

2023

Happy News



CAB432 Assignment 1

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9/16/2023

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Executive Summary

A **curated news service** is a platform or service that provides users with carefully selected and organized news articles, reports, and information from various sources.

The goal of a curated news service is to filter through the overwhelming amount of news content available and present users with relevant, high-quality, and trustworthy news stories on specific topics or areas of interest.

The app was design to facilitate a greater experience with the way users get news.

Firstly, the app selectively filters articles to only be shown if they meet a certain sentiment score, allowing users to selectively view positive or negative news. Helps users filter articles in a new way which wouldn't be possible without the combination of Api's.

Secondly, keyword extraction is performed so that the user can get a deeper understanding of the key topics. To add onto that, keywords that have a Wikipedia page are displayed with an extract and a link to the page furthering the deeper learning goals of the website. Lastly, the app will allow user to read tweets about the keywords in the articles, so they can see what other people are talking about in relation to that subject.

SCREENSHOT: homepage with mouse hovering over positive news button.



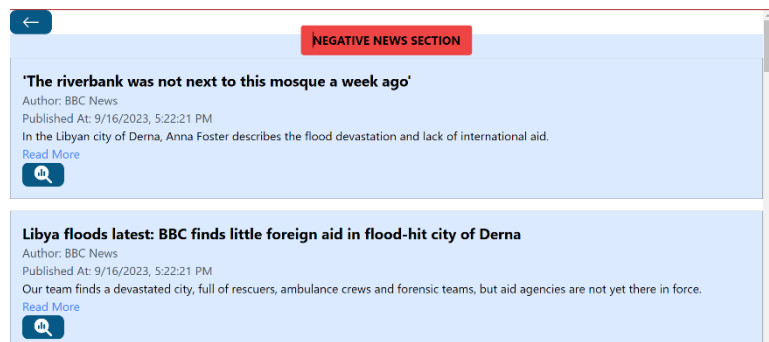
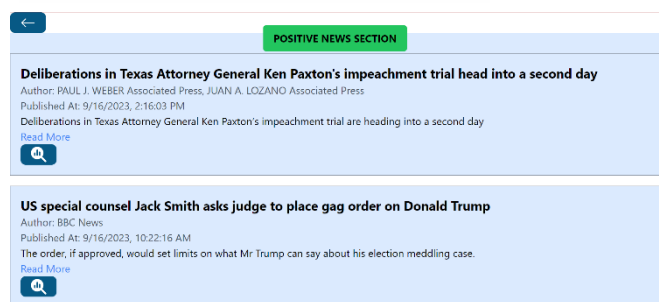
Introduction

Description

The News Insight app is a groundbreaking platform designed to revolutionize the way users consume news. It addresses the critical need for more personalized and insightful news consumption in today's information age. By selectively filtering articles based on sentiment analysis, the app empowers users to curate their news feeds according to their emotional preferences, offering a unique and personalized news experience. Additionally, the app employs advanced keyword extraction techniques to provide users with a deeper understanding of the key topics in each article. Notably, it showcases keywords with associated Wikipedia pages, offering users the opportunity for in-depth exploration. Moreover, the app goes beyond traditional news platforms by allowing users to access tweets related to the keywords in the articles, facilitating a holistic understanding of public sentiment and discourse around the subjects. News Insight represents a significant leap forward in news consumption, enabling users to engage with news in a more tailored, informative, and interactive manner.

System Requirements

As a **News Enthusiast**, I want the system to **selectively filter articles based on sentiment analysis**, so that I can **curate my news feed to see more positive or negative news articles according to my emotional preference**. The system should utilize sentiment analysis APIs to categorize articles, obtained from news API, based on their emotional tone.




As a **Knowledge Seeker**, I want the system to **perform keyword extraction in articles**, so that I can **gain a deeper understanding of the key topics discussed**. The system should leverage natural language processing (NLP) APIs for keyword extraction.

As a **Knowledge Seeker**, I would like to **explore keywords that have associated Wikipedia pages**, providing me with access to **additional context and information**. The system should leverage Wikipedia APIs for accessing relevant Wikipedia pages.

'The riverbank was not next to this mosque a week ago'

Author: BBC News
Published At: 9/16/2023, 5:22:21 PM
In the Libyan city of Derna, Anna Foster describes the flood devastation and lack of international aid.
[Read More](#)



EXTRA NEWS WEBSITE

'The riverbank was not next to this mosque a week ago'

Storm Daniel


2023 storm in the Mediterranean Sea

Storm Daniel, also known as Cyclone Daniel, was the deadliest and costliest Mediterranean tropical-like cyclone ever recorded as well as the deadliest cyclone worldwide since Cyclone Nargis in 2008. It was also the deadliest weather event of 2023 to date. Forming as a low-pressure system around 4 September 2023, the storm

Anna Foster

English radio news reporter and presenter

Anna Foster is an English radio news reporter and presenter, she presented the drivetime programme on 5 Live Monday to Friday.

[Read more](#)

Port

Maritime facility where ships may dock to load and discharge passengers and cargo


A port is a maritime facility comprising one or more wharves or loading areas, where ships load and discharge cargo and passengers. Although usually situated on a sea coast or estuary, ports can also be found far inland, such as Hamburg, Manchester and Duluth; these access the sea via rivers or

As a **Social Observer**, I want the system to **allow me to read tweets related to the keywords in news articles**, so that I can **gauge public sentiment and understand what others are discussing in relation to those topics**. The system should integrate with Twitter APIs to fetch and display tweets associated with the keywords.

Anna Foster


English radio news reporter and presenter

Anna Foster is an English radio news reporter and presenter, she presented the drivetime programme on 5 Live Monday to Friday.

[Read more](#)


EXTRA NEWS WEBSITE

Anna Foster




BBC Breakfast
BBCBreakfast

Aid teams are battling to help survivors and locate the dead five days after devastating flooding hit eastern Libya killing at least 11,000 people. On #BBCBreakfast Anna Foster had the latest from the Libyan city of Benghazi
<https://t.co/j5QkDVQVtg>



Ikebukuro
IkebukuroIcse

Why is the BBC reporter Anna Foster wearing a headscarf?
<https://t.co/XlvXbSCYpZ>
Sat Sep 16 18:57:26 +0000 2023 2298 views



BBC Radio 4 Today
BBCr4today

"It is astonishing when you actually stand in Derna and see how the centre of that city has been simply carved away - there is nothing left The BBC's Anna Foster describes the scale of devastation in the Libyan port city #R4Today
<https://t.co/kVKILt6Vnv>

Resources

News API:

DATA: Provides the news articles for the app.

<https://newsapi.org/>

News API is a simple, easy-to-use REST API that returns JSON search results for current and historic news articles published by over 80,000 worldwide sources.

The News API endpoint '<https://newsapi.org/v2/top-headlines>' allows users to retrieve live top and breaking headlines, sorted by the earliest date published, for a specific country, category, or sources. Users can also perform keyword searches to filter articles. This API is particularly useful for applications like news tickers and provides options to customize the request, such as specifying the country, category, sources, and the number of results per page.

Sentiment Analysis API:

ANALYSIS: Uses to filter the articles.

<https://www.twinword.com/blog/interpreting-the-score-and-ratio-of-sentiment/>

<https://rapidapi.com/twinword/api/sentiment-analysis>

Tool to analyse the emotional tone of text, making it valuable for businesses and developers seeking to understand customer sentiment. With the ability to customise positive and negative thresholds using scores and ratios, this API offers flexibility in interpreting sentiment, making it suitable for a wide range of applications, from sentiment analysis apps to monitoring social media comments for brand perception.

The API endpoint provided in the code snippet allows users to analyse the sentiment of text by sending a GET request to '<https://twinword-sentiment-analysis.p.rapidapi.com/analyze/>'. The 'text' parameter in the request is used to provide the input text for sentiment analysis, and the API responds with sentiment-related information based on the provided text.

Keyword Extraction API:

ANALYSIS: Used to filter the keywords from the articles.

<https://keywordextraction.net/>

<https://rapidapi.com/textanalysis/api/keyword-extraction>

The Keyword Extraction API employs advanced Natural Language Processing and Machine Learning technologies to automatically extract keywords or key phrases from user-provided URLs or documents. It serves as a valuable tool for developers and businesses aiming to enhance content analysis and information retrieval processes.

The API endpoint '<https://textanalysis-keyword-extraction-v1.p.rapidapi.com/keyword-extractor-url>' allows users to extract keywords from a specified URL using natural language processing techniques. In the provided code snippet, it extracts the top X amount keywords from the Wikipedia page about Natural Language Processing.

Twitter API:

DATA: Used to give extra social media context to keywords from articles.

<https://rapidapi.com/omarmhaimdat/api/twitter154>

- **NOTE:** This Api was chosen to circumnavigate X's (former known as Twitter) free API policy which does not allow users to read tweets in a programmatic way.

API has endpoints to tweet, get user info, search on twitter.

The API endpoint '<https://twitter154.p.rapidapi.com/search/search>' enables users to perform a Twitter search with specific criteria, including a query term, minimum retweets, minimum likes, and other filtering options. It retrieves the top results meeting the specified criteria within the English language that were posted since the start date of '2022-01-01'. This API is valuable for applications that require real-time access to Twitter data and allows developers to fine-tune their search parameters for more targeted results.

Wikipedia API:

DATA: Used to give extra formal context to the keywords from articles.

https://en.wikipedia.org/api/rest_v1/#/

The Wikipedia API (Application Programming Interface) provides a set of RESTful endpoints designed to access and retrieve various types of information from Wikipedia. Users can retrieve article content, summary information, page metadata, and more.

The Wikipedia API endpoint 'https://en.wikipedia.org/api/rest_v1/page/summary/{title}' provides a summary response for a given Wikipedia page with the specified title. The response includes an extract of the first paragraph of the page in both plain text and HTML formats, along with information about the type of the page. This API is particularly useful for generating page previews, also known as hovercards or popups, on websites or for displaying link previews in mobile or desktop applications. It allows developers to access concise information about Wikipedia articles to enhance user experiences when navigating web content or app interfaces.

Persistence service

Docker and AWS S3 was used in this project.

Docker:

<https://hub.docker.com/repository/docker/bobparis/cab432-a1-backend/general>

AWS S3:

<https://s3.console.aws.amazon.com/s3/buckets/bdam1-n11072059-s3-cab432-a1?region=us-east-1&tab=objects>

Technical Breakdown

Architecture and Data Flow

1. Client-side React (Vite) App:

- Hosted on AWS S3 as a static web application.
- Responsible for rendering the user interface and making HTTP requests to the backend for data.

2. Backend Docker Container:

- Running on an EC2 instance deployed with Ubuntu 22.
- Exposed on port 3000 within the EC2 instance.
- Node.js server using Express to handle API requests and data manipulation.
- Responsible for querying and aggregating data from various external APIs, including news, sentiment analysis, keyword extraction, and Wikipedia.
- Accesses the visit count data from a sister S3 bucket.

3. External APIs:

- Used by the backend Docker container to fetch data:
- News API
- Sentiment Analysis API
- Keyword Extraction API
- Wikipedia API

4. Sister S3 Bucket:

- Contains a JSON element that keeps count of all visits.
- Accessed by the backend Docker container to fetch the visit count data.

5. EC2 Instance:

- Acts as a host for the Docker container.
- Exposes the Docker container on port 8000.
- Handles incoming HTTP requests from the client-side React app.

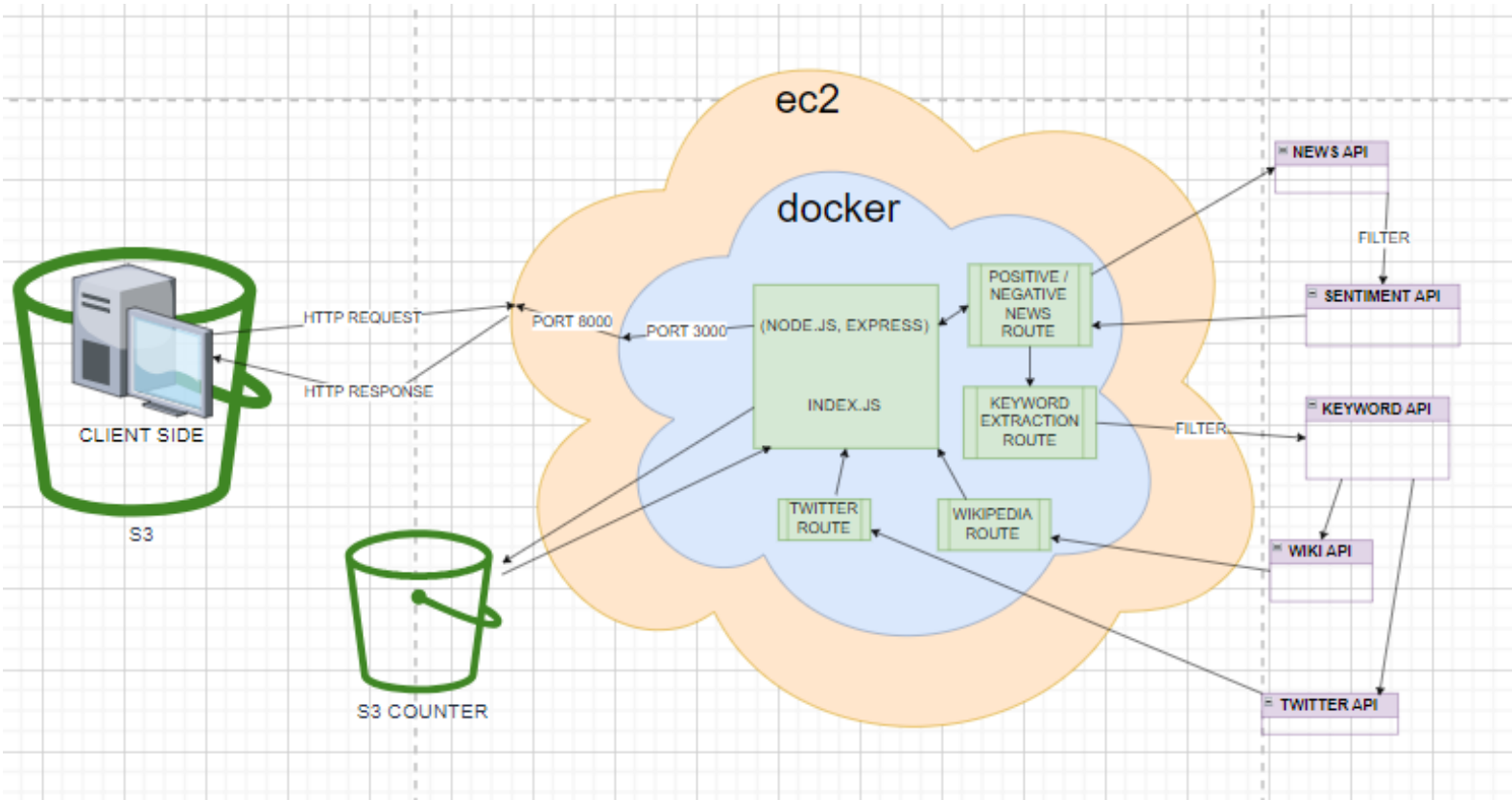
Data Flow:

The client-side React app makes HTTP requests to the EC2 instance (port 8000) for various data needs.

The EC2 instance forwards these requests to the Docker container (port 3000) running the Node.js server.

The Node.js server processes the requests by fetching data from external APIs and the sister S3 bucket.

Data retrieved from APIs and S3 is then sent back as responses to the client-side React app, which displays it to the user.



Deployment and the Use of Docker

Docker was used to simplify the deployment of their Node.js application on Amazon EC2 instances. The application was built using the Express framework. In the Dockerfile, they chose the LTS version of Node.js as the base image. To organize the application files within the container, they set the working directory to `'/usr/src/app'`. They then copied the `package.json` and `package-lock.json` files into the container and ran `'npm install'` to install the required dependencies. After that, they copied all of the application's source code into the working directory. To ensure the application could be accessed from the outside, they exposed port 3000. Finally, they specified the command to run when the container starts, which, in this case, was `'npm run dev'`.

They didn't encounter any significant issues with their Dockerfile or the Docker deployment on their EC2 instances during this process. This setup allowed for a smooth and repeatable deployment of their Node.js application within a Docker container, providing the flexibility and consistency required for efficient development and scaling. The complete Dockerfile can be found in the appendix for reference. [Test plan](#)

Task	Expected Outcome	Result	Appendix
Counter shows number of visits in homepage	Counter displayed	Pass	A1
Positive news button works	Link to positive news articles	Pass	A2
Negative news button works	Link to negative news articles	Pass	A3
Back Button works	Link back to home page	Pass	A4

User feedback on loading home page	Shows a loading animation while waiting for API	Pass	A5
User feedback on loading on news articles	Shows a loading animation while waiting for API	Pass	A6
User feedback on loading on wiki	Shows a loading animation while waiting for API	Pass	A7
User feedback on loading on twitter page	Shows a loading animation while waiting for API	Pass	A8
Show if no news is available	Show a response stating no news was retrieved.	Pass	A9
Create counter if bucket does not exist	Create a counter if bucket gets deleted	Pass	A10
Articles link to original	The links called read more are accurate	Pass	A11
Wiki links to original	The links called read more are accurate	Pass	A12
Wiki button loads wiki extracts	Ui components with accurate wiki data is loaded	Pass	A13
Twitter button loads tweets	Ui components with accurate tweet data is loaded	Pass	A14
Show if no tweets available	Show a response stating no tweets was retrieved.	Pass	A15
Show if no keywords extracted that have wiki pages	Show a response stating no data was retrieved.	Pass	A16

Difficulties / Exclusions / unresolved & persistent errors

The difficult part in this assessment was passing data about while using website links in the URL. All the '/' characters would cause errors in the routes.

When URLs with multiple slashes (e.g., "example.com/some/data/123"), it can create confusion for both the Express.js server and the React Router on the client side because they treat slashes as route separators by default. In this example, Express.js might interpret this URL as having three route segments ("some," "data," and "123"), while it was intended to be a single, complex parameter or a part of the route.

This required reworking of the initial plan of just getting the params from the URL. For the Server-side wildcard routes were used. Wildcard routes to capture the entire URL path, including slashes, as a parameter. This can be helpful when dealing with URLs that have dynamic or unpredictable structures. For the client side, the 'useLocation' hook was used with passing data with React Router's 'Link'. This approach allows maintenance of clean and structured URLs while passing necessary data to components as needed.

API latency with one of the twitter API's took ~30 seconds per request which ultimately left a poor user experience. A new faster API needed to be found which was done after trial and error.

Functionality which could have been added was adding a sentiment score to the twitter API call and colour coding them as green or red in the user interface.

The functionality mentioned in the brief fully completed, then the idea of adding wiki and twitter API was thought of to add even more context to the articles. The Wikipedia address the formal context while the twitter addresses the social context.

Due to the curated nature of the project, curated news service, the amount of user input was limited. This enabled a seamless development experience, as less testing and bugs can occur when there is less chance for user input. User input is an uncontrollable variable which means a lot more testing needs to occur and more bugs can become present, when compared to an app which only get data and filters it.

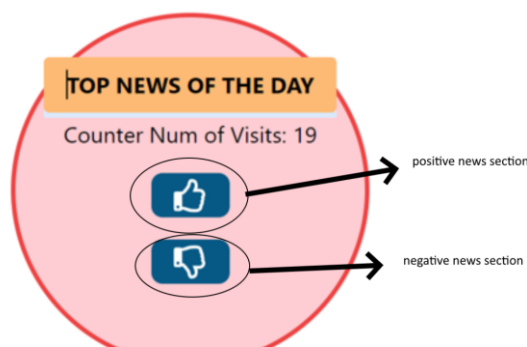
Extensions (Optional)

Add more user input and sentiment analysis on twitter.

User guide

Ease of use for users was a critical goal when developing the UI. The user interfaces is extremely simple and easy to navigate.

- Each page beside the homepage has a back button in the top left corner
- The homepage has two buttons, **thumbs up** leads to the positive news area. The **thumbs down** button leads to the negative sentiment news area.



[←](#)
POSITIVE NEWS SECTION

Glitzy New York Fashion Week, Coco Gauff claims U.S. Open title and more of the week's best photos

Published At: 9/16/2023, 8:37:49 PM

See 15 of the week's most interesting images from around the world, as selected by Washington Post photo editors.

[Read More](#)

→ link to original article

Deliberations in Texas Attorney General Ken Paxton's impeachment trial head into a second day

Author: PAUL J. WEBER Associated Press, JUAN A. LOZANO Associated Press

Published At: 9/16/2023, 2:16:03 PM

Deliberations in Texas Attorney General Ken Paxton's impeachment trial are heading into a second day

[Read More](#)

→ link to keyword extraction / wiki page for the specific article

Nova Scotia

Province of Canada

WIKIPEDIA
The Free Encyclopedia

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Nova Scotia is one of the thirteen provinces and territories of Canada. It is one of the three Maritime provinces and one of the four Atlantic provinces. Nova Scotia is Latin for "New Scotland".

[Read more](#)

→ link to twitter responses

Nova Scotia 🌐 121 languages

Article Talk Read Edit View history Tools

From Wikipedia, the free encyclopedia Coordinates: 45°00′00″N 62°58′58″W﻿ / ﻿45.00000°N 62.98278°W﻿ / 45.00000; -62.98278

This article is about the province in Canada. For other uses, see Nova Scotia (disambiguation).

Nova Scotia (/ˌnoʊvə ˈskoʊjə/ NOH-və SKOH-ah; French: Nouvelle-Écosse; Scottish Gaelic: Alba Nuadh) is one of the thirteen provinces and territories of Canada. It is one of the three Maritime provinces and one of the four Atlantic provinces. Nova Scotia is Latin for "New Scotland".

Most of the population are native English-speakers, and the province's population is 969,383 according to the 2021 census. It has the largest population of Canada's Atlantic Provinces. It is the country's

Nova Scotia

Province

Motto(s): *Munit Haec et Altera Vincit* (Latin) ("One defends and the other conquers")

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→ links to WIKI page

Analysis

Question 1: Vendor Lock-in

- **Wiki API:** Replacing the Wiki API could be moderately challenging. Wikipedia provides a comprehensive data source, and while there are alternatives like DBpedia, Wikidata, and other wiki-based APIs, migrating would require adapting to different data structures and endpoints. However, it's feasible with some effort.
- **NewsAPI:** Replacing NewsAPI with an alternative news aggregation API can generally be a manageable task. News aggregation APIs provide access to a wide range of news sources, and there are several providers in this domain. There are several alternatives to NewsAPI, such as Bing News Search API, GNews API, and

ContextualWeb News API, among others. These APIs offer similar news search and retrieval capabilities

- **Sentiment API:** Replacing a Sentiment API can be relatively easy, especially if it provides a simple sentiment analysis service. There are various sentiment analysis libraries and services like VADER, TextBlob, or Google Cloud Natural Language that can be alternatives. Migrating sentiment analysis functionality should be achievable.
- **Keyword API:** Replacing a Keyword API could be moderately challenging. Keyword extraction and analysis services vary in their algorithms and capabilities. Competitors like MonkeyLearn, AlchemyAPI, or custom NLP solutions exist, but migration would require adapting to the new service's input/output formats and semantics. However, Migration is very possible if needed.
- **Twitter API:** Replacing the Twitter API would be complex and hard. Twitter's API is unique in providing real-time access to Twitter data. Alternatives like Gnip (now part of Twitter) or paid social media analytics tools exist, but migrating may involve significant development effort and cost. Direct alternatives with the same level of access are limited. Even though this project does not directly interact with the official twitter API, but rather through a middle man API service, the data is twitter coming from the official twitter API.
- **Persistence Service:** Transitioning from AWS S3 to an equivalent alternative for hosting a JSON file should be relatively straightforward, primarily involving configuration adjustments in the application. Ensuring data consistency during the migration and verify that the new storage provider meets your data storage and access requirements. Alternatives include Azure Blob Storage (Microsoft) or Google Cloud Storage (Google). The biggest impact would be the authentication. AWS offers seamless integration and authentication between its services, which can make switching to another provider more complex in this regard. Another impact would be setup and configuration, as the services would be more disjointed if switched to a different non-AWS service.

Question 2: Container Deployment

- For a more substantial application, container-based deployment offers advantages in terms of portability, scalability, and resource efficiency. However, it introduces complexity and requires expertise. Direct deployment to VMs is an alternative but may come with trade-offs in resource utilization and management.
- Using a container-based deployment for this application comes with the disadvantage of more complexity than just running in the Vm. One disadvantage is the networking challenge of the docker and ec2 port. On top of the complexity of docker can make deployment harder.
- Deployment of a small node application for the whole Vm would not be very resource efficient, using docker can avoid this issue. Therefore, using a whole Vm just to deploy one small node application would not be recommended and a dockerised approach would be the way to go.
- **Database as a Service (DBaaS):** Managed database services like Amazon RDS, Google Cloud SQL, or Azure SQL Database. These services offer scalable and highly available databases with automated backups, which is crucial for user accounts and application data.

- Object Storage: For storing user-generated content or files, consider using object storage services like Amazon S3, Google Cloud Storage, or Azure Blob Storage. These services provide scalable, durable, and cost-effective storage for unstructured data.
- Caching: Implement caching solutions like Redis or Memcached to improve the performance of your application, especially if it relies on frequently accessed data.

References

Use a standard approach to referencing – see the guidance at <https://www.citewrite.qut.edu.au/cite/>.

Appendix:

A1. Dockerfile:

```
# Basic DockerFile to run a node application

# Node version 20
FROM node:lts

# Path in the container where the application files will go
WORKDIR /usr/src/app

# Copy in the package files and install required packages
COPY /package*.json ./
RUN npm install

# Copy our app source tree into the working directory
COPY . .

EXPOSE 3000
# Command to execute when the container starts
CMD [ "npm", "run", "dev" ]
```

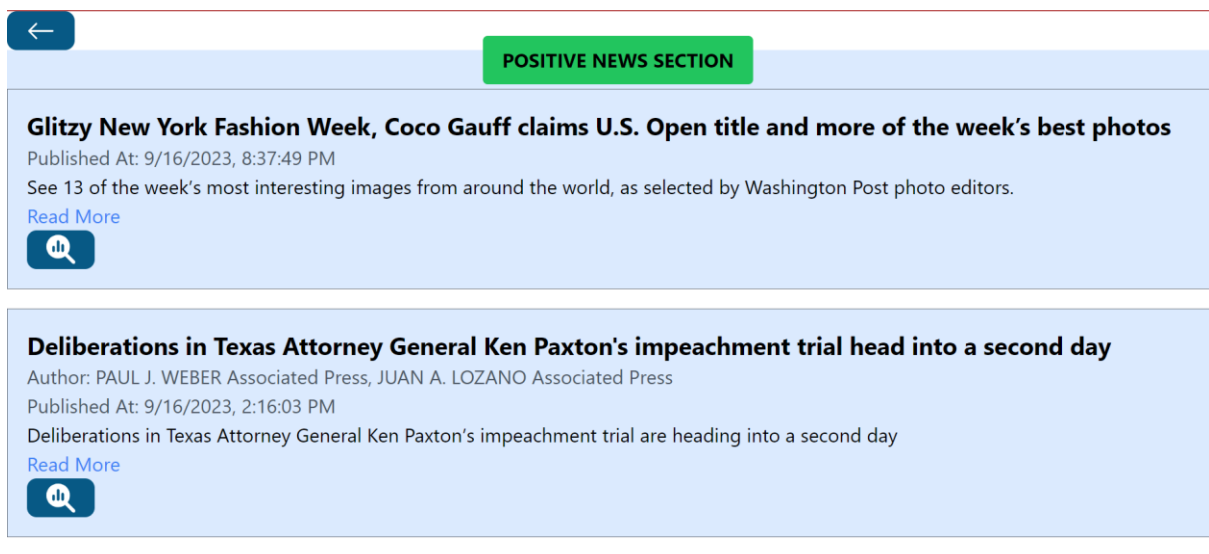
Appendices

Stuff you want to include but is too long or too complex to include in the main report text. The full Docker file, some longer excerpt from API docs. Whatever helps.

Test 1:



Test 2:



Test 3:

←

NEGATIVE NEWS SECTION

Ukraine's Crimea attacks seen as key to counter-offensive against Russia

Author: BBC News

Published At: 9/16/2023, 8:37:18 PM

This week's attacks against Russian targets are part of increased efforts to cut supply lines.

Read More

'The riverbank was not next to this mosque a week ago'

Author: BBC News

Published At: 9/16/2023, 5:22:21 PM

In the Libyan city of Derna, Anna Foster describes the flood devastation and lack of international aid.

Read More

Test 4:

←

NEGATIVE NEWS SECTION

Ukraine's Crimea attacks seen as key to counter-offensive against Russia

Author: BBC News

Published At: 9/16/2023, 8:37:18 PM

This week's attacks against Russian targets are part of increased efforts to cut supply lines.

Read More

TOP NEWS OF THE DAY

Counter Num of Visits: 25

Test 5:

TOP NEWS OF THE DAY

Counter Num of Visits: 0

16

Test 6:



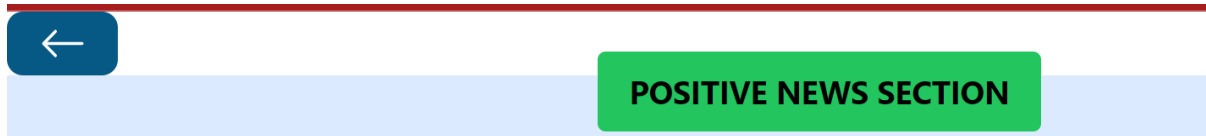
Test 7:



Test 8:




Test 9:



No articles available.

Test 11:

Hurricane Lee heads towards New England and Canada
Author: BBC News
Published At: 9/16/2023, 6:22:24 AM
Millions are under warnings as the storm tracks north, bringing powerful winds and heavy rain.
[Read More](#)


A screenshot of the BBC News website. The browser address bar shows "bbc.com/news/world-us-canada-66822999". The page has a red header with the BBC logo and navigation links: "Your account", "Home", "News", "Sport", "Reel", "Worklife", "Travel", "Future", and a menu icon. Below the header is a red banner with the word "NEWS" in white. Underneath is a navigation bar with links: "Home", "War in Ukraine", "Climate", "Video", "World", "Asia", "UK", "Business", "Tech", "Science", and a menu icon. Below this is another navigation bar with links: "World", "Africa", "Australia", "Europe", "Latin America", "Middle East", and "US & Canada" (which is underlined). The main content area features the headline "One dead as Storm Lee hits New England and Canada" with a sub-headline "1 hour ago" and a red share icon. To the right, under the heading "Top Stories", are two article snippets: "Russell Brand accused of rape and sexual assault" (11 hours ago) and "Brand appears distracted at gig".

Test 12:

Nova Scotia

Province of Canada

Nova Scotia is one of the thirteen provinces and territories of Canada. It is one of the three Maritime provinces and one of the four Atlantic provinces. Nova Scotia is Latin for "New Scotland".

[Read more](#)



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From Wikipedia, the free encyclopedia

Coordinates: 45°00′00″N 62°59′52″W﻿ / ﻿45.00000°N 62.99778°W﻿ / 45.00000; -62.99778

*This article is about the province in Canada. For other uses, see *Nova Scotia* (disambiguation).*

Nova Scotia (/ˈnoʊvə ˈskoʊjə noʊ-və skoʊ-shə/; French: *Nouvelle-Écosse*; Scottish Gaelic: *Alba Nuadh*) is one of the thirteen provinces and territories of Canada. It is one of the three Maritime provinces and one of the four Atlantic provinces. Nova Scotia is Latin for "New Scotland".

Most of the population are native English-speakers, and the province's population is 969,383 according to the 2021 census. It has the largest population of Canada's Atlantic Provinces. It is the country's



Test 13:

EXTRA NEWS WEBSITE

'The riverbank was not next to this mosque a week ago'

Storm Daniel

2023 storm in the Mediterranean Sea

Storm Daniel, also known as Cyclone Daniel, was the deadliest and costliest Mediterranean tropical-like cyclone ever recorded as well as the deadliest cyclone worldwide since Cyclone Nargis in 2008. It was also the deadliest weather event of 2023 to date. Forming as a low-pressure system around 4 September 2023, the storm

Anna Foster

English radio news reporter and presenter

Anna Foster is an English radio news reporter and presenter, she presented the drivetime programme on 5 Live Monday to Friday.

Read more

Port

Maritime facility where ships may dock to load and discharge passengers and cargo

A port is a maritime facility comprising one or more wharves or loading areas, where ships load and discharge cargo and passengers. Although usually situated on a sea coast or estuary, ports can also be found far inland, such as Hamburg, Manchester and Duluth; these access the sea via rivers or

Test 14:

EXTRA NEWS WEBSITE

Anna Foster

BBC Breakfast
BBCBreakfast

Aid teams are battling to help survivors and locate the dead five days after devastating flooding hit eastern Libya killing at least 11,000 people. On #BBCBreakfast Anna Foster had the latest from the Libyan city of Benghazi

<https://t.co/j5QkDVQVtg>

Ikebukuro
IkebukuroIce

Why is the BBC reporter Anna Foster wearing a headscarf?

<https://t.co/XlvXbSCypZ>


Sat Sep 16 18:57:26 +0000 2023 2298 views

BBC Radio 4 Today
BBCr4today

"It is astonishing when you actually stand in Derna and see how the centre of that city has been simply carved away - there is nothing left The BBC's Anna Foster describes the scale of devastation in the Libyan port city #R4Today

<https://t.co/kVKILt6Vnv>

Test 16:




EXTRA NEWS WEBSITE

Hurricane Lee heads towards New England and Canada

No data available.

Test 15:



EXTRA NEWS WEBSITE

Nova Scotia

No tweets available.