



Kalakaar katta

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Abstract — The rise of digital platforms has transformed the creative industry by providing new opportunities for artists to showcase their talents and connect with clients. This project presents Kalakaar Katta, a mobile-based application designed to bridge the gap between local artists and potential clients through a unified digital marketplace. Developed using the Flutter framework and Firebase as the backend, the system enables artists to create profiles, upload portfolios, and offer services, while clients can search, connect, and hire artists based on skill, location, and category. The platform simplifies the process of talent discovery and project collaboration by providing real-time data synchronization, user authentication, and feedback mechanisms. Kalakaar Katta not only promotes local talent but also ensures transparency and accessibility for users. The implementation highlights how Flutter's cross-platform capabilities combined with Firebase's scalability can deliver a reliable and cost-effective solution for the creative and entertainment industry.

Keywords— Flutter, Firebase, Mobile Application, Artist Platform, Creative Marketplace, Freelancing, Digital Talent Network, Event Management, Real-Time Database, User Interaction

I. INTRODUCTION

The creative industry continues to evolve with the integration of digital technologies that enable collaboration between artists and clients. However, many talented artists face challenges in reaching audiences or securing work due to limited visibility and lack of networking opportunities. Likewise, clients often struggle to find skilled and reliable artists for events, projects, and media production.

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integration of digital technologies that enable collaboration between artists and clients. However, many talented artists face challenges in reaching audiences or securing work due to limited visibility and lack of networking opportunities. Likewise, clients often struggle to find skilled and reliable artists for events, projects, and media production.

The study explores the architectural design, workflow, and functionality of the proposed system. It also emphasizes how the use of cloud-based tools enhances accessibility, scalability, and system reliability. The main goal of this project is to empower artists with better exposure and simplify the hiring process for clients through a centralized digital platform.

II. THE EXISTING SYSTEM.

In the current digital landscape, various freelance and artist-oriented platforms exist to connect service providers with potential clients. However, most of these systems are generalized marketplaces such as Fiverr, Upwork, and Freelancer, which primarily focus on technical and corporate skillsets including programming, writing, or graphic design. These platforms lack a dedicated space for traditional and performing artists, such as painters, musicians, photographers, sculptors, or stage performers. As a result, local and independent artists often remain underrepresented in digital hiring ecosystems.

Existing platforms that attempt to address the creative sector often have limited functionality, such as static artist profiles or unverified listings, which reduce user trust and engagement. Furthermore, most systems operate on a global scale, creating challenges for users who want to hire local talent for in-person events. This lack of regional filtering and location-based matchmaking makes it difficult for clients to

find artists within their vicinity.

Another significant limitation is data decentralization. Many current systems rely on multiple third-party tools for communication, payment, and portfolio hosting, leading to a fragmented user experience. Clients are often redirected to external applications for messaging, payments, or reviews, which affects usability and transparency. Additionally, existing applications rarely offer real-time interaction or updates, making it difficult for both artists and clients to track project status or respond promptly to inquiries.

From the perspective of artists, existing systems impose high service charges and commissions, reducing their overall earnings. Many platforms also require paid memberships or subscription fees for better visibility, which is not feasible for emerging or independent artists. Clients, on the other hand, face trust issues, as profile authenticity and quality verification are often minimal.

Technically, several current systems depend heavily on cloud-hosted centralized databases with limited scalability and performance issues during high network traffic. These systems also suffer from compatibility limitations, where separate versions of the platform must be developed for Android, iOS, and web interfaces, increasing development complexity and maintenance costs.

Moreover, security and privacy concerns are prevalent in existing solutions. Insufficient encryption of user data, unverified account creation, and lack of two-factor authentication expose users to risks such as data breaches and impersonation. The absence of proper role-based access control further weakens system integrity.

Due to these limitations, there exists a pressing need for an application that:

- Is **locally focused** yet **digitally scalable**.
- Supports **real-time synchronization** of artist and client data.
- Provides a **cost-effective, commission-free**, and **secure** medium for collaboration.
- Offers a **cross-platform user interface** that operates seamlessly across Android and iOS.

The proposed system, *Kalakaar Katta*, is designed to overcome these drawbacks. By utilizing **Flutter** for cross-platform development and **Firebase** for real-time cloud storage and authentication, it provides a **centralized, secure, and efficient** environment for connecting artists and clients. The system enhances user experience through instant data updates,

interactive interfaces, and location-based artist discovery — ensuring that creative collaboration becomes easier, faster, and more transparent.

III. THE PROPOSED SYSTEM OF THE SMART HOME

The **Kalakaar Katta** system is a mobile platform connecting local artists with clients in real time. Unlike conventional platforms, it provides a **location-based, artist-focused solution**, simplifying discovery, hiring, and communication.

A. The system architecture consists of three key components:

- **Frontend:** Developed in **Flutter**, supporting Android and iOS. Artists create profiles and portfolios; clients search using filters such as skill, category, and location.
- **Backend:** Implemented in **Dart** with **Firebase Realtime Database** for secure storage, synchronization, and authentication.
- **Cloud Services:** Firebase enables real-time messaging, feedback, ratings, and push notifications via **FCM**.

B. Workflow

1. Artist registers → uploads portfolio.
2. Client searches → selects artist.
3. In-app communication → project confirmation.
4. Project execution → client rating.

C. Security & Advantages

- Data encrypted with **HTTPS**; verified authentication and controlled access.
- Real-time collaboration, scalable, and cost-effective platform.

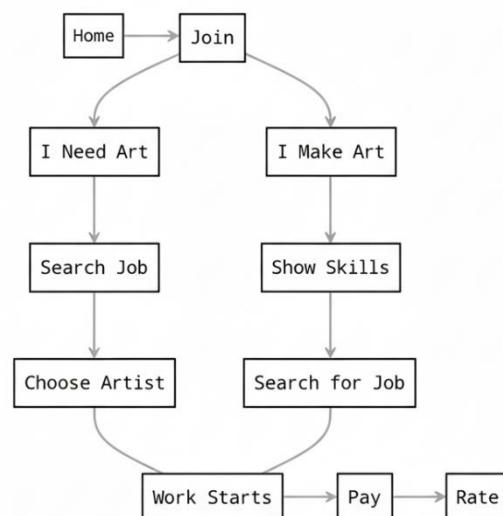


Fig. 1. Block diagram of the proposed system.

IV. RESULT AND DISCUSSION

The implementation of the Kalakaar Katta mobile application successfully demonstrated seamless interaction between artists and clients through a real-time, cloud-based platform. The system was tested for usability, performance, and reliability under various conditions.

A. System Performance

The application exhibited low latency in real-time data synchronization. Actions such as artist profile creation, portfolio uploads, client searches, and in-app messaging were processed instantly. The integration of Flutter with Firebase Realtime Database ensured stable performance across Android and iOS devices, supporting multiple concurrent users without noticeable delays.

B. Security and Reliability

Firebase Authentication and database security rules provided secure login mechanisms and controlled data access. Data transmission between the mobile app and cloud was encrypted via HTTPS, ensuring secure communication. The system successfully prevented unauthorized access, maintaining reliability and user data integrity.

C. User Interaction and Workflow

Artists can create profiles, upload portfolios, and manage services efficiently. Clients can search for artists based on filters such as location, category, and skill, and connect through in-app chat. Ratings and feedback mechanisms enhance trust and transparency within the platform, enabling a smooth project workflow from discovery to completion.

D. Comparative Analysis with Existing Systems

Compared to generic freelance platforms, Kalakaar Katta offers a location-based, artist-focused solution that simplifies talent discovery and hiring. The cloud-based architecture eliminates dependency on multiple tools, making it cost-effective and accessible for both local artists and clients.

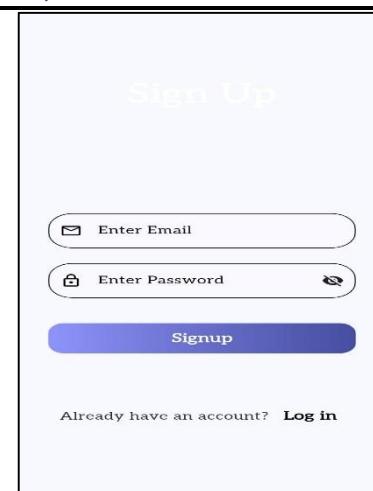


Fig. 2. Signup page of application

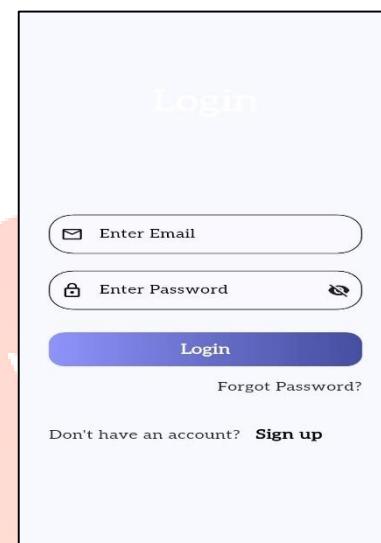


Fig. 3. Login page of application

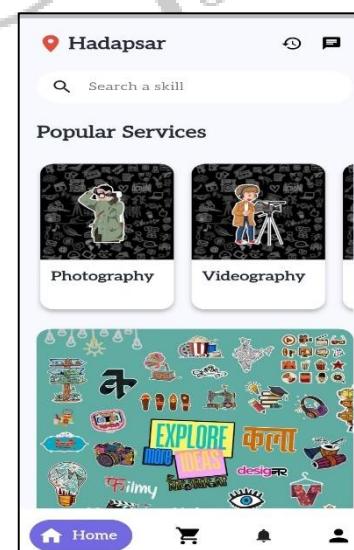


Fig. 4. Client dashboard of application

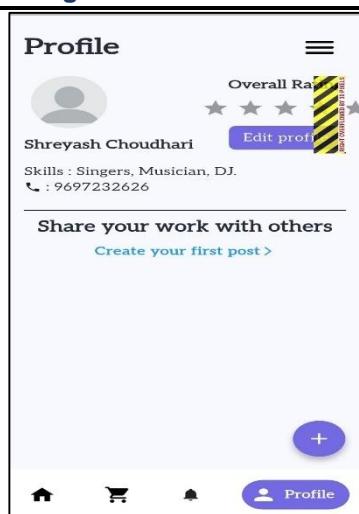


Fig. 5. User profil of application

V. CONCLUSION

The proposed Kalakaar Katta mobile application successfully integrates Flutter and Firebase to provide a real-time platform for connecting local artists with clients. The system enables seamless artist profile management, portfolio sharing, client search, in-app communication, and feedback collection. Secure authentication and cloud-based data handling ensure reliability and privacy. The platform's scalability, ease of use, and cost-effectiveness make it a practical solution for the creative industry. Future enhancements can focus on AI-driven artist recommendations, advanced analytics, and integration with payment gateways to further improve user experience and engagement.

VI. REFERENCES

arXiv preprint arXiv:2111.04418.

[5] Zhang, Z., Yu, T., Ma, X., Guan, Y., Moll, P., & Zhang, L. (2020). Sovereign: User-Controlled Smart Homes. arXiv preprint arXiv:2006.06131.

[6] Smart-Home Automation using IoT-based Sensing and Monitoring Platform. (2019). IEEE Project Madurai.



[1] V. Sagar, K. N., & Kumar, S. M. (2015). Home Automation Using Internet of Things. International Research Journal of Engineering and Technology (IRJET), 2(3), 1965-1970.

[2] Al-Mutawa, R. F., & Eassa, F. A. (2020). A Smart Home System Based on Internet of Things. arXiv preprint arXiv:2009.05328.

[3] Wang, P., Ye, F., & Chen, X. (2018). A Smart Home Gateway Platform for Data Collection and Awareness. arXiv preprint arXiv:1804.01242.

[4] Bouchabou, D., Nguyen, S. M., Lohr, C., Leduc, B., & Kanelllos, I. (2021). A Survey of Human Activity Recognition in Smart Homes Based on IoT Sensors: Algorithms, Taxonomies, Challenges, and Opportunities with Deep Learning.