

KumbhConnect: A Smart Digital Assistant for Nashik Kumbh Mela 2027

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Abstract: *KumbhConnect is an innovative and integrated digital assistance platform developed to transform the overall management, safety, and experience of pilgrims, volunteers, and officials during the Nashik Kumbh Mela 2027. Designed to address the challenges of massive crowd gatherings, the system seamlessly combines GPS-based navigation, real-time crowd analytics, AI-driven lost and found identification using facial recognition, multilingual chatbot communication, and rapid emergency alert services into one unified smart application. Built using React Native for cross-platform accessibility, Firebase for real-time synchronization, and Python Flask along with Node.js for backend processing, the platform ensures fast, reliable, and scalable data handling in high-density environments. Informative and interactive, KumbhConnect bridges the gap between traditional event management and modern digital intelligence by incorporating cloud technologies and artificial intelligence to support real-time decision making, efficient communication, and enhanced public safety. The application provides dynamic routing to avoid congested zones, supports instant reporting and tracking of missing individuals, and facilitates multilingual conversational support for diverse user groups. Through its integrated architecture, KumbhConnect aims to improve operational coordination among authorities, ensure a safer pilgrimage environment, and enhance the cultural experience for millions of participants. Ultimately, the project demonstrates how emerging technologies can be leveraged to build inclusive, responsive, and scalable digital systems tailored for large-scale religious events in India.*

Keywords: Kumbh Mela, Smart Event Management, GPS Navigation, Firebase, DeepFace, Crowd Monitoring, Multilingual Chatbot, Artificial Intelligence, Emergency Response, Real-time Systems

