A Project Report On

NewsNimble: An Automated Instagram News bot

Bachelor of Technology and Engineering Computer Science & Engineering LOVELY PROFESSIONAL UNIVERSITY PHAGWARA, PUNJAB



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Abstract:

Social media platforms have become an increasingly popular way for people to stay informed about the news and current events. However, with the overwhelming amount of information available, it can be difficult for users to keep up with everything. To address this issue, we have developed a social media bot that uses open and free news APIs and natural language processing (NLP) to provide users with summarized news updates.

One of the unique aspects of our bot is its use of open and free news APIs, which allows us to aggregate news from a wide variety of sources. We believe that our social media bot can help to increase users' engagement with the news and promote greater awareness and understanding of important issues.

Novelty

Our social media news bot is a unique and innovative solution for delivering news updates to users in a way that is concise, relevant, and easy to understand. While there are other news bots and aggregators available, our solution stands out in several keyways:

- Use of Natural Language Processing (NLP): Our bot uses advanced NLP algorithms to summarize news articles and provide users with the most important information in a concise and easyto-understand format. This approach ensures that users are receiving accurate and relevant news updates, while also making the information more accessible to a wider audience.
- Aggregation of Open and Free News APIs: Unlike many other news bots and aggregators, our solution utilizes open and free news APIs to aggregate news from a wide variety of sources. This means that users can receive news updates from a range of reputable sources without having to pay for access to premium news services.
- Integration with Social Media Platforms: Our bot operates on major social media platforms and allows users to subscribe to news topics that interest them. This integration with social media platforms makes it easy for users to access news updates directly from their social media feeds, and helps to increase engagement with the news.

In summary, our social media news bot is a unique and innovative solution that combines the latest advances in NLP technology with open and free news APIs like newsapi.org and newsdata.io to provide users with accurate, and relevant news updates. Its integration with social media platforms make it a user-friendly and engaging tool for staying informed about current events.

Introduction

A social media news bot is a computer program that automatically delivers news updates to users on major social media platforms. The bot works by aggregating news articles from a wide range of sources, and using natural language processing (NLP) algorithms to summarize the key points of each article. The summarized news updates are then shared with users in a format that is concise, accurate, and easy to understand.

Objective:

The objective of our social media news bot is to provide users with an engaging way to stay informed about current events. By utilizing open and news APIs and advanced NLP algorithms like Chatgpt, our bot aims to deliver accurate news updates to users on Instagram.

Team Members:

S.No.	Name	UID / Reg. ID.
1.	Shruti (Mentor)	24906
2.	Sushant Pandey	12116471
3.	Suryansh Yadav	12113972

Project Implementation

Idea Elaboration:

The bot aggregates news articles from a wide range of sources using https://newsapi.org/, https://newsapi.ai/, and uses available advanced natural language processing algorithms like chatgpt to summarize the key points of each article. While doing so, for a better user engagement we are also hoping to edit the images associated with the news articles over the internet, by using available tools like https://cloudinary.com/ and https://pixlab.io/. This will require us to store the image on a server or openly addressable area on the internet and then apply the filters using the already stated tools.

Results indicate that the social media news bot is an effective way to deliver personalized and concise news updates to users on major social media platforms. The bot's use of news APIs and advanced algorithms ensures that users will receive a balanced and diverse range of news updates that are accurate and easy to understand on Instagram.

The social media news bot provides a unique and innovative solution for delivering news updates to a wide audience. Its use of NLP algorithms and open news APIs, as well as its integration with a social media platform like Instagram, make it a useful tool for staying informed about current events in a way that is convenient, personalized, and accessible.

In conclusion, our NewsNimble: the social media news bot to be developed in this research paper demonstrates the potential for using the advancements in NLP algorithm and open and additional APIs to deliver personalized news updates to users on Instagram. Further research could explore ways to improve the bot's accuracy and readability, as well as ways to enhance the user experience and increase engagement with the news.

Expected Outcomes

NewsNimble could potentially turn into a news-based startup. As social media and news consumption continue to grow, there is a clear demand for personalized and brief news updates, and the bot offers a unique and innovative solution to this problem.

However, launching a startup based on a news bot would require careful planning, market research, and strategic partnerships with social media platforms and news organizations. The startup would need to consider issues such as revenue models, user acquisition, and data privacy.

Overall, while turning the social media news bot into a startup would require a significant investment of time and resources, it has the potential to become a successful and profitable venture that could help fill a growing need for personalized news updates.

Expected Time Required

The development and deployment of a prototype for this news bot can be a time-intensive process, but with a dedicated team of two members and with the right resources, it is certainly achievable within a reasonable timeframe like 3-4 months.

GitHub Repository Link:

https://github.com/SamHeuer/NewsNimble

