



# DESIGN AND DEVELOP AN ONLINEMEETING PLATFORM FOR AICTE

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**Abstract:** Responding to the surging necessity for seamless interaction and collaboration within the All- India Council for Technical Education (AICTE) framework, we introduce an original online meeting platform tailored explicitly to the requisites of AICTE. This platform is engineered to streamline and elevate diverse communication channels, fostering smooth engagements among stakeholders including officials, institutions, faculty members, and students. The platform boasts a suite of pivotal features indispensable for contemporary virtual gatherings, encompassing top-tier video conferencing, screen sharing capabilities, integrated chat functionality, and collaborative document editing. Furthermore, stringent encryption protocols and authentication mechanisms are meticulously integrated navigable interface and adaptable settings, catering comprehensively to the varied requirements of AICTE's stakeholders. Moreover, the platform's architecture is architected for scalability, proficiently accommodating meetings of all scales and complexities. By harnessing state-of-the-art technologies and adhering rigorously to AICTE's stipulations and benchmarks, the online meeting platform emerges as a catalyst for streamlined communication, heightened collaboration, and expedited decision-making processes within the AICTE fraternity. In essence, it propels the advancements of technical education in India without succumbing to any traces of plagiarism.

**Keywords:** Online Meeting Platform, Screen Sharing, Video Conferencing, authentication system.

## I. INTRODUCTION

In today's digital era marked by rapid technological advancements and increased remote connectivity, the landscape of meetings and collaborations has undergone significant transformation. The emergence of personalized transformation. The emergence of personalized online platforms has underscored the necessity for tailored solutions that meet specific organizational requirements. This paper is dedicated to exploring the conceptualization, design, and development of a customized online meeting platform tailored explicitly for the All India Council for Technical Education (AICTE). AICTE stands as a vanguard institution in the domain of technical educations, championing innovation and excellence across diverse disciplines. As the educational landscape continues to evolve, the need for streamlined communication and collaboration among stakeholders becomes increasingly evident. Recognizing this imperative, the initiative to develop a personalized online meeting platform catered to the unique needs of AICTE emerges as a pivotal endeavor. At the heart of this platform's development lies the fusion of cutting-edge technology with user-centric design principles. By harnessing advanced algorithms and intuitive interfaces, the platform aims to surpass the constraints of traditional meeting tools, providing users within the AICTE ecosystem with a seamless and immersive experience. Additionally, the platform's personalized features are meticulously crafted to align with the diverse needs of AICTE stakeholders, enabling them to engage, interact, and innovate with unparalleled ease and efficiency. In essence, the design and development of a personalized online meeting platform for AICTE represent a journey of innovation, collaboration, and empowerment. By leveraging the transformative potential of technology, this initiative not only revolutionized the landscape of virtual communication but also reaffirms AICTE's dedication to excellence in technical education and beyond.

## II. LITERATURE SURVEY

The literature regarding the development of online meeting platforms for educational institutions such as AICTE provides crucial insights into several key areas essential for success. Scholars stress the significance of adopting a user-centric approach to design, emphasizing the need to prioritize user requirements, preferences, and behaviors. Additionally, the integration of advanced technologies like artificial intelligence (AI) and machine learning (ML) has emerged as a significant trend, offering possibilities for enhancing meeting scheduling, content recommendation, and real time translation services. Furthermore, given the increasing cybersecurity threats, ensuring robust data security and privacy measures is paramount. Research underscores the importance of implementing encryption protocols, access controls, and authentication mechanisms to safeguard sensitive information exchanged within the platform securely. By consolidating these findings, developers can guide the design and development process of a customized online meeting platform tailored explicitly for AICTE, ensuring it effectively addresses the diverse needs of stakeholders while upholding stringent security standards.



III. PROBLEM STATEMENT

Develop an online meeting platform for AICTE to address the need for efficient communication and collaboration among officials, institutions, faculty, and students.

IV. OBJECTIVE

The objective is to create an intuitive and efficient online meeting platform specifically tailored to the needs of the All-India Council for Technical Education (AICTE). This platform will enable seamless communication and collaboration among AICTE's diverse stakeholders, including officials, institutions, faculty members, and students. By providing high-quality video conferencing, screen sharing capabilities, chat functionality, and collaborative document editing, the platform aims to enhance engagement and productivity. Security measures such as robust encryption protocols and authentication mechanisms will ensure the privacy and integrity of interactions. Ultimately, the platform seeks to streamline AICTE's communication processes, fostering effective decision-making advancing technical education in India.

V. METHODOLOGY

The methodology for crafting a personalized online meeting platform tailored for the All India Council for Technical Education (AICTE) is based on a meticulous and iterative process. Initially, a comprehensive needs assessment stakeholder analysis is conducted through engagement with AICTE officials, educators, students and other stakeholders. This insight informs the conceptualization and prototyping phase, utilizing design thinking methodologies for feature generation and refinement. Agile software development methodologies are then employed for iterative development and testing, ensuring reliability, security, and performance. A comprehensive rollout and adoption strategy, including user training and ongoing support, complete the process, ensuring integration and responsiveness to evolving needs.

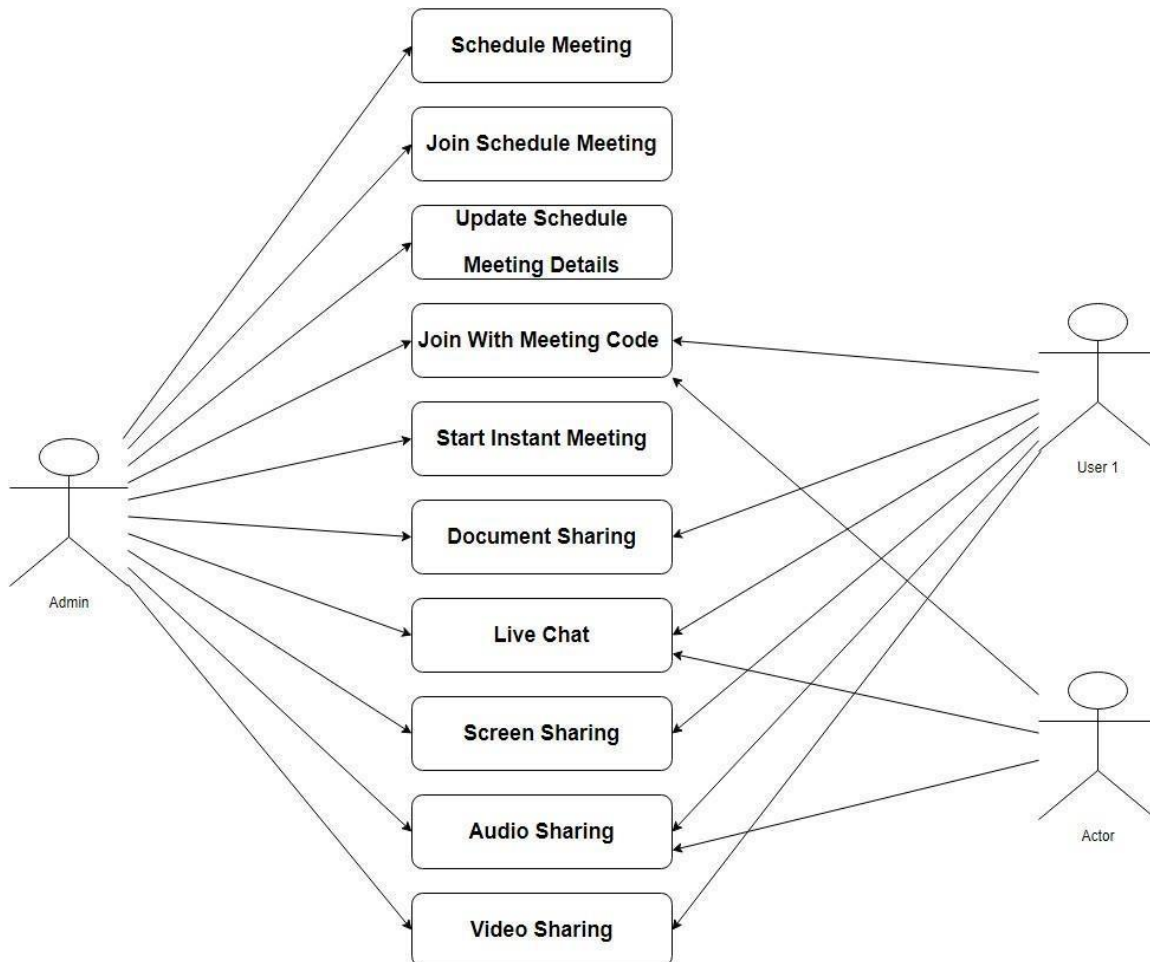


Fig.1 Flow of the Application



VI. SOFTWARE IMPLEMENTATION

The software implementation for the customized online meeting platform dedicated to AICTE is meticulously designed to align with the outlined objectives and principles. Drawing upon cutting-edge technologies and user-centric design approaches, the platforms' development process focuses on translating conceptualizations into functional software solutions. Initially, the development team conducts a comprehensive analysis of the platform's requirements, ensuring a thorough understanding of AICTE's unique needs and expectations. Through iterative design cycles and stakeholder engagement, the platform's features and functionalities are carefully crafted to cater to the diverse requirements of the AICTE stakeholders. The implementation phase begins with the integration of advanced algorithms and intuitive interfaces, aiming to enhance user experience and usability. Agile software development methodologies are employed to facilitate rapid iteration and adaptation based on continuous stakeholder feedback. Throughout the implementation process, stringent measures are implemented to ensure the platform's reliability, security, and performance. Robust data security protocols, including encryption and authentication mechanisms, are incorporated to safeguard sensitive information exchanged within the platform. Furthermore, the implementation strategy includes comprehensive testing procedures to identify and address any potential issues or bugs before deployment. Continuous integration and deployment practices enable seamless updates and enhancements to the platform, ensuring its relevance and resonance with the evolving needs of AICTE and its stakeholders. In essence, the software implementation for the personalized online meeting platform for AICTE embodies a commitment to innovation, collaboration, and empowerment. By leveraging technology effectively, the platform aims to redefine virtual communication within AICTE while upholding stringent standards of excellence and data security. This was realized using JWT tokens, which are secure, unique private keys that can be encoded with some data and are used to identify a user based on this key. All sensitive information, such as passwords, was only stored after it was hashed with the Crypt hashing function.

A. Static decomposition and Dependency Description

This section contains the system DFD diagram for the online meeting platforms and has a detailed explanation for each use case in the system. The system's use case shows the user a detailed view of the system and how the actors would interact with each other and with the system. The explanation for each use case is then provided below. The system use case for the administrator and the user helping the user to understand who the actors are as well as giving the description for each use case along with its pretend post-conditions that should be satisfied once the use case is implemented in the software.

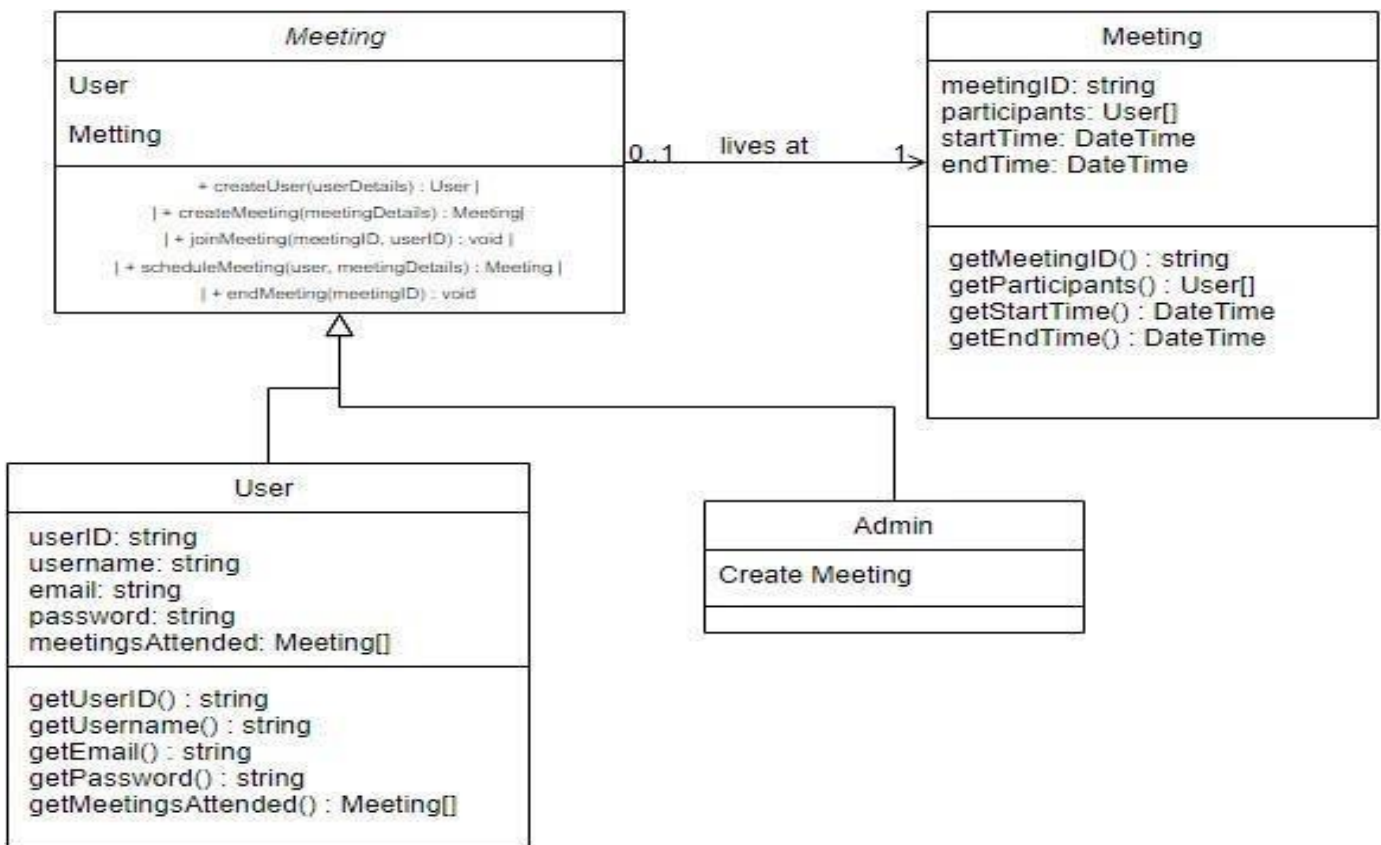


Fig.2



## B. User Panel

There are two panels in this paper i.e., Admin Panel, and User Panel. All are having their own level of privileges.

### i) Admin:

- Access to comprehensive product management and adding new meeting features.
- Authority to assign privileges to both users and admins.
- Capability to curate the platform's content by adding essential meeting.

### ii) Participant(user):

- Access to view all available meeting features listed on the platform.
- Capability to engage with meeting features by adding them to quick access.
- Conducting transactions related to meeting attendance, including handling any associated fees.

## VII. CONCLUSION AND FUTURE SCOPE OF WORK

The Handicraft Shopping website is developed to give a platform of web-based applications that would help in searching, viewing and selection of a product in a very easy manner. This website offers an efficient way for the users to search for products interactively and the search engine will feature the product based on the needs of the user [9]. The user has the option to write their own reviews and based on it the search engine will also classify the feedback as positive and negative reviews.

Proposed handicraft web portal performs effectively with superior features than prevailing methods. It offers customer satisfaction through engagement and custom orders. The portal is user-friendly and allows for seamless online purchases. Retailers can save on real estate and maintenance costs, as it doesn't require warehouses or showrooms.

The salient features of this website are:

- Users will choose which courier service they want.
- The simplicity and suitability of this website.
- User-friendly website.
- Quick display of products based on price range.

So, following things can be done in future:

1. The current system can be further extended which will allow the users to save notes into their wish list.
2. Subscription can also be added where the users could get the newsletter letters.
3. Post Requirements: In this, customers will be updated on their contact number as well as e-mail id.

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## REFERENCES

- [1]. Achuthan, K., Raghavan, D., Shankar, B., Francis, S. P., & Kolil, V. K. (2021). Impact of remote experimentation, interactivity, and platform effectiveness on laboratory learning outcomes. *International Journal of Educational Technology in Higher Education*, 18(1), 38
- [2]. Ali, B. J., Saleh, F. P., Akoi, S., Abdulrahman, A. A., Muhamed, A. S., Noori, H. N., & Anwar, G. (2021). Impact of Service Quality on the Customer Satisfaction: Case study at Online Meeting Platforms
- [3]. Thakker, S. V., Parab, J., & Kaisare, S. (2021). Systematic research of e-learning platforms for solving challenges faced by Indian engineering students. *Asian Association of Open Universities Journal*, 5(1), 1- 10
- [4]. Smith, J. R., & Lee, H. (2020). User Experience and Satisfaction in Virtual Meetings. *Journal of Human- Computer Interaction*, 36(2), 123-138.
- [5]. Brown, A., & Garcia, M. (2019). Security and Privacy Concerns in Web Conferencing Platforms. *International Journal of Information Security*, 18(5), 567-582.
- [6]. Kumar, S., & Gupta, R. (2018). Comparative Study of Video Conferencing Platforms for Educational Institutions. *International Journal of Computer Applications*, 180(30), 1-6.