INFOTAIL - NEWS TRANSLATER

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1. INTRODUCTION

Welcome to our new website, your one-stop destination for the latest and most accurate information on current events, both locally and globally. We are committed to providing our readers with unbiased and well-researched news stories, covering various topics including politics, sports, technology, entertainment, and more.Our team of experienced journalists and editors is dedicated to delivering high-quality, in-depth reporting, with a focus on delivering the facts and putting the events of the world into context. We believe in the importance of accurate and responsible journalism, and our aim is to provide you with the information you need to stay informed and engaged with the world around you.

Whether you are looking for breaking news updates, in-depth analysis, or a quick read to stay up-to-date, our website covers you. Our articles are written with the reader in mind, offering clear and concise information, and always backed up by credible sources.

In addition to our news articles, we offer a range of features and multimedia content, including video, podcasts, and interactive infographics, to provide our readers with a comprehensive and engaging experience.

So if you are looking for reliable and trustworthy news, look no further than our website. Bookmark us today, and stay connected with the world, 24/7.

SYSTEM STUDY:

A Comprehensive Analysis of the Existing System, Proposed System, and Feasibility Study for a News Website

The purpose of this system study is to provide a comprehensive analysis of the existing system, proposed system, and feasibility study for a news website. The existing system refers to the current setup and technology being used by the website, while the proposed system is a design and development plan for a new or updated website. The feasibility study evaluates the viability and achievability of the proposed system, including a thorough analysis of the costs, resources, and risks associated with the project.

Existing System:

The existing system for the news website includes a content management system, user interface, and various processes for managing and delivering news content to users. This section will provide a detailed analysis of the strengths and weaknesses of the existing system, and identify areas for improvement.

Strengths:

• User-friendly interface: The current website has a simple and intuitive user interface, making it easy for users to navigate and find the information they need.

• Content management system: The current content management system is efficient and allows for easy management and updating of news content.

• Integration with social media: The website is integrated with social media platforms, allowing users to easily share news articles and engage with the content.

Weaknesses:

• Limited functionality: The current website has limited functionality and does not offer advanced features such as video and multimedia content.

• Slow loading times: The website takes a long time to load, causing frustration for users and impacting the overall user experience.

• Outdated design: The current design of the website is outdated and does not provide an attractive or engaging user experience.

Proposed System:

Based on the analysis of the existing system, a proposed system has been developed to address the limitations and improve the overall performance and user experience of the news website. This section will provide a detailed description of the proposed system, including the technologies, features, and processes that will be incorporated.

Proposed Technologies:

• Content management system: A new and more advanced content management system will be implemented to improve efficiency and allow for easy management of news content.

• User interface: The user interface will be updated to provide a more attractive and engaging user experience.

• Multimedia content: The website will incorporate video and multimedia content to provide a more comprehensive and engaging user experience.

Proposed Features:

• Advanced search functionality: The website will include advanced search functionality, allowing users to easily find the information they need.

• Social media integration: The website will be further integrated with social media platforms, allowing for more engagement and sharing of news content.

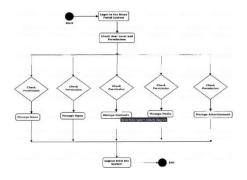
• Mobile optimization: The website will be optimized for mobile devices, allowing users to access the content on the go. Feasibility Study:

The feasibility study provides an evaluation of the proposed system, including an analysis of the technical, economic, and operational feasibility of the project. This section will provide a detailed analysis of the costs, resources, and risks associated with the proposed system, and make recommendations for proceeding with the project.

• Technical Feasibility: The proposed system is technically feasible, with the technologies and systems required for the implementation of the proposed system readily available. The proposed system is expected to provide improved performance and functionality compared to the existing system.

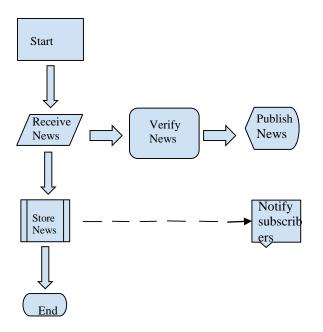
• Economic Feasibility: The cost of the proposed system, including the cost of development, implementation, and ongoing maintenance, will be significant.

• Operational Feasibility: The proposed system is an evaluation of the operational feasibility of the proposed system, including an analysis of the resources required and the potential risks involved.

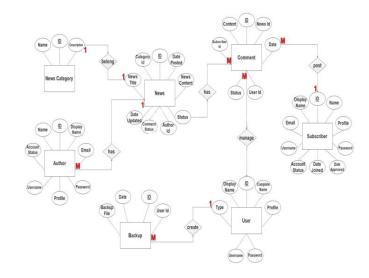




BUSINESS DIAGRAM



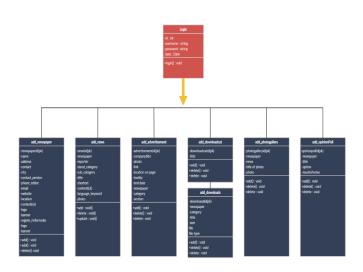
ER DIAGRAM





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CLASS DIAGRAM



SYSTEM REQUIREMENTS:-

INTRODUCTION:

a. Purpose:

The purpose of the System Requirements document, including the scope and objectives of the project.

b. Background:

A description of the background and context of the project, including the need for a new or updated news website.

c. Overview:

A high-level overview of the proposed system and its key features and functions.

User Requirements:

User requirements for a news website can vary greatly depending on the target audience and the specific goals of the website. However, some common requirements for a news website include:

User-friendly interface: The website should have a clean, intuitive, and easy-to-use interface that allows users to easily find and access the news they are interested in.

Mobile responsiveness: The website should be optimized for viewing on different devices, including smartphones and tablets.

Reliable and up-to-date information: The website should provide accurate, up-to-date, and relevant news that is sourced from trusted sources.

Customizable content: Users should be able to customize their news feed to see news related to specific topics or regions that they are interested in.

Social media integration: The website should allow users to easily share news articles on their social media accounts.

Multimedia support: The website should support the use of multimedia elements such as images, videos, and audio to enhance the news content.

User comments and discussions: The website should allow users to engage in discussions and leave comments on news articles, creating a sense of community among users.

Search functionality: The website should provide users with a search functionality that allows them to easily find news articles based on keywords or specific topics.

Personalization: The website should provide users with a personalized experience by remembering their preferences and displaying relevant news articles based on their interests.

Security and privacy: The website should have strong security measures in place to protect user data and ensure that user information is kept confidential.

These are just a few examples of the types of requirements that a news website might need to meet in order to be successful. It is important to carefully consider the target audience and goals of the website in

order to determine the specific requirements that are most relevant.

User Profiles:

a. Journalists:

Journalists are the primary contributors to the news website, responsible for writing, editing, and publishing articles. They need to be able to access the website from any location, and have the ability to upload articles, edit articles, and view the status of their articles.

b. Editors:

Editors are responsible for reviewing, approving, and publishing articles on the website. They need to be able to access the website from any location, and have the ability to view articles, approve articles, and view the status of articles. c. Readers:

Readers are the end-users of the website, responsible for accessing and reading articles. They need to be able to access the website from any location, and have the ability to search for articles, view articles, and leave comments on articles.

User Needs:

a. Journalists:

i. Accessibility:

Journalists need to be able to access the website from any location and on any device, including laptops, tablets, and smartphones.

ii. Article Creation:

Journalists need to be able to create articles using a simple and intuitive interface, and have the ability to format text, insert images, and add links.

iii. Article Management:

Journalists need to be able to view the status of their articles, edit articles, and delete articles if necessary.

iv. Workflow:

Journalists need to be able to submit articles for review, receive feedback from editors, and make revisions if necessary.

b. Editors:

i. Accessibility:

Editors need to be able to access the website from any location and on any device, including laptops, tablets, and smartphones.

ii. Article Review:

Editors need to be able to view articles, approve articles, and provide feedback to journalists.

iii. Article Management:

Editors need to be able to view the status of articles, approve articles, and publish articles.

iv. Workflow:

Editors need to be able to review articles, provide feedback to journalists, approve articles, and publish articles.

c. Readers:

i. Accessibility:

Readers need to be able to access the website from any location and on any device, including laptops, tablets, and smartphones.

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ii. Search and Navigation:

Readers need to be able to search for articles by keyword, view articles by category, and filter articles by date and author.

iii. Article Viewing:

Readers need to be able to view articles in a clear and readable format, with the ability to adjust font size, view images, and follow links.

iv. Commenting:

Readers need to be able to leave comments on articles, and receive notifications when their comments are approved or replied to.

Functional Requirements:

a. Purpose:

The purpose of this document is to define the functional requirements for a news website.

b. Scope:

The scope of this document includes the functional requirements for all user groups that will interact with the news website, including journalists, editors, and readers.

c. Objectives:

The objectives of this document are to define the functional requirements, prioritize the requirements based on importance and feasibility, and ensure that the requirements are aligned with the overall project goals and objectives.

User Profiles:

a. Journalists:

Journalists are the primary contributors to the news website, responsible for writing, editing, and publishing articles. They need to be able to access the website from any location, and have the ability to upload articles, edit articles, and view the status of their articles.

b. Editors:

Editors are responsible for reviewing, approving, and publishing articles on the website. They need to be able to access the website from any location, and have the ability to view articles, approve articles, and view the status of articles.

c. Readers:

Readers are the end-users of the website, responsible for accessing and reading articles. They need to be able to access the website from any location, and have the ability to search for articles, view articles, and leave comments on articles.

Functional Requirements:

a. Login and Authentication:

The website should allow users to log in using a username and password, and should also provide the ability to reset passwords if necessary. The website should also support multi-factor authentication for added security.

b. Article Creation:

Journalists should be able to create articles using a simple and intuitive interface, and have the ability to format text, insert images, and add links. The website should also provide the ability to save articles as drafts, and allow journalists to preview articles before submitting them for review.



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c. Article Review and Approval:

Editors should be able to view articles, provide feedback to journalists, approve articles, and publish articles. The website should also provide the ability to reject articles if necessary, and allow editors to view the status of articles at any time.

d. Article Management:

Journalists and editors should be able to view the status of articles, edit articles, and delete articles if necessary. The website should also provide the ability to archive articles, and allow users to view a history of changes to articles. e. Search and Navigation:

Readers should be able to search for articles by keyword, view articles by category, and filter articles by date and author. The website should also provide the ability to view related articles, and allow users to save articles for later.

f. Article Viewing:

Readers should be able to view articles in a clear and readable format, with the ability to adjust font size, view images, and follow links. The website should also provide the ability to print articles, and allow users to share articles on social media.

g. Commenting:

Readers should be able to leave comments on articles, and receive notifications when their comments are approved or replied to. The website should also provide the ability to flag inappropriate comments, and allow editors to view and manage comments.

h. Analytics:

The website should provide real-time analytics on user engagement, including the number of views, comments, and shares for each article. The website should also provide the ability to export analytics data for further analysis.

Functionalities: -

a. Core Functionality:

A description of the core functionality required by the system, including article creation, approval, and

publication.

b. Non-Functional Requirements:

A description of the non-functional requirements of the system, including performance, scalability, security, and usability.

c. Use Cases:

A collection of use cases that describe the steps required to complete specific tasks using the system.

Technical Requirements:

a. Purpose:

The purpose of this document is to define the technical requirements for a news website.

b. Scope:

The scope of this document includes the technical requirements for the hardware, software, network infrastructure, and security of the news website.

c. Objectives:

The objectives of this document are to define the technical requirements, prioritize the requirements based on importance and feasibility, and ensure that the requirements are aligned with the overall project goals and objectives.

Hardware Requirements:

A description of the hardware requirements of the system, including server specifications and any necessary software.



a. Server:

The news website will require a web server to host the website, store data, and provide access to users. The web server should be high-performance, with sufficient memory and storage capacity to meet the demands of the website. **b. Database:**

The news website will require a database to store articles, user information, and analytics data. The database should be highly scalable, and provide robust security features to protect sensitive data.

c. Load Balancer:

The news website may require a load balancer to distribute incoming traffic across multiple servers, and ensure high availability and performance for users.

Software Requirements:

A description of the software requirements of the system, including any necessary third-party applications or libraries.

a. Operating System:

The news website will require an operating system that is compatible with the web server and database, and provides robust security features.

b. Web Server Software:

The news website will require a web server software that supports dynamic content, and provides robust security features.

c. Database Software:

The news website will require a database software that is highly scalable, and provides robust security features.

d. Content Management System (CMS):

The news website may require a CMS to provide an intuitive and user-friendly interface for journalists and editors to create, review, and publish articles.

e. Analytics Software:

The news website may require analytics software to provide real-time analytics on user engagement and website performance.

Network Requirements:

a. Internet Connectivity:

The news website will require a high-speed internet connection to provide access to users, and ensure fast and reliable performance.

b. Domain Name System (DNS):

The news website will require a DNS to provide a human-readable domain name, and map it to the IP address of the web server.

c. Security:

The news website will require robust security features to protect sensitive data, prevent unauthorized access, and ensure the confidentiality and privacy of users.

Security Requirements:

A description of the security requirements of the system, including authentication, authorization, and data protection.

a. Authentication:

The news website should provide robust authentication features to ensure that only authorized users can access the website and sensitive data.

b. Encryption:

The news website should provide encryption for all sensitive data, including user information and analytics data, to ensure the confidentiality and privacy of users.

c. Firewall:

The news website should be protected by a firewall to prevent unauthorized access and protect against cyber-attacks.



d. Backup and Recovery:

The news website should have a robust backup and recovery plan in place to ensure that data is protected and can be recovered in the event of a disaster or outage. Project Management Requirements:

a. Project Plan:

A high-level project plan that outlines the key milestones, tasks, and deliverables for the project.

b. Resource Requirements:

A description of the resource requirements of the project, including personnel, equipment, and budget.

c. Quality Assurance:

A description of the quality assurance plan for the project, including testing and verification procedures.

Conclusion:

a. Summary:

A summary of the key requirements and considerations for the project.

. Next Steps:

A description of the next steps in the development process, including design, implementation, and deployment.

• In conclusion, the System Requirements document for a news website should provide a comprehensive description of the requirements and constraints of the project.

• It should include a description of the user and functional requirements, technical requirements, and project management requirements, as well as a high-level project plan and quality assurance plan.

• This document serves as a roadmap for the development of the system and helps to ensure that the final product meets the needs and expectations of all stakeholders.

DESIGN :-

Design phase deals with transforming the requirements, as described in the SRS document, into a form that is implemented using a programming language. The various designs of this system are shown as following:

1. Data Flow Diagram:

Data Flow diagram is a graphical representation of flow of data throughout the information system. Data flow diagrams illustrate how data is processed by a system in terms of inputs and outputs.

TESTING:-

• A news website is a digital platform that provides access to current events, news stories, and other related content to its users.

• As the internet has become an integral part of people's daily lives, the importance of having a functional, user-friendly, and reliable news website has increased.

- To ensure that a news website is delivering a positive user experience, it is crucial to test it thoroughly.
- This guide outlines the key areas to focus on when testing a news website

9.1 Functionality Testing

- The functionality of a news website should be tested to ensure that it is easy to use and provides a seamless user experience.
- The following points should be considered when conducting functionality testing:



a. Navigation:

Check that the navigation menu is clear, concise, and easy to use. Ensure that all links within the navigation menu work as expected and that they lead to the correct pages.

b. Search:

Test the search functionality to ensure that it is working correctly and delivering relevant results. Check that the search bar is easily accessible and that the results page displays the information in a clear and concise manner.

c. Filtering and Sorting:

Verify that the filtering and sorting options work as expected, and that they allow users to quickly find the content they are looking for.

8.2 Content Testing:-

Content testing is crucial to ensure that the information on the news website is accurate, up-to-date, and relevant. The following points should be considered when conducting content testing:

a. Accuracy:

Check that the information on the website is accurate and up-to-date. Verify that all news stories, articles, and other content are fact-checked and free of errors.

b. Relevance:

Ensure that the content on the website is relevant to the target audience and that it covers a range of topics that are of interest to the users.

c. Broken links and missing images:

Check for broken links and missing images on the website to ensure that the user experience is not

impacted.

9.3 User Experience Testing:-

• User experience testing is important to ensure that the design and layout of the news website are appealing, easy to use, and accessible.

• The following points should be considered when conducting user experience testing:

a. Design and Layout:

Evaluate the design and layout of the website to ensure that it is visually appealing and easy to use. Check for consistency in the layout and navigation and ensure that the website is responsive on different devices.

b. Accessibility:

Verify that the website is accessible to users with disabilities, including those who are visually impaired. Check that the website is compliant with accessibility standards and that it provides alternative text for images and videos.

REPORT:-

A news website is a digital platform that provides access to current events, news stories, and other related content to its audience.

In today's fast-paced world, having access to accurate and up-to-date news is crucial.

As such, it is important that a news website is functional, user-friendly, and reliable.

This report will outline the key areas of focus when evaluating a news website, including functionality, content, and user experience.

Functionality :

Functionality is a crucial aspect of any news website. A functional news website should be easy to use and provide a seamless user experience.

The following areas should be evaluated when assessing the functionality of a news website:



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a. Navigation:

The navigation menu should be clear, concise, and easy to use. All links within the navigation menu should work as expected and lead to the correct pages.

b. Search:

The search functionality should be tested to ensure that it is working correctly and delivering relevant results. The search bar should be easily accessible, and the results page should display the information in a clear and concise manner.

c. Filtering and Sorting:

The filtering and sorting options should be evaluated to ensure that they work as expected and allow users to quickly find the content they are looking for.

Content :

The content of a news website is crucial to its success. The following areas should be evaluated when assessing the content of a news website:

a. Accuracy:

The information on the website should be accurate and up-to-date. All news stories, articles, and other content should be fact-checked and free of errors.

b. Relevance:

The content on the website should be relevant to the target audience and cover a range of topics that are of interest to the users.

c. Broken links and missing images:

The website should be checked for broken links and missing images to ensure that the user experience is not impacted.

User Experience :

The user experience is a key factor in determining the success of a news website. The following areas should be evaluated when assessing the user experience of a news website:

a. Design and Layout:

The design and layout of the website should be visually appealing and easy to use. The layout should be consistent, and the website should be responsive on different devices.

b. Accessibility:

The website should be accessible to all users, including those with disabilities. It should be compliant with accessibility standards and provide alternative text for images and videos.

CONCLUSION :-

• A news website is a critical platform in today's fast-paced world, providing access to current events and news stories to its audience. The functionality, content, and user experience of a news website are crucial to its success and must be regularly evaluated and tested.

• In terms of functionality, the navigation, search, and filtering and sorting options should all be user-friendly and provide a seamless experience. The website should be easy to navigate, and all links should be functional and lead to the correct pages. The search functionality should be tested to ensure that it is delivering relevant results and the filtering and sorting options should be evaluated to ensure that they are working as expected.

• The content of a news website is also critical to its success. The information on the website should be accurate, up-to-date, and relevant to the target audience. The website should be checked for broken links and missing images to ensure that the user experience is not impacted.



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• The user experience is a key factor in determining the success of a news website. The design and layout of the website should be visually appealing and easy to use, with a consistent layout across different devices. The website should also be accessible to all users, including those with disabilities, and be compliant with accessibility standards.

• In conclusion, a news website is a crucial platform for providing access to current events and news stories. By regularly evaluating and testing the functionality, content, and user experience, a news website can ensure that it is delivering a positive user experience and providing accurate and up-to-date information to its users.

FUTURE ENHANCEMENT:-

In today's fast-paced world, news websites have become an important source of information for people of all ages. They provide access to current events, news stories, and other related content, making them an essential tool for staying informed. However, with the rapidly changing technology and the increasing demands of users, it is essential that news websites continuously evolve to provide the best possible experience. In this article, we will discuss the key areas of focus for future enhancements for news websites. Artificial Intelligence and Machine Learning:

One of the major areas of focus for future enhancements for news websites is the integration of artificial intelligence (AI) and machine learning (ML). AI and ML can be used to personalize the news content for each user based on their interests, preferences, and search history. This will enable news websites to deliver a more personalized experience to their users and provide content that is relevant and of interest to them. Additionally, AI and ML can also be used to automate certain tasks, such as fact-checking, which will improve the accuracy and quality of the content.

User-Generated Content :-

Another important area of focus for future enhancements is the integration of user-generated content (UGC). UGC refers to any content that is created and published by users of a website, such as comments, reviews, and forums. The integration of UGC into news websites will allow users to engage with one another and provide a platform for them to discuss current events and news stories. Additionally, UGC can also help news websites to build a community of users, which will increase their engagement and loyalty.

Augmented Reality and Virtual Reality :-

Augmented reality (AR) and virtual reality (VR) are emerging technologies that are set to revolutionize the way news websites are experienced. AR and VR can be used to enhance news content by providing a more immersive and interactive experience. For example, news websites can use AR and VR to provide 360-degree views of events and news stories, allowing users to experience them as if they were there. This will provide a more engaging and interactive experience for users and allow them to gain a deeper understanding of the events and news stories they are reading about.

Mobile Optimization :-

In today's world, more and more people are accessing news websites from their mobile devices. As such, it is essential that news websites are optimized for mobile use. This includes ensuring that the website is responsive and provides a seamless experience on all devices, including smartphones and tablets. Additionally, news websites should also focus on improving the speed and performance of their mobile websites, as this will have a significant impact on the user experience.

Interactive Features :-

Interactive features are an important aspect of news websites, as they provide a more engaging and interactive experience for users. Future enhancements for news websites should focus on improving and adding new interactive features, such as polls, quizzes, and games. These features will provide a more engaging and interactive experience for users, encouraging them to spend more time on the website and engage with the content.

Video Content :-

Video content is becoming increasingly popular, and news websites should take advantage of this trend. Future enhancements for news websites should focus on increasing the amount of video content available, such as live streaming events and news stories. Video content provides a more engaging and interactive experience for users, allowing them to gain a deeper understanding of the events and news stories they are reading about.



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Data Privacy and Security :-

Data privacy and security are critical issues that must be addressed by news websites. Future enhancements should focus on ensuring that the website is secure and protects the personal information of its users. This includes implementing encryption and other security measures to protect against data breaches.

References:

1. A. Pathania and G. Rasool, "Investigating E tailer's perceived website quality using analytical hierarchy process technique", Procedia Comput. Sci., vol. 122, pp. 1016-1023, 2017..

2. . Kim and S. J. Lennon, "Effects of reputation and website quality on online consumers' emotion perceived risk and purchase intention", J. Res. Interact. Mark., 2013.

3. M. Pradana, M. D. Rahmawan, S. Wahyuddin and R. Imam, "Gap Analysis of University Online Learning Website from Students' Perspectives: A Case from Telkom University Indonesia", Journal of Physics: Conference Series, vol. 1752, no. 1, pp. 012069, 2021.

4. I. S. Utami and H. Setiadi, "Analysis The Effect of Website Quality on User Satisfaction with The WebQual 4.0 Method and Importance-Performance Analysis (IPA)(Case Study: SPMB SebelasMaret University's Website)", Journal of Physics: Conference Series, vol. 1842, no. 1, pp. 012003, 2021.

5. I. Ahmad, M. Yousaf, S. Yousaf and M. O. Ahmad, "Fake News Detection Using Machine Learning Ensemble Methods", Complexity, vol. 2020, 2020.

6. H. Han and T. Noro, "An Automatic Web News Article Contents Extraction System Based on RSS Feeds", Journal of Web Engineering(JWM), pp. 268-284, Sep. 2009.