

CREATE A NEWS APPLICATION WITH PYTHON
K.SUPARNA¹, TATIPATTI SIVA DURGA ²

¹ Assistant Professor MCA, DEPT, Dantuluri Narayana Raju College , Bhimavaram, Andhrapradesh

Email id:- suparnakalidindi@gmail.com

²PG Student of MCA, Dantuluri Narayana Raju College , Bhimavaram, Andhrapradesh

Email id :- tatipattisivadurga@gmail.com

ABSTRACT

The News Application project is an open-source repository available on GitHub, aimed at providing a web-based platform for accessing and browsing news articles. This abstract provides an overview of the project, highlighting its objectives, key components, and functionality.

This is a News Application created using Python's Django Framework. In this application, user can search news about any topics they want. The topics can be related to any person, any location, any fields etc. Once the user searches for the topic, the topic name is stored in the database, and accordingly an API Call is made for that topic. The result is fetched in the JSON Format and displayed in the front page. For improving the display of the page, Bootstrap framework is used. The API data is being fetched from the website of News API only after registering and providing Proper API Key.

1. INTRODUCTION

Introduction to Project Online News Portal

In today's fast-paced world, staying updated with the latest news is crucial. The News Application project aims to address this need by providing a web-based platform for accessing and browsing news articles. The application aggregates news articles from various sources and provides users with a user-friendly interface to read and explore news content.

Literature Survey:

Since news papers are generally intended for a general audience the information they provide will be of on use for your list review. Journalist are generally not scholars expects on the topic on which they are writing and us newspaper articles are not scholarly source.

News Aggregation:

The news aggregation module collects news articles from various sources, such as RSS feeds or news APIs. It fetches news articles and organizes them based on categories, topics, or sources, ensuring a diverse range of news content for users.

News Article Display:

The news article display module presents the news articles in a user-friendly and visually appealing manner. It includes features such as article summaries, images, publication dates, and author information. Users can click on articles to view the full content.

Search and Filtering:

The search and filtering module enables users to search for specific news articles based on keywords, categories, or sources. It provides an intuitive search interface and allows users to filter articles based on their preferences.

Social Sharing:

The social sharing module allows users to share interesting articles on social media platforms or via email. It includes social sharing buttons for popular platforms, making it easy for users to share news content with their networks.

Advantages

- News on the Internet can be updated round the clock so that readers can have the most up-to-date news any time of the day or night.
- Once a news item is put on the Internet, it becomes instantly available for use round the globe without additional variable costs.
- The lead time required between occurrence of an event and news making on it available on the Internet has reduced considerably. Some items of news like stock market prices are now available almost in real-time.
- News provider can get detailed data on popularity of news items. This information can help in better choice of information put on the site.
- The type of news and the way it is presented can be customized to the needs and preference of individual readers
- You don't have to wait for newspaper in morning.
- Any time any news related to different fields will be available.
- Money and time will also save.

Disadvantages

- Newspapers are more convenient to read. One can easily relax, reclined over a deck chair, and reading a newspaper. This Kind of ease in reading is not possible with Internet-news.
- Newspaper can be carried and read at any location of the world. There is no precondition of availability of Internet connectivity.
- Newspaper can be carried and read at any location of the world. There is no precondition of availability of Internet connectivity.
- Reading newspaper does not require any equipment such as a computer.
- It is important to note that Internet capabilities are improving very fast, and with that the Internet-news is moving toward overcoming its current disadvantages over newspaper.

2. LITERATURE SURVEY AND RELATED WORK**Introduction**

Define the scope of your project, including the goals and objectives of creating a news application.

Explain the importance of staying updated with news and the need for efficient news delivery mechanisms.

Introduce the concept of news applications and their role in today's digital world.

Existing News Applications

Identify and analyze popular news applications available on various platforms (web, mobile, desktop).

Discuss their features, user interfaces, and user experiences.

Highlight their strengths and weaknesses.

Provide insights into how they gather and deliver news content.

Technologies and Tools

Explore the programming languages, frameworks, and libraries commonly used to develop news applications.

Discuss the advantages and disadvantages of using Python for this project.

Investigate tools and APIs that can be used for web scraping, data storage, and content delivery.

Web Scraping

Describe the process of web scraping for news articles.

Discuss the challenges and legal considerations related to web scraping.

Mention popular Python libraries for web scraping, such as BeautifulSoup and Scrapy.

Data Storage

Explain the importance of efficient data storage for news applications.

Compare different database systems (e.g., SQLite, MySQL, MongoDB) for storing news data.

Discuss data modeling and schema design for news articles.

User Interface Development

Discuss the principles of user interface (UI) and user experience (UX) design.

Explore Python libraries and frameworks for building UIs, such as Tkinter, PyQt, or web-based frameworks like Flask and Django.

Present design patterns and best practices for creating a user-friendly news application interface.

Content Delivery

Explore various methods of delivering news content to users, such as push notifications, email subscriptions, and real-time updates.

Discuss APIs and services for delivering news content efficiently.

Explain how to handle user preferences and personalization.

Security and Privacy

Address security concerns related to data storage, user accounts, and content delivery.

Discuss user privacy and data protection regulations, such as GDPR.

Explain how to secure web scraping and prevent unauthorized access.

Monetization Strategies

Explore different monetization models for news applications, such as ads, subscriptions, and freemium models.

Discuss the advantages and disadvantages of each model.

Provide case studies of successful news applications and their monetization strategies.

Conclusion

Summarize the key findings from the literature survey.

Highlight the critical aspects to consider when developing a news application in Python.

Set the stage for your project by emphasizing the importance of careful planning and the integration of best practices.

Remember that this literature survey is just the first step in creating a news application. Once you have a solid understanding of the existing landscape and best practices, you can proceed with the project's design, implementation, and testing phases. Good luck with your news application development!

3. EXISTING SYSTEM

System Analysis is a detailed study of the various operations performed by a system and their relationships within and outside of the system. Here the key question is- what all problems exist in the present system? What must be done to solve the problem? Analysis begins when a user or manager begins a study of the program using existing system.

During analysis, data collected on the various files, decision points and transactions handled by the present system. The commonly used tools in the system are Data Flow Diagram, interviews, etc. Training, experience and common sense are required for collection of relevant information needed to develop the system. The success of the system depends largely on how clearly the problem is defined, thoroughly investigated and properly carried out through the choice of solution. A good analysis model should provide not only the mechanisms of problem understanding but also the frame work of the solution. Thus it should be studied thoroughly by collecting data about the system. Then the proposed system should be analyzed thoroughly in accordance with the needs.

System analysis can be categorized into four parts.

- System planning and initial investigation
- Information Gathering
- Applying analysis tools for structured analysis
- Feasibility study
- Cost/ Benefit analysis.

4.PROPOSED SYSTEM

The proposed News Application system is built using Python and the Django web framework. The key components and features of the system include:

News Aggregation:

The news aggregation module collects news articles from various sources, such as RSS feeds or news APIs. It fetches news articles and organizes them based on categories, topics, or sources, ensuring a diverse range of news content for users.

News Article Display:

The news article display module presents the news articles in a user-friendly and visually appealing manner. It includes features such as article summaries, images, publication dates, and author information. Users can click on articles to view the full content.

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The social sharing module allows users to share interesting articles on social media platforms or via email. It includes social sharing buttons for popular platforms, making it easy for users to share news content with their networks.

Feasibility Analysis:

Whatever we think need not be feasible .It is wise to think about the feasibility of any problem we undertake. Feasibility is the study of impact, which happens in the organization by the development of a system. The impact can be either positive or negative. When the positives nominate the negatives, then the system is considered feasible. Here the feasibility study can be performed in two ways such as technical feasibility and Economical Feasibility.

Technical Feasibility:

We can strongly says that it is technically feasible, since there will not be much difficulty in getting required resources for the development and maintaining the system as well. All the resources needed for the development of the software as well as the maintenance of the same is available in the organization here we are utilizing the resources which are available already.

Economical Feasibility:

Development of this application is highly economically feasible. The organization needed not spend much money for the development of the system already available. The only thing is to be done is making an environment for the development with an effective supervision. I f we are doing so, we can attain the maximum usability of the corresponding resources. Even after the development, the organization will not be in condition to invest more in the organization. Therefore, the system is economically feasible.

5. IMPLEMENTATION**Implementation**

Detailed Design of Implementation - This phase of the systems development life cycle refines hardware and software specifications, establishes programming plans, trains users and implements extensive testing procedures, to evaluate design and operating specifications and/or provide the basis for further modification.

Technical Design - This activity builds upon specifications produced during new system design, adding detailed technical specifications and documentation.

Test Specifications and Planning - This activity prepares detailed test specifications for individual modules and programs, job streams, subsystems, and for the system as a whole.

Programming and Testing - This activity encompasses actual development, writing, and testing of program units or modules.

User Training - This activity encompasses writing user procedure manuals, preparation of user training materials, conducting training programs, and testing procedures.

Acceptance Test - A final procedural review to demonstrate a system and secure user approval before a system becomes operational.

Installation Phase - In this phase the new Computerized system is installed, the conversion to new procedures is fully implemented, and the potential of the new system is explored.

System Installation: The process of starting the actual use of a system and training user personnel in its operation.

Review Phase - This phase evaluates the successes and failures during a systems development project, and to measure the results of a new Computerized Transystem in terms of benefits and savings projected at the start of the project.

Development Recap - A review of a project immediately after completion to find successes and potential problems in future work.


Post-Implementation Review - A review, conducted after a new system has been in operation for some time, to evaluate actual system performance against original expectations and projections for cost-benefit improvements. Also identifies maintenance projects to enhance or improve the system

6. RESULTS AND DISCUSSION SCREEN SHOTS

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https://www.cnbc18.com

Stock Market Live: Sensex, Nifty 50 likely to open lower, Asian indices in the red - CNBC TV18

Share Market LIVE Updates: Indian equity benchmarks BSE Sensex and NSE Nifty 50 open lower on Wednesday. Losses in financial and FMCG shares led the headline indices lower.

Date: 2023-08-02T04:29:38Z [See Full News](#)



None

No Communication From RBI On CEO Succession: Kotak Mahindra Bank - NDTV News

Kotak Mahindra Bank's current CEO Uday Kotak's term ends in December this year, and as per RBI's new rules on limiting the tenures of CEOs, he cannot continue in the office.

Date: 2023-08-02T03:06:55Z [See Full News](#)

Business Standard

Stocks to Watch on Aug 2: HeroMoto, Campus Activewear, Adani Wilmar, Titan - Business Standard

Business Standard


None

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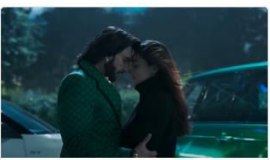
TIMESOFINDIA.COM

WHAT? Adil Hussain says a scene in 'Sholay' was copied from 'Once Upon A Time in the West'; netizens mock the actor - Times of India

The Times of India

What if someone told you that a part of the Amitabh Bachchan, Dharmendra, Sanjeev Kumar and Amjad Khan starrer cult film 'Sholay' was lifted from a Hollywood movie? That's correct! Actor Adil Hussain has posted a video sequence from Sergio Leone's 19

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HT Entertainment Desk

Rocky Aur Rani Kii Prem Kahaani box office: Ranveer and Alia film earns ₹60 cr - Hindustan Times

Hindustan Times

Rocky Aur Rani Kii Prem Kahaani box office: The Karan Johar film now stands at ₹60 crore after five days of its release. | Bollywood

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etimes.in

Bigg Boss OTT 2: Janardhan Dhurve's Bhavishyavani: Elvish Yadav will get married at 30, Avinash Sachdev h - Times of India

The Times of India

Bebika Dhurve's father enters the house and all the contestants sat down with him to know about their future. His bhavishyavani for Elvish and Avinash

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None
Uncovering the mechanisms of attention processing in frontoparietal networks - News-Medical.Net
News-Medical.Net
Almost half of patients who experienced a stroke in the right cerebral hemisphere later develop a very unusual symptom: they lose the ability to perceive what is happening in the left side of space.

Date: 2023-08-02T04:26:00Z See Full News



None
Study offers deeper understanding of regulatory T cells yielding therapeutic benefits - News-Medical.Net
News-Medical.Net
Decades of research have left knowledge gaps about cells that regulate the immune system: Purdue and NIH.

Date: 2023-08-02T03:51:00Z See Full News



None
Pecans may help prevent obesity and reduce inflammation, study shows - News-Medical.Net
News-Medical.Net
Daily consumption of pecans have been shown to prevent obesity and a host of related health issues like fatty liver disease and diabetes, according to a collaborative study by Texas A&M AgriLife scientists.

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NDTV Sports Desk
"...For Last 8-9 Years": Sanju Samson Sums Up His Team India Career - NDTV Sports
NDTV News
Sanju Samson scored a half-century in the 3rd ODI against West Indies as India won the contest by 200 runs.

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Ritayan Basu
Real Madrid Legend Marcelo Breaks Opponent's Leg in Two, Sent Off in Tears | WATCH - News18
News18
Marcelo was sent off in tears after his lunge at Luciano Sanchez during a Copa Libertadores match left the Argentinos Jrs defender with a horrific injury.

Date: 2023-08-02T02:47:52Z See Full News



HT Sports Desk
'Don't want luxury': Hardik Pandya slams West Indies cricket board for not making 'basic arrangements' for Team India - Hindustan Times
Hindustan Times
After India beat West Indies by 200 runs in the 3rd ODI to seal the series 2-1, Hardik Pandya slammed the West Indies cricket board for poor arrangements. | Cricket

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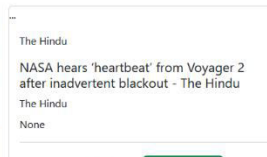
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Stock Market Live: Sensex, Nifty 50 likely to open lower, Asian indices in the red - CNBCTV18
CNBCTV18
Share Market LIVE Updates: Indian equity benchmarks BSE Sensex and NSE Nifty 50 open lower on Wednesday. Losses in financial and FMCG shares led the headline indices lower.

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The Hindu
NASA hears 'heartbeat' from Voyager 2 after inadvertent blackout - The Hindu
The Hindu
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None
NASA Walllops successfully launches Antares rocket to ISS - WAVY TV 10
YouTube
The NG-19 Cygnus spacecraft successfully launched aboard Northrop Grumman's Antares rocket just after 8:30 p.m. Tuesday, then made its way to the ISS, with a...

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Brian Dakss, Alex Sundby

Mega Millions jackpot leaps to estimated \$1.25 billion - CBS News

CBS News

The pot of gold soared after no winning tickets were sold for Tuesday night's estimated \$1.1 billion grand prize.

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Associated Press

MLB Roundup: Rays beat Yankees again, Cubs score 20 in win over Reds - Sportsnet.ca

Sportsnet.ca

Zach Eflin pitched six shutout innings of three-hit ball to become the American League's first 12-game winner, Randy Arozarena hit a two-run homer off Carlos Rodón and Tampa Bay beat New York.

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None

Singer Lizzo Sued By Former Dancers For Sexual Harassment And Hostile Work Environment - NDTV

NDTV News

The complaints filed by plaintiffs Arianna Davis, Crystal Williams and Noelle Rodriguez include harassment based on sex, religion, race and disability.

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7.CONCLUSION AND SCOPE

CONCLUSION

The News Application project a web-based platform for accessing and browsing news articles. By leveraging Python and the Django web framework, the system offers user registration and authentication, news aggregation, article display, search and filtering, bookmarking and saved articles, social sharing, and commenting features. The News Application serves as a valuable resource for users to stay informed and engaged with the latest news. The project is open-source, allowing users to contribute, customize, and enhance the system according to their specific requirements.

8.REFERENCE

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- 3) Head First Java 2nd Edition
- 4) <http://www.jdbc-tutorial.com/>
- 5) Java and Software Design Concepts by APre