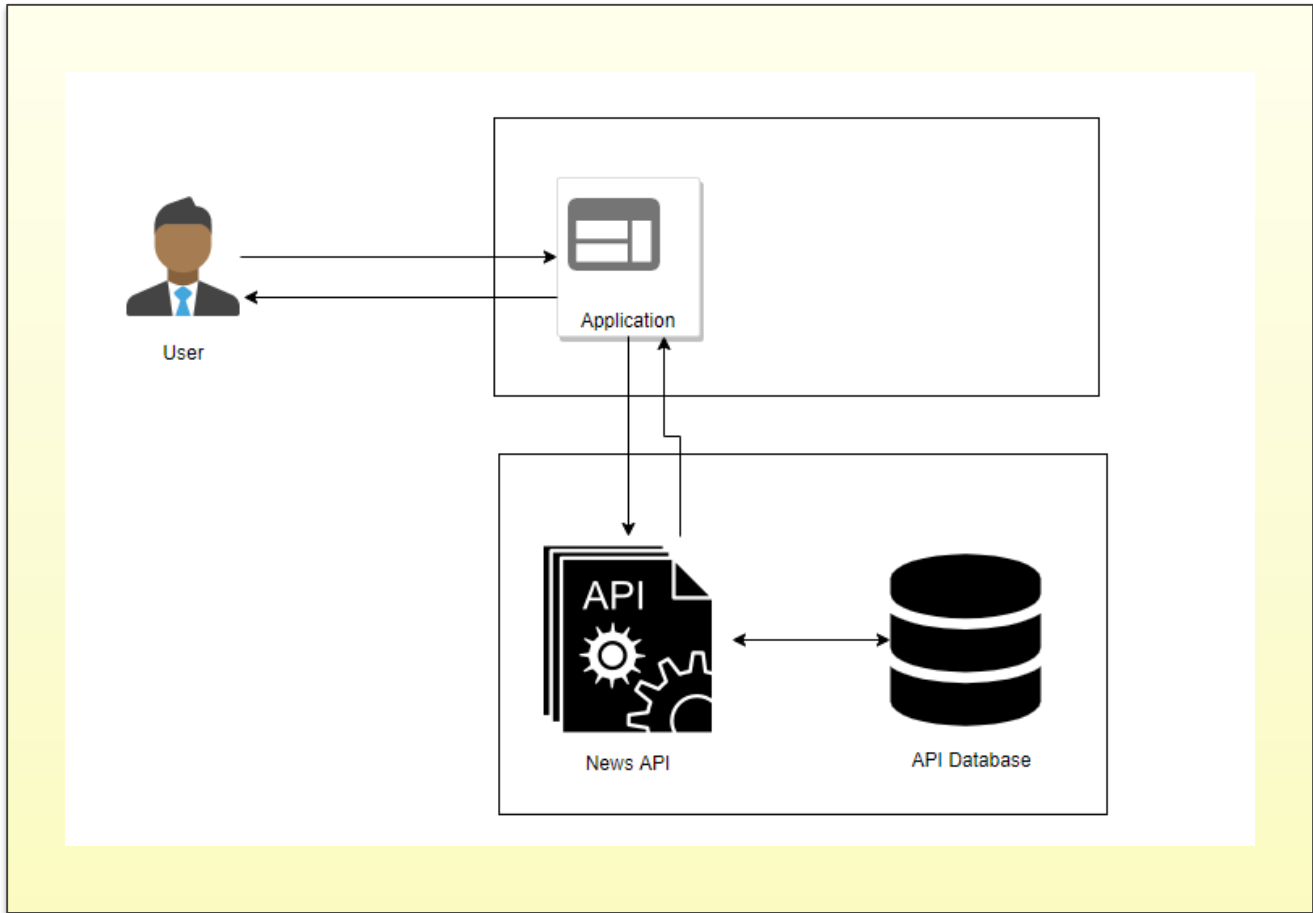
8

Search News

9

App Settings

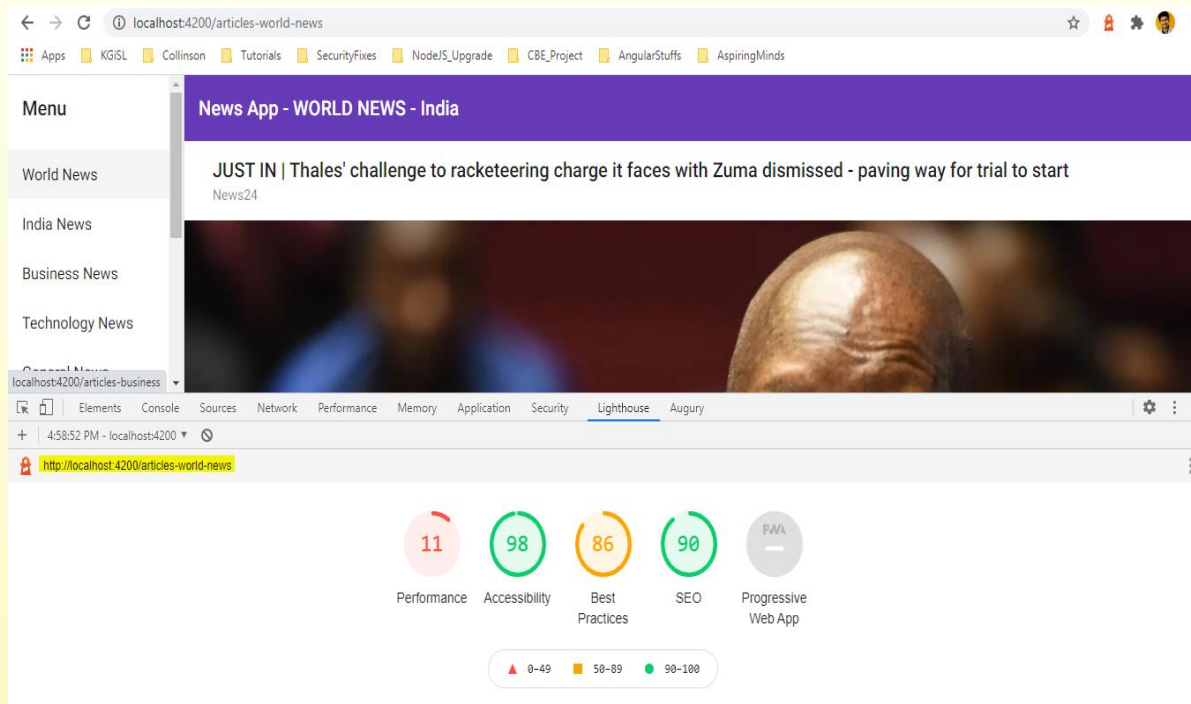
Application Architecture Diagram



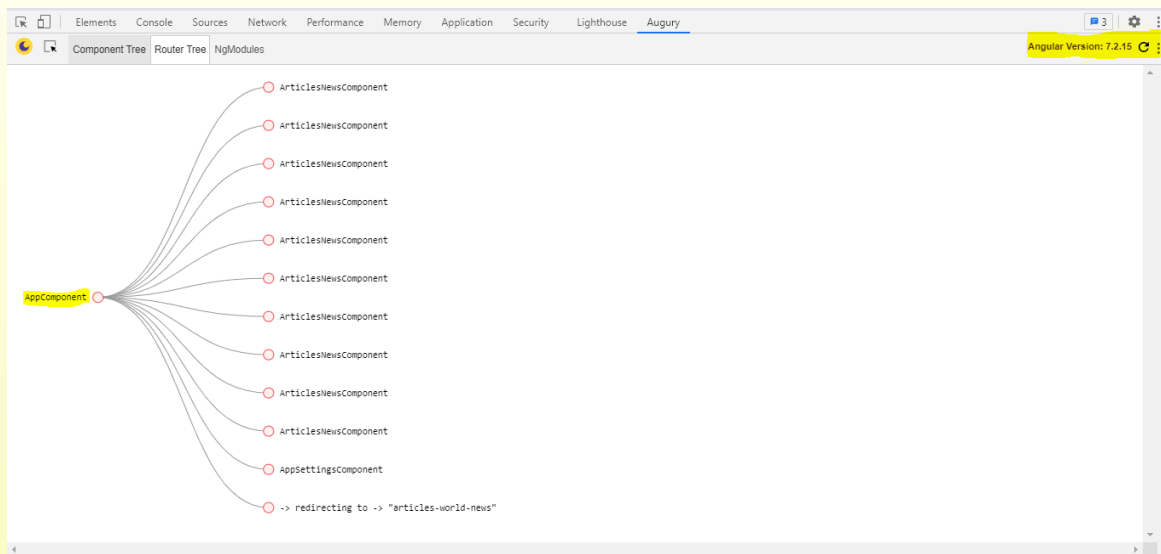
Progressive Web Apps – NEWS APP (TOP NEWS, EVENTS & STORIES)

- **Progressive Web Apps** are web apps that use emerging web browser APIs and features along with traditional progressive enhancement strategy to bring a native app-like user experience to cross-platform web applications.
- **Progressive Web Apps** take advantage of the latest technologies to combine the best of web and mobile apps.
- It is intended to work on any platform that uses a standards-compliant browser, including both desktop and mobile devices.

PWA Audit Report with Lighthouse (Open-Source Tool from Google)



Router Tree Structure of Components:



Country Modification under App Settings:

- User can change the **default country** under **App Settings**. **Default country** is **India**.
- Based on selected country under the app settings - news for **business, technology, general, health, science, entertainment & sports** are fetched from the Open Source News API Service and parsed to display in the App User Interface.
- **User can view news and stories from around the world to nearly 54 countries.**

The screenshot displays the 'App Settings' screen of a news application. On the left, a vertical menu lists various news categories, with 'App Settings' highlighted at the bottom. The main content area features a purple header bar labeled 'News App - SETTINGS - India'. Below this header, there is a dropdown menu titled 'Select the Country' with 'India' selected. Underneath the dropdown, the text 'Selected Country : in' is visible.

Menu

World News

India News

Business News

Technology News

General News

Health News

Science News

Entertainment News

Sports News

Search News

App Settings

Ne Ireland

Israel

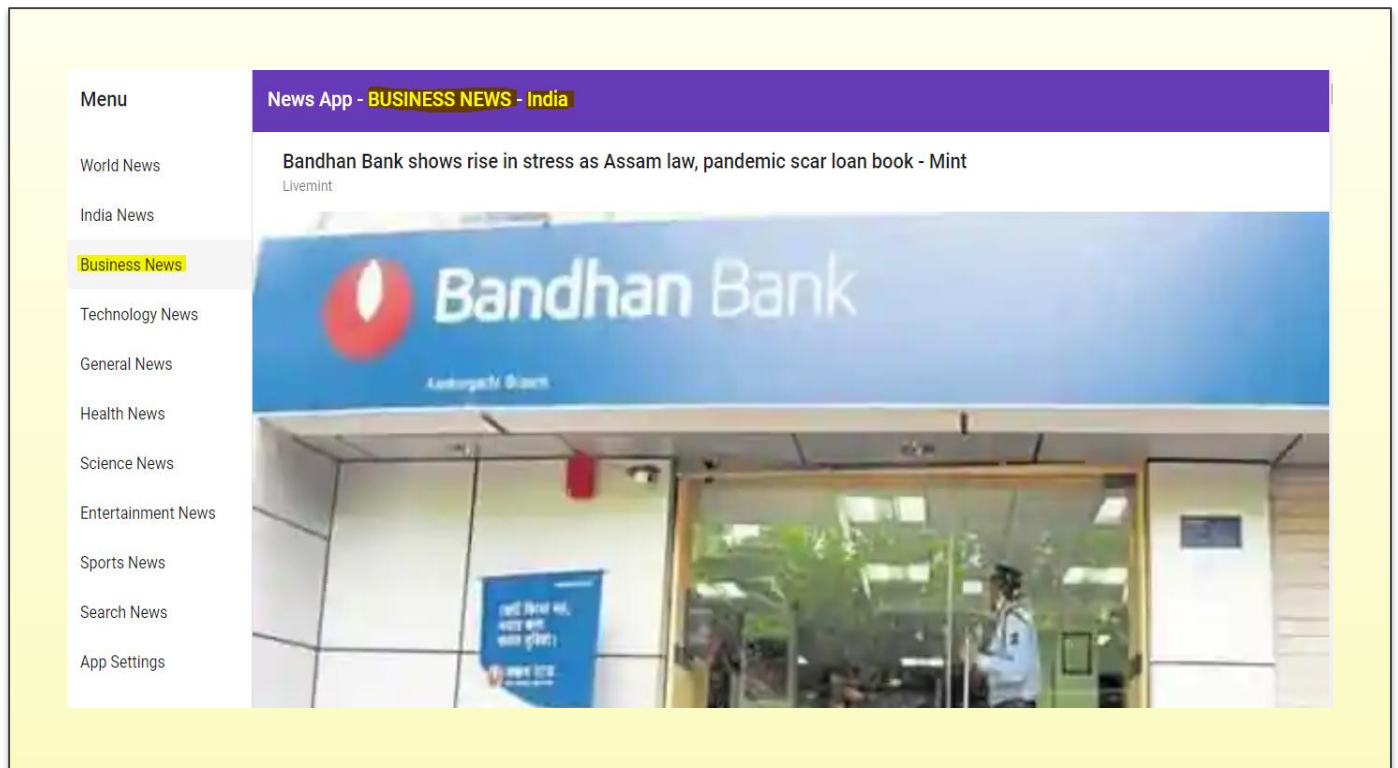
India

Italy

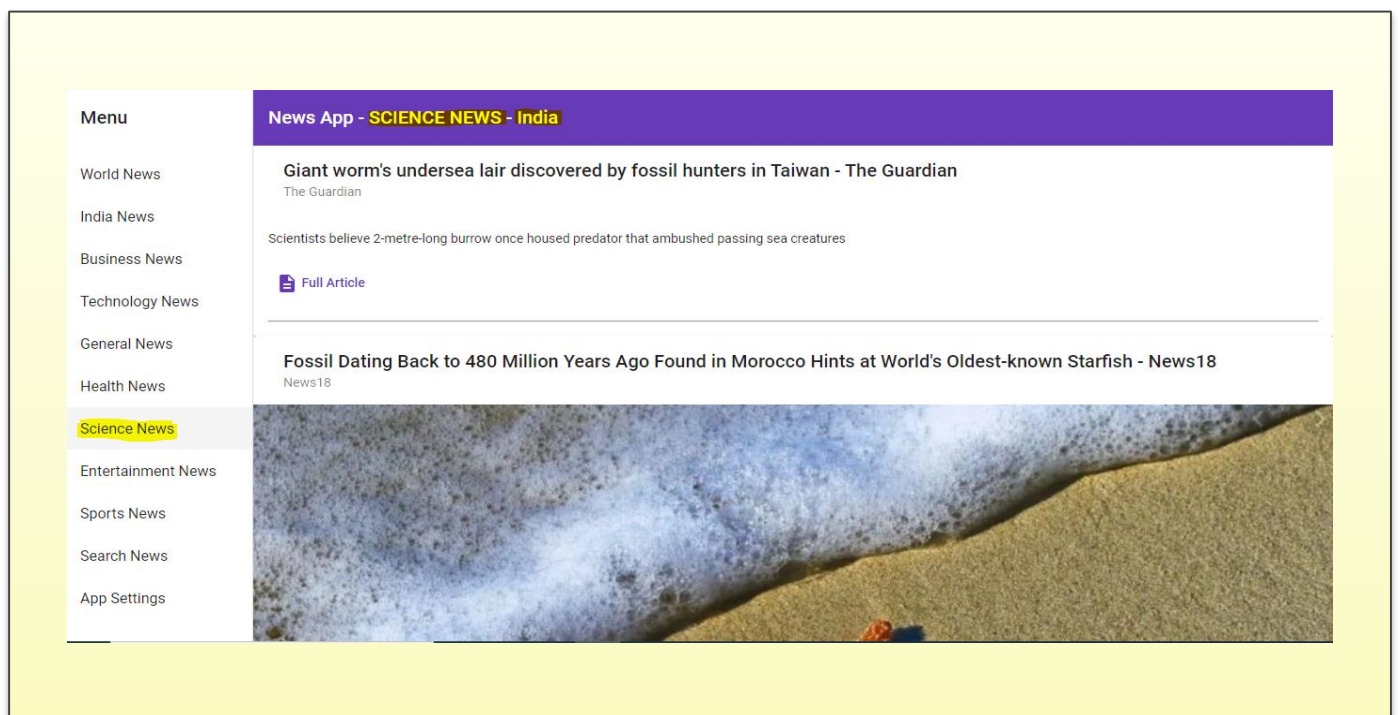
Japan

Korea

Business News for the selected country - India



Science News for the selected country - India



Search News:

- User can search for any news under this menu option.
- User can query as BBC or ABC NEWS or RAHUL DRAVID etc.,

The screenshot displays a mobile application interface for searching news. The top navigation bar is purple with the text "News App - SEARCH NEWS - India". A left-hand menu lists various news categories, with "Search News" currently selected and highlighted in yellow. The main content area features a search bar with the placeholder text "Enter the text to search any news". The word "BBC" has been entered into the search bar. Below the search bar, there is a blue button labeled "Search News".

Menu

World News

India News

Business News

Technology News

General News

Health News

Science News

Entertainment News

Sports News

Search News

App Settings

News App - SEARCH NEWS - India

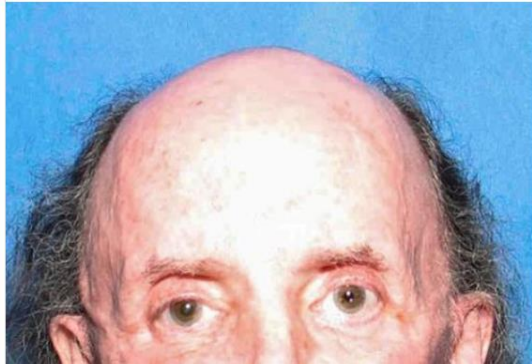
Enter the text to search any news

BBC

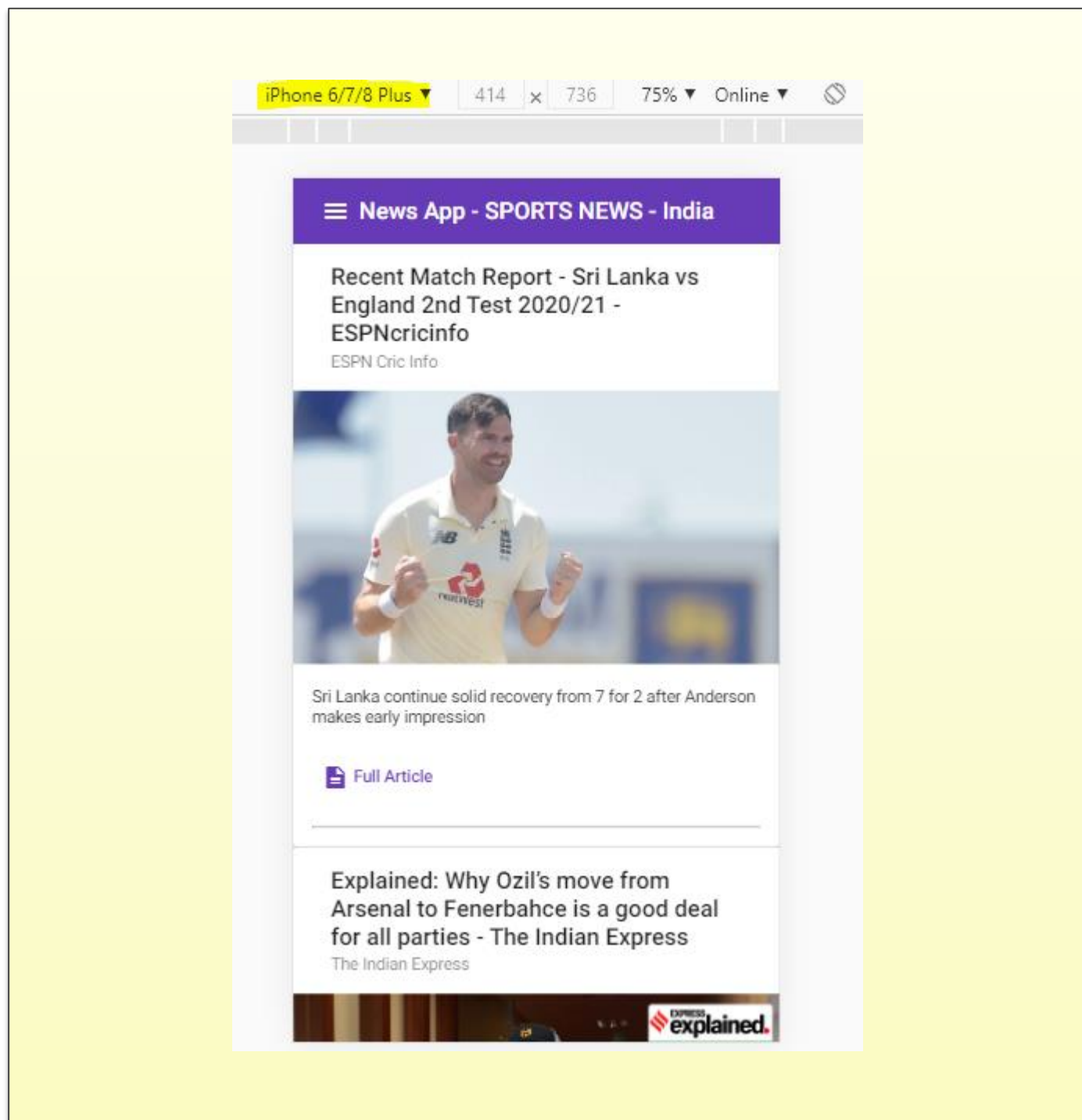
Search News

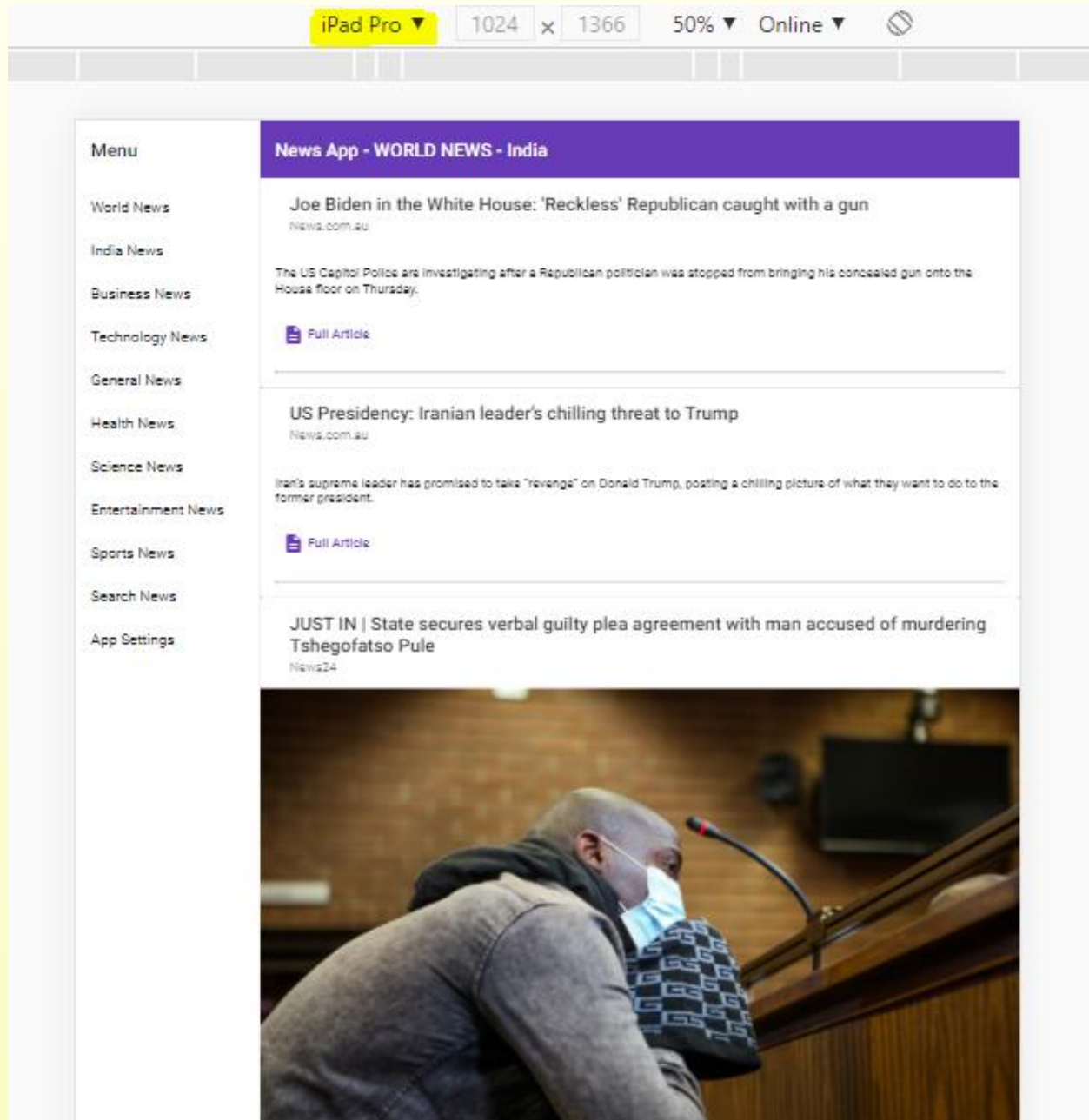
BBC apologises for Phil Spector death headline

BBC News



Mobile Browser View of News App:





News API (Open Source API):

News API has 2 main endpoints:

1. Top headlines - /v2/top-headlines

- Returns breaking news headlines for a country and category, or currently running on a single or multiple sources. This is perfect for use with news tickers or anywhere you want to display live up-to-date news headlines and images.
- This endpoint provides live top and breaking headlines for a country, specific category in a country, single source, or multiple sources. You can also search with keywords. Articles are sorted by the earliest date published first.

2. Everything - /v2/everything

- We index every recent news and blog article published by over 50,000 different sources large and small, and you can search through them with this endpoint. This endpoint is better suited for news analysis and article discovery, but can be used to retrieve articles for display too.
- Search through millions of articles from over 50,000 large and small news sources and blogs. This includes breaking news as well as lesser articles.
- This endpoint suits article discovery and analysis, but can be used to retrieve articles for display, too.

We also have a minor endpoint that can be used to retrieve a small subset of the publishers we index from:

3. Sources - /v2/sources

- Returns information (including name, description, and category) about the most notable sources we index. This list could be piped directly through to your users when showing them some of the options available.
- This endpoint returns the subset of news publishers that top headlines (/v2/top-headlines) are available from. It's mainly a convenience endpoint that you can use to keep track of the publishers available on the API, and you can pipe it straight through to your users.

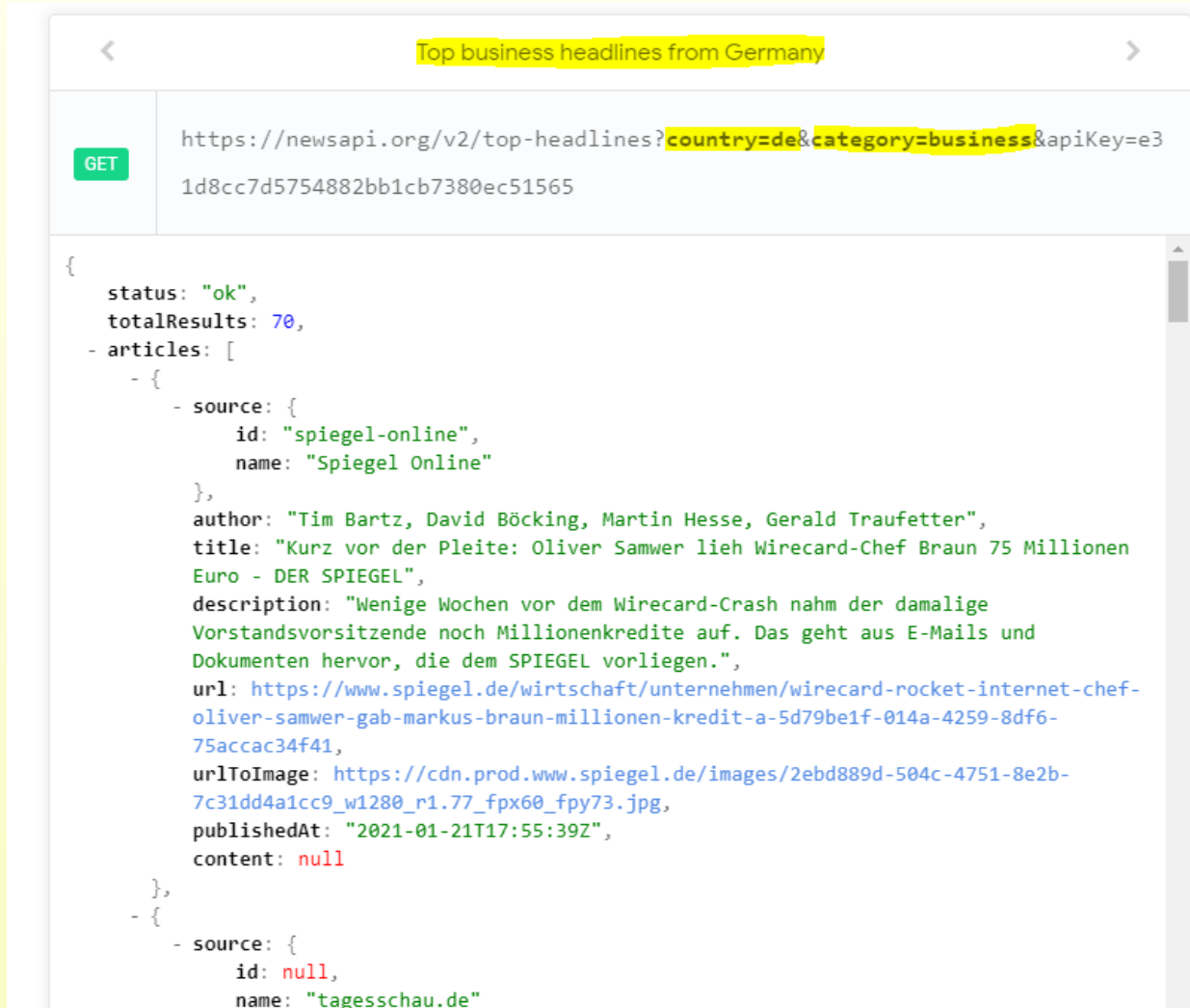
Sample News API Request & Response for Top headlines in the US



The screenshot displays a web browser interface. At the top, a tab is labeled "Top headlines in the US". Below the tab, a green "GET" button is positioned to the left of the request URL: `https://newsapi.org/v2/top-headlines?country=us&apiKey=e31d8cc7d5754882bb1cb7380ec51565`. The response is shown as a JSON object in a code editor. The JSON indicates a successful status ("ok"), 38 total results, and a list of articles. The first article is from CNN, authored by Betsy Klein and Veronica Stracqualursi, titled "Biden issues slew of pandemic initiatives to improve vaccine distribution, expand testing and reopen schools - CNN". The description mentions President Joe Biden's first full day in office, focusing on the COVID-19 pandemic. The URL is `https://www.cnn.com/2021/01/21/politics/biden-national-coronavirus-plan/index.html`. The image URL is `https://cdn.cnn.com/cnnnext/dam/assets/210120202424-03-biden-executive-order-0120-super-tease.jpg`. The publishedAt timestamp is "2021-01-21T18:28:00Z". The content is truncated with "[+3571 chars]".

```
{
  status: "ok",
  totalResults: 38,
  - articles: [
    - {
      - source: {
        id: "cnn",
        name: "CNN"
      },
      author: "Betsy Klein and Veronica Stracqualursi, CNN",
      title: "Biden issues slew of pandemic initiatives to improve vaccine
distribution, expand testing and reopen schools - CNN",
      description: "President Joe Biden's first full day in office Thursday will focus
on getting the Covid-19 pandemic under control, rolling out his national strategy
that includes several executive actions related to vaccinations and testing in
hopes of moving the federal res...",
      url: https://www.cnn.com/2021/01/21/politics/biden-national-coronavirus-
plan/index.html,
      urlToImage: https://cdn.cnn.com/cnnnext/dam/assets/210120202424-03-biden-
executive-order-0120-super-tease.jpg,
      publishedAt: "2021-01-21T18:28:00Z",
      content: "(CNN)President Joe Biden's first full day in office Thursday will focus
on getting the Covid-19 pandemic under control, rolling out his national strategy
that includes several executive actions relat... [+3571 chars]"
    },
    - {
      - source: {
```

Sample News API Request & Response for Top business headlines from Germany



The screenshot displays a REST client interface. At the top, the title bar reads "Top business headlines from Germany". Below this, a green "GET" button is next to the request URL: `https://newsapi.org/v2/top-headlines?country=de&category=business&apiKey=e31d8cc7d5754882bb1cb7380ec51565`. The response is a JSON object showing the status as "ok", 70 total results, and a list of articles. The first article is from "Spiegel Online" with a title about Oliver Samwer's loan to Wirecard's CEO.

```
{
  status: "ok",
  totalResults: 70,
  - articles: [
    - {
      - source: {
        id: "spiegel-online",
        name: "Spiegel Online"
      },
      author: "Tim Bartz, David Böcking, Martin Hesse, Gerald Traufetter",
      title: "Kurz vor der Pleite: Oliver Samwer lieh Wirecard-Chef Braun 75 Millionen Euro - DER SPIEGEL",
      description: "Wenige Wochen vor dem Wirecard-Crash nahm der damalige Vorstandsvorsitzende noch Millionenkredite auf. Das geht aus E-Mails und Dokumenten hervor, die dem SPIEGEL vorliegen.",
      url: https://www.spiegel.de/wirtschaft/unternehmen/wirecard-rocket-internet-chef-oliver-samwer-gab-markus-braun-millionen-kredit-a-5d79be1f-014a-4259-8df6-75accac34f41,
      urlToImage: https://cdn.prod.www.spiegel.de/images/2ebd889d-504c-4751-8e2b-7c31dd4a1cc9_w1280_r1.77_fpx60_fpy73.jpg,
      publishedAt: "2021-01-21T17:55:39Z",
      content: null
    },
    - {
      - source: {
        id: null,
        name: "tagesschau.de"
      }
    }
  ]
}
```