QUICK POLL

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Abstract

The Quick Poll system is a web-based application designed to enable users to create, share, and participate in polls in a fast and efficient manner. In today's digital environment, collecting opinions and feedback is essential for decision-making in education, business, and social platforms. This system provides a simple and user-friendly interface where users can instantly create polls with multiple options and distribute them to a wide audience. The application allows participants to vote in real-time, ensuring quick response collection and immediate result visualization through charts or percentage displays. It also includes features such as user authentication, secure voting mechanisms to prevent duplicate responses, and optional anonymity for voters. Administrators can manage polls, monitor responses, and analyze results for better insights.

The backend of the system is designed to handle data storage, vote counting, and result processing efficiently, while the frontend ensures smooth interaction and accessibility across devices. By integrating modern web technologies, the Quick Poll system ensures scalability, reliability, and ease of use. Overall, the Quick Poll system simplifies the process of opinion gathering and enhances user engagement by providing a fast, reliable, and interactive polling experience.

I. Introduction

In the modern digital era, collecting opinions and feedback has become an essential part of decision-making in various fields such as education, business, social media, and event management. Traditional methods of conducting surveys or polls, such as paper-based questionnaires or manual data collection, are time-consuming, less efficient, and prone to errors. To overcome these limitations, there is a need for a fast, reliable, and user-friendly system that can gather responses instantly and present results in a clear format. The Quick Poll system is designed to address this need by providing an online platform where users can easily create, share, and participate in polls within seconds. It enables users to post questions with multiple options and allows participants to vote conveniently from any device with internet access. The system ensures real-time data collection and instant result generation, making it highly effective for quick decision-making.

Additionally, the Quick Poll system incorporates features such as secure voting, prevention of duplicate responses, and optional anonymity, ensuring fairness and reliability of results. It also provides visual representations like charts and percentages, making it easier for users to analyze poll outcomes. By leveraging modern web technologies, the Quick Poll system improves efficiency, reduces manual effort, and enhances user engagement. It serves as a powerful tool for organizations and

individuals who need to collect opinions quickly and accurately in a digital environment.

II. Literature Survey

The concept of online polling and voting systems has been widely studied in the field of information technology, especially with the growth of web-based applications and digital communication. Traditional polling methods were mostly manual, involving paper-based surveys and physical data collection. These methods were inefficient, time-consuming, and prone to errors. Research studies highlight that such systems also required significant manpower and lacked real-time result processing capabilities .

With the advancement of technology, online voting and polling systems emerged as a more efficient alternative. These systems allow users to participate from any location using internet-enabled devices, significantly improving accessibility and reducing operational costs. Studies show that online systems enable instant data collection and faster decision-making, making them suitable for educational institutions, organizations, and social platforms .

Security and reliability have been major research concerns in the development of online polling systems. Many researchers have proposed the use of cryptographic techniques, biometric authentication, and secure login mechanisms to ensure voter authenticity and prevent duplicate voting. For example, some systems integrate fingerprint or facial recognition to verify users, ensuring that only authorized participants can vote . Additionally, cryptographic protocols are used to maintain data integrity and confidentiality during the voting process .

Recent studies have also explored the integration of blockchain technology in polling and voting systems. Blockchain provides a decentralized and transparent platform where votes can be securely recorded and verified. This approach helps prevent tampering, ensures transparency, and increases trust among users. Research indicates that blockchain-based systems can enhance system reliability and reduce the risk of fraud, although they still face challenges related to scalability and implementation complexity .

Another important area of research focuses on usability and user experience. Effective polling systems must be simple, intuitive, and accessible to users of all technical backgrounds. Studies emphasize that user-friendly interfaces and real-time result visualization (such as charts and graphs) significantly improve user engagement and participation rates.

Despite the advantages, existing systems still face limitations such as security vulnerabilities, dependence on internet connectivity, and concerns regarding data privacy. Researchers continue to explore improved models that balance security, usability, and efficiency. In conclusion, the literature indicates that online polling systems like the Quick Poll application are evolving rapidly with the integration of modern technologies. By combining secure authentication, real-time processing, and user-friendly design, these systems provide a reliable and efficient solution for collecting opinions and making informed decisions.

III. System Analysis

The Quick Poll system is designed to provide a fast and efficient way to collect opinions from users in real time. It focuses on delivering a simple, user-friendly interface that allows users to create and participate in polls without technical difficulty. The system analyzes requirements such as speed, accessibility, and security while ensuring that duplicate voting is prevented. It supports multiple users simultaneously and ensures smooth data storage and retrieval for instant result generation. The system also includes visualization features like charts and percentages for better understanding of results. Scalability and cross-device compatibility are considered to ensure performance across mobile and desktop platforms. Overall, the system aims to provide a reliable and efficient polling solution.

Existing System

The existing polling systems are mostly traditional and manual, relying on paper-based methods or basic digital tools. These systems require physical distribution of questionnaires, making the process time-consuming and labor-intensive. Manual vote counting often leads to errors and delays in result generation. Additionally, these systems have limited reach, restricting participation to specific locations. Some online systems exist, but they are often complex, lack proper security, and do not provide real-time updates. Data analysis is usually limited, and user engagement remains low due to slow and inefficient processes. Overall, existing systems are outdated and unable to meet modern requirements.

Disadvantages of Existing System

- Time-consuming data collection process
- High chances of human errors in counting
- Limited accessibility and reach
- Lack of real-time results
- Poor user engagement
- Insecure voting (duplicate or fake votes possible)

Proposed System

The proposed Quick Poll system is a web-based application that enables users to create and participate in polls instantly. It allows real-time voting from any location and ensures secure participation through authentication and duplicate vote prevention. The system automatically calculates results and displays them using graphical representations such as charts and percentages. It supports multiple devices and provides an intuitive interface for ease of use. Administrators can efficiently manage polls and monitor responses. The system is scalable, reduces manual work, and improves accuracy, making it a modern solution for quick and reliable opinion gathering.

Advantages of Proposed System

- Instant poll creation and participation
- Real-time result display

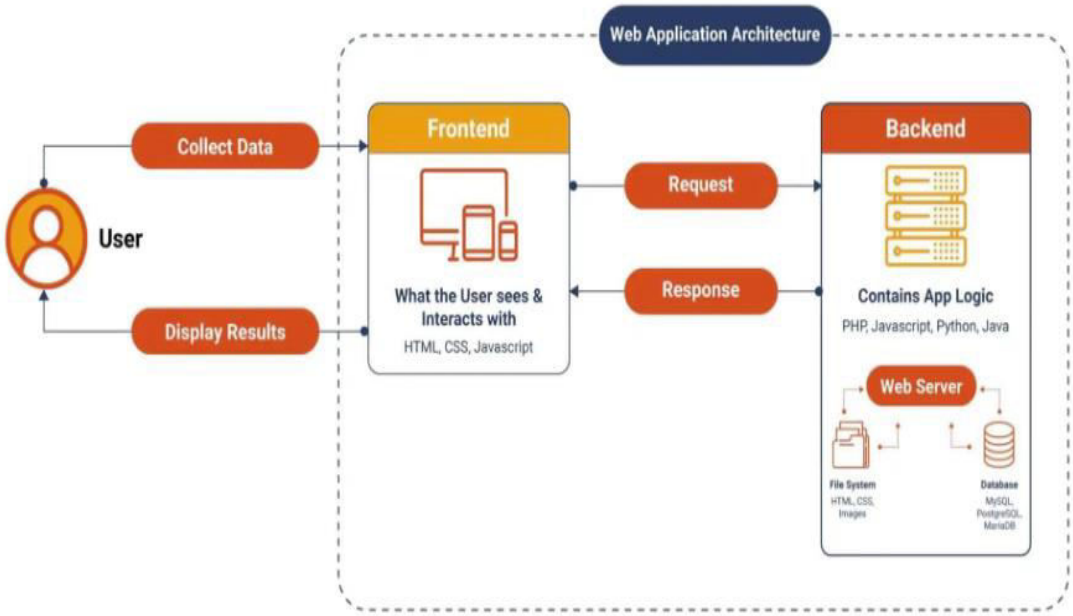
- User-friendly interface
- Secure and reliable voting system
- Accessible from anywhere
- Reduces manual work
- High accuracy in results

IV. Methodology

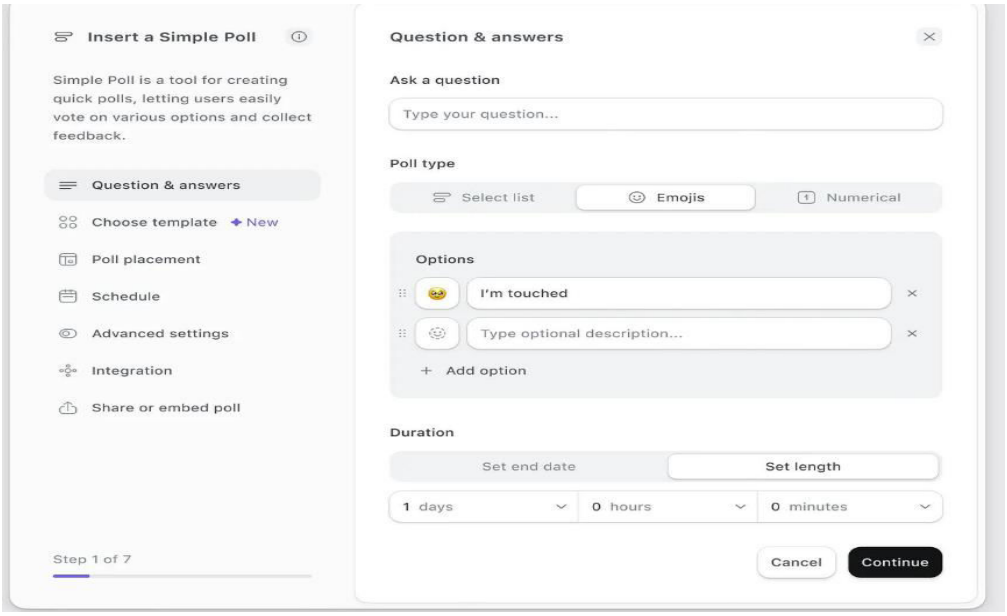
The development of the Quick Poll system follows a structured approach, starting with requirement gathering from users and stakeholders. The system is designed using a modular architecture, with separate frontend and backend components. The frontend focuses on user interaction, while the backend manages data processing and storage. A database is used to store poll information and user responses securely. APIs are implemented for communication between components, and authentication mechanisms ensure secure access. The system undergoes rigorous testing to ensure reliability and performance before deployment. Continuous maintenance and updates are carried out to improve functionality and user experience.

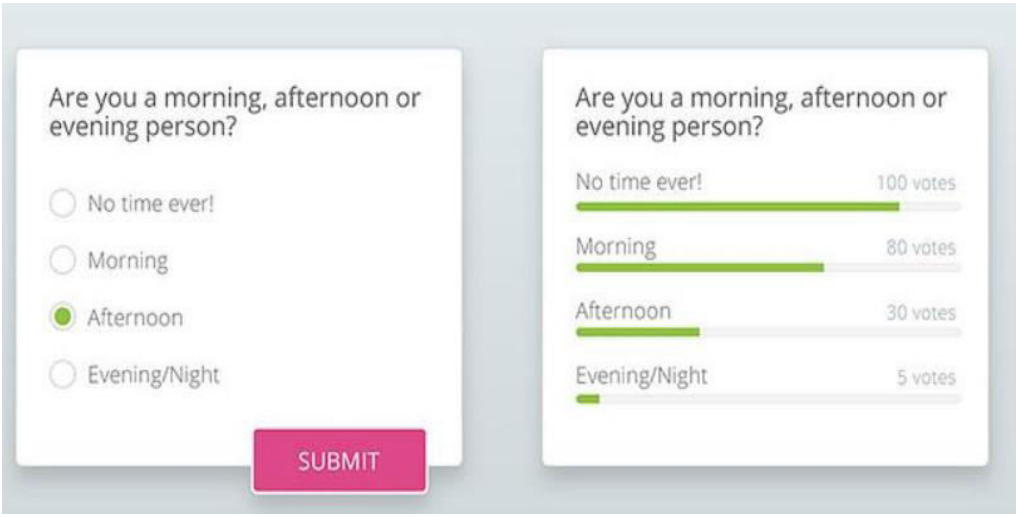
System Architecture

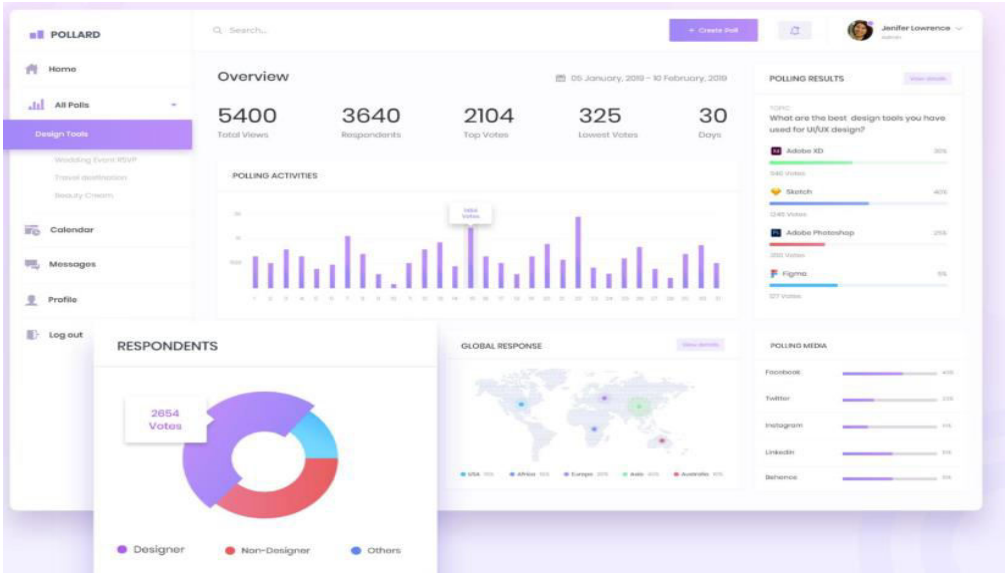
The Quick Poll system follows a client-server architecture where the frontend acts as the user interface and the backend handles processing. Users interact with the system through web browsers, sending requests to the server. The server processes these requests and communicates with the database to store and retrieve information. APIs facilitate smooth interaction between frontend and backend components. Authentication modules ensure secure access, while real-time updates enable instant result display. Admin functionalities allow efficient poll management and monitoring. The architecture is designed to be scalable, secure, and efficient, ensuring smooth performance for all users.



V. Result and Output







VI. Conclusion

In conclusion, the Quick Poll system successfully provides a fast, efficient, and user-friendly solution for collecting opinions and feedback in real time. It overcomes the limitations of traditional polling methods by eliminating manual effort, reducing errors, and enabling instant result generation. The system ensures secure and reliable voting through authentication and duplicate vote prevention mechanisms, thereby maintaining the integrity of the results.

By incorporating features such as real-time updates, graphical result visualization, and cross-device accessibility, the Quick Poll system enhances user engagement and simplifies decision-making processes. The client-server architecture and use of modern web technologies ensure scalability, flexibility, and smooth performance even with a large number of users.

Overall, the Quick Poll system serves as an effective digital tool for organizations, educational institutions, and individuals to gather opinions quickly and accurately. It demonstrates how technology can streamline data collection and improve efficiency, making it a valuable solution in today's fast-paced digital world.

References

1. Kumar, R. D., Prudhviraj, G., Vijay, K., Kumar, P. S., & Plugmann, P. (2024). Exploring COVID-19 through intensive investigation with supervised machine learning algorithm. In Handbook of Artificial Intelligence and Wearables (pp. 145-158). CRC Press.
2. Swathi, B., Vijay, K., Sushanth Babu, M., & Dinesh Kumar, R. (2024, November). Machine Learning Techniques in Cloud Based Intrusion Detection. In The International Conference on Artificial Intelligence and Smart Environment (pp. 557-564). Cham: Springer Nature Switzerland.
3. Sv satyakrishna, shirisha rangu ,bhargavi nalacheruve.(2024) Prospective investigation on colorectal cancer with SMOTE on machine learning Algorithm
4. Dr.G.Vishnu Murthy, BhargaviNalacheruve 1Professor, Department of computer Science & engineering, Anurag University, TS, India. 2Student, Department of computer Science & engineering, Anurag University, TS, India.

5. V. N. S. Manaswini, K. K, C. Nigam, S. S. Ali, R. Niranjana, and Suman, "Real-Time Object Detection in Drone Surveillance Using YOLOv5," in Proc. 2025 3rd Int. Conf. IoT, Communication and Automation Technology (ICICAT), Gorakhpur, India, 2025, pp. 1–6, doi: 10.1109/ICICAT68430.2025.11414670.
6. B. Soundarya, V. N. S. Manaswini, M. Ayyakrishnan, R. D. Kumar, "Contextual Analysis of Big Data Analytics in Intelligent Transportation Frameworks," in Intersection of Artificial Intelligence, Data Science, and Cutting-Edge Technologies: From Concepts to Applications in Smart Environment, Lecture Notes in Networks and Systems, vol. 1353, Cham: Springer, 2025, doi: 10.1007/978-3-031-88304-0_79.
7. R. D. Kumar, V. N. S.Manaswini, "Applications of blockchain in smart cities: detecting fake documents from land records using blockchain technology," in Blockchain for Smart Cities, Elsevier, 2021, pp. 105–117, doi: 10.1016/B978-0-12-824446-3.00017-X.
8. Tejavath Veeramma, Badarla Anil, Guguloth Ravinder, "An advanced movie recommender using collaborative filtering and sentiment analysis," International Research Journal of Modernization in Engineering Technology and Science, vol. 7, no. 7, July 2025, doi: 10.56726/IRJMETS81618.
9. Ravi Kumar Banoth, Ramana Murthy B V, "Automatic crop recommendation system using LightGBM and decision tree machine learning models," Journal of Machine and Computing, vol. 5, no. 1, pp. 343, Jan. 2025, doi: 10.53759/7669/jmc202505026.
10. Ravi Kumar Banoth, Dr. B.V. Ramana Murthy, "Smart agriculture through IoT and machine learning for analyzing carbon footprints," in Proc. Int. Conf. Computer Science and Communication Engineering (ICCSCE), Apr. 2025.
11. Ravi Kumar Banoth, B. V. Ramana Murthy, "Soil image classification using transfer learning approach: MobileNetV2 with CNN," SN Computer Science, vol. 5, art. no. 199, 2024, doi: 10.1007/s42979-023-02500-x.
12. Gaddam, S. Integrating Analytics into the Development Process: Bridging the Gap between Data Insights and Design Execution.
13. Reddy, S. K. R. Developing a Modular AI Framework to Enhance Scalability and Personalization in Next-Generation Reward Platforms.
14. Poojari, R. Frameworks for Data Management and Lineage in Large-Scale Healthcare Data Systems.
15. Purmani, S. S. R. (2025). Streamlining IT operations and service management with agile frameworks. European Journal of Advances in Engineering and Technology, 12(4), 76–81.
16. Viswanathan, V. (2024). Embedding Ethical Principles into Generative AI Workflows for Project Teams.
17. Mudusu, S. K. (2026, April 15). The secure intelligence framework: Architecting AI systems for a data-driven world. CIO (Foundry Expert Contributor Network).
18. Viswanathan, V. (2024). Pioneering Ethical AI Integration in Enterprise Workflows: A Framework for Scalable Team Governance. Available at SSRN 5375619.
19. Mudusu, S. K. (2025, June 3). Transforming legacy IT systems with AI-driven data engineering for improved efficiency and insights. Hampton Global Business Review (HGBR).

20. Gajula, S. (2026, March). Two Pillars of Banking Intelligence: A Comparative Analysis of AI Techniques for Fraud Prevention and Churn Mitigation. In 2026 14th International Symposium on Digital Forensics and Security (ISDFS) (pp. 1-6). IEEE.
21. Maturi, S. Y. (2023). Crowdsourced frontier: Unveiling autonomous adversarial cybercapabilities via open AI competition. International Journal of Intelligent Systems and Applications in Engineering, 11(1s), 275–284.
22. Chowdhury, A. K., Muhit, M. M. I., & Islam, M. M. (2023). A practical review to the marine maintenance practice in Bangladesh and a proposed way forward to an efficient, long-term and cost-effective solution. In Proceedings of the 13th International Conference on Marine Technology (MARTEC 2022). https://doi.org/10.2139/ssrn.4445071
23. Manoharan, D. (2025). Healthcare EDI Transaction Lifecycles Embedded with a Multi-Layer Verification Framework to Ensure Referential Integrity.
24. Ravishankara, M. (2026, February). CircuChain: Disentangling Competence and Compliance in LLM Circuit Analysis. In SoutheastCon 2026 (pp. 1-7). IEEE.
25. Doragacharla, V. R. (2023). Comprehensive Benchmarking Analysis of Auto Scaling Approaches in Cloud Native Streaming Pipelines During Flash Sales and Holiday Traffic Peaks. Available at SSRN 6566479.
26. P. Venkata Ramana. (2024). AI-driven predictive analytics in ERP systems for proactive supply chain optimization. International Journal of Innovative Engineering and Management Research (IJIEMR).
27. Kumar Adabala, P. (2021). Optimizing ERP Modernization: A Smart Data Migration Framework Approach. International Journal of Enhanced Research in Science, Technology &Amp; Engineering, 10(07), 61–72. https://doi.org/10.55948/ijerste.2021.0708
28. Kavuri, S. (2025). Critical Review of Software Testing Problems in the Current Decade. International Journal on Science and Technology, 16(2). https://doi.org/10.71097/ijsat.v16.i2.9469
29. Srikanth Kavuri. (2024). Probabilistic Generative Modeling for Synthesizing High-Coverage Test Data in Safety-Critical Software Applications. Computer Fraud and Security, 633–642. https://doi.org/10.52710/cfs.838
30. Venkata Pavan Kumar Gummadi. (2024). API Design and Implementation: RAML and OpenAPI Specification. Journal of Electrical Systems, 16(4), 76–85. https://doi.org/10.52783/jes.9329
31. Venkata Pavan Kumar Gummadi. (2025). MuleSoft's Role in Advancing Sustainable Digital Infrastructure: An Enterprise Integration Perspective. Journal of Information Systems Engineering and Management, 10(62s), 1313–1321. https://doi.org/10.52783/jisem.v10i62s.13783