Online news portal

Bhavik , Hitharth, Apra, Himanshu , Aashika

COMPUTER SCIENCE , POORNIMA

COLLEGE OF ENGINEERING, INDIA

Abstract

The development of a modern News Web Application aims to provide an engaging user experience with advanced features for reading news. The app targets daily newspaper readers, offering them the ability to read and listen to news articles. Its homepage is dynamically generated based on users' past searches to suggest relevant articles. A comment section allows real-time interaction, fostering discussions and feedback. An admin-user portal enables CRUD operations and user management. Developed using HTML, CSS, JavaScript, and React, the app is fully responsive and accessible on various devices. Extensive testing and benchmarking ensure performance with minimal latency even under high user loads. Security features like encryption, authentication, and access control safeguard user data and prevent cyber-attacks. Future directions for the app include further development and research to enhance its potential.

Keywords : html, css , javascript

Introduction-

In today's world, technology is an integral part of our lives, shaping our daily routines. The advent of computer technology has brought about a revolutionary change, with web applications becoming indispensable for most of our tasks. Websites have emerged as the go-to source of information, accessible anytime, anywhere, and at a minimal cost. In this age of information, knowledge is power, and our project aims to harness this power by raising awareness among people.Our project is an online news portal designed to address the limitations of the traditional manual system. The primary objective is to create a platform for managing web-based news, offering a user-friendly interface for people worldwide to stay informed about current events. The portal caters to two types of users: regular users, who can view and add comments, and administrators, who oversee and manage the website.Regular users can access relevant information based on various categories set by the administrator. They can also search for specific topics and add comments, which require approval from the administrator after providing their name and email. The website features essential pages that provide relevant information, which users can access as needed.Administrators are responsible for ensuring the website functions smoothly. They manage user permissions, approve comments, and generate reports to monitor the website's performance. The ultimate goal of this project is to create a user-friendly news portal that serves as a reliable source of information for people around the globe

Literature review-

This paper introduces a novel method to enhance webpage content accessibility by leveraging user browsing data to generate personalized and updated webpages tailored to user interests. This approach aims to streamline content discovery, reducing the need for extensive browsing or searching. The study demonstrates how this method can enhance user satisfaction and engagement with web-based content. An innovative approach for an online news portal is presented, focusing on prioritizing news topics based on registered users' preferences.

- The method involves a comprehensive analysis of user profiles using domain ontology and semantic techniques to deliver personalized news content aligned with user interests. This approach is expected to boost user engagement and satisfaction, while also enhancing the relevance and value of the news portal's content.A unique function for visually impaired individuals is described, involving news summarization. This function aims to improve accessibility for this user group, providing them with summarized news content tailored to their needs.An article proposes a solution for enhancing web application performance using Node.js, a server-side JavaScript runtime environment known for its non-blocking I/O model. This allows Node.js to handle multiple requests simultaneously, leading to more efficient and responsive web applications. Additionally, the article highlights the advantages of using React.js for front-end development, such as improved response times and enhanced search engine optimization (SEO) capabilities. Combining these technologies enables developers to create high-quality web applications that are fast and user-friendly.Another proposal introduces a web-based platform for innovative product design, focusing on user-oriented design principles to enhance firms' information management systems. The platform prioritizes user- friendliness to improve usability and overall user experience.

Problem statement

This study explores the methods and processes for designing and developing a user-friendly web-based system for an online news portal. The system allows users to access news categories such as sports, entertainment, business, science, health, and more. The focus is on creating an intuitive and efficient platform for users to navigate and find relevant news content easily.

Existing system-

There is a wide array of news applications and websites available, including popular platforms like

Google News, Apple News, and Flipboard, among others.

Google News:

Google News, a service developed by Google, aggregates news articles from thousands of publishers and magazines. It utilizes computer algorithms to select articles based on factors such as search history and location. Users can personalize their news feed by selecting preferred topics and news sources. Google News includes a feature called Full Coverage, which provides a comprehensive overview of a story using various perspectives, videos, and tweets. However, users cannot leave comments on articles.

Apple News:

Apple News is a news aggregator app for iOS, macOS, and watchOS devices. It offers personalized news feeds based on user interests and reading history, allowing users to follow specific topics, publications, and channels. Apple News also features curated news stories by a human editorial team, providing a blend of top stories, trending news, and personalized recommendations. Similar to Google News, Apple News lacks an interactive comment section for user engagement.

Flipboard:

Flipboard, available on iOS, Android, and web platforms, presents news articles and stories in a magazine-style format. Users can curate articles from various sources into personalized magazines. Flipboard offers Smart Magazines, utilizing machine learning to suggest articles based on user interests and behavior. Additionally, users can followspecific topics, publications, and users. Flipboard includes a commenting feature for user engagement, but it is not real-time, and there is no guarantee of receiving responses to comments

Proposed system-

The proposed News Web Application is designed to offer a modern interface and advanced features to enhance the user experience while reading news articles. A key feature of the application is its ability to provide personalized article suggestions based on a user's browsing history. This is achieved by analyzing the user's reading habits and interests to deliver relevant and captivating content. The application also includes a comment section for real-time discussions and feedback among users, fostering interaction and debate.

An admin-user portal is integrated into the system, enabling the admin to manage users and perform CRUD operations. This feature allows the admin to oversee user accounts, access control, and user-generated content.

Developed using HTML, CSS, JavaScript the application is fully responsive and accessible across various devices, including mobile, laptop, and tablet. Extensive testing and benchmarking have been conducted to evaluate the application's performance, demonstrating its capability to handle a large user base and deliver content with minimal latency. Security measures such as encryption, authentication, and access control have been implemented to safeguard user data and protect against cyber-attacks.

In summary, the proposed system aims to offer users a more personalized and engaging news reading experience compared to existing platforms.

Objective-

- Enable users to listen to news articles.
- Manage news categories and user profiles.
- Dynamically suggest related news topics.
- Allow users to review and comment on articles.

Methodology-

The methodology for developing and implementing the News Web Application is outlined as follows:

1. *Requirements Analysis*: This phase involved identifying the application's requirements and features by analyzing the needs of the target audience and market.

2 *Design*: During this phase, the application's architecture was created, and its user interface (UI) was designed using HTML, CSS, and JavaScript. The UI was designed to be responsive, accessible, and user-friendly.

3 *Development*: The application was developed using React for the front-end and Node.js, Express.js, and MongoDB for the backend. Algorithms were employed to suggest relevant articles based on users' past searches, and a real-time comment section was implemented for user interaction.

4. *Testing*: Extensive testing and benchmarking were conducted to ensure the application met performance and security standards. Any bugs or issues identified were addressed during this phase.
5. *Deployment*: The application was deployed to a production environment to makeit accessible to end-users.

6 *Evaluation*: The application's performance was evaluated based on its ability to handle a large user base, deliver content efficiently, and ensure user data privacy and security.

7 *Future Development*: The project concluded by highlighting the application's

potential and discussing future development and research directions

Highlights of website-

-Recommendation on starting page

-news articles

-related news according to search

-videos content too

-your own list of news

-dashboard available

Conclusions-

Based on the provided information, the abstract suggests the development of a News Web Application with a modern, user-friendly interface and advanced features for reading news articles. The application includes a personalized homepage, comment section, and admin-user portal for managing users and content. Frontend development utilizes HTML, CSS, JavaScript. Extensive testing has been conducted to evaluate the application's performance, security features, and scalability. Overall, the project aims to address challenges faced by traditional news systems and establish itself as a leading news platform in the digital age.

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