

News Feed ChatBot

This API was built to cater to the News Feed chatbot and was developed using Flask and newsAPI. The application will be used to extract top news articles based on the user's query and return the results to the chatbot.

REQUEST

The API uses the POST method and requires the input in the form of a JSON object with the parameters:

- Country
- Category
- City

The request will be sent to the application in the form of a JSON object as required. For example if the user wants to extract URLs of articles that were based on India, for the city Chennai and category Govt Policy, the request will be sent as:

```
{  
    "country": "india",  
    "category": "policies",  
    "city": "Chennai"  
}
```

RESPONSE

The response sent will be a list of JSON objects which contains the extracted links based on the user request. The request links were sorted by date so, the most

recent information will be displayed first. The response contains the JSON file in the format:

```
[  
    "place_name" : {  
        "category": "category_name",  
        "description": "description of the news",  
        "sentiment": sentiment_score,  
        "title": "title of the news",  
        "image_url": "url to image",  
        "url": "url to the news article"  
    }  
]
```

For example, If the request was sent as :

```
{  
    "country": "india",  
    "category": "policies",  
    "city": "Chennai"  
}
```

The response will be a list of json objects in the format above containing the details for each extracted news link.

In order to create a more personalized experience for the user wrt the chatbot, we take city as a parameter and return only news articles relevant to the city closest to the location.

If a user enters a city that does not belong to our list of top 100 cities, the chatbot asks the user to enter the closest urban city to their location and returns news articles wrt that city. The chatbot ***request must be with the city name in Title Case.*** This improves the overall experience of the chatbot as compared to returning news articles from all cities in a country.

Granularity (for the requested categories) :

Vaccine : country level

Cases news: city level

Government Policy: city level

Deployment:

The application was deployed on the VM at the address : 35.183.135.20:2222

Request Object: JSON

The city name in the request must be in the title case.

Response Object: List of JSON

The request is received from the chatbot team in the format:

```
{  
    "country": "india",  
    "category": "policies",  
    "city": "Chennai"  
}
```

The API takes in the country, city and category, extracts the news using the NEWS API. Sentiment analysis is done on the extracted news. The categories available(as requested) are government policy (policies) , cases news (cases) and vaccine. The API extracts the recent top news from the top newspaper articles in that location.

News.csv file:

“country”, “category_name”, “url”, “title”, “description”, “image_url”, “sentiment”, “city”

The data gets updated in this format i.e a dataframe with those columns gets saved as the news.csv file. The sentiment score of the news is also added in the output news.csv file.

The updation of the news.csv file is achieved using NewsAPI where the objective is to extract news articles for all countries, top 100 cities and categories, wherever news is available.

Scheduling:

The designed scheduler updates the news (in news.csv) every 12 hrs since the number of requests is limited to 500 per day. However, multiple NewsAPI keys are used to handle this. Once the number of requests crosses its limit, the next API key will be used to extract the news.

Reference Links:

NewsApi: <https://newsapi.org/>

Flask: <https://flask.palletsprojects.com/en/1.1.x/>