

# RURAL SANGAM

**Project Reference No.:** 48S\_MCA\_0193

*College : Bangalore Institute of Technology*  
*Branch : Department of Computer Applications*  
*Guide(s) : Prof. Usha M*  
*Prof. Sandarsh Gowda M M*  
*Student(s): Mr. Sahil Anant Belurkar*  
*Ms. Lavanya Gourish Nayak*  
*Mr. Hemanth Raj N*  
*Mr. Vignesh R*

## **Keywords:**

Bridging the Gap, Rural-Urban Collaboration, Student Empowerment, Web Platform, Inclusive Education, MERN Stack, Real-time Communication.

## **Introduction:**

Education is a fundamental right, yet many students in rural India, especially in government schools, lack awareness of career opportunities and skill development paths. The absence of proper mentorship creates a gap between rural and urban students, limiting their aspirations and potential growth.

RuralSangam is a web-based platform designed to bridge this educational divide by fostering collaboration between rural students, urban peers, and university-level mentors. The platform enables registration and profile creation for students and volunteers, providing access to real-time chat, discussion forums, video sessions, and collaborative tools for seamless learning and mentorship.

Volunteers and mentors can offer structured guidance, conduct sessions, and share valuable insights to help rural students navigate their career paths. By tracking student engagement and providing learning resources, RuralSangam creates a sustainable learning ecosystem that ensures rural students receive the support they need.

With a scalable and cloud-hosted infrastructure, the platform is designed for long-term growth and accessibility. By enabling volunteers to give back to their communities, RuralSangam fosters collaboration and knowledge-sharing, ensuring that every

student, regardless of their location, has access to quality mentorship and peer learning.

### **Objectives:**

- **Bridging the Urban-Rural Divide:** Connects rural students with urban peers and mentors for collaboration and learning.
- **Volunteerism and Giving Back:** Enables university students to mentor rural students and contribute to their roots.
- **Career Awareness and Guidance:** Provides insights into education, scholarships, and career opportunities for rural students.
- **Skill Development and Collaborative Learning:** Promotes teamwork, workshops, and peer-to-peer learning to empower students.

### **Methodology:**

The RuralSangam platform will be developed as a web-based application using the MERN stack, allowing rural students, urban peers, and mentors to register and create profiles. It will feature secure authentication for user access and engagement. The platform will incorporate real-time chat, discussion forums, video sessions, and collaborative tools to facilitate seamless interaction. Volunteers can contribute through a structured mentorship system, offering guidance, resources, and interactive learning opportunities. A progress tracking system will monitor student engagement, while feedback mechanisms will ensure continuous improvement. Designed with a scalable architecture, the platform will be optimized for cloud deployment, ensuring long-term growth and accessibility.

### **Result and Conclusion:**

The development of RuralSangam successfully established a web-based platform that bridges the educational gap between rural and urban students. The platform enabled seamless registration, mentorship programs, and interactive learning tools, fostering meaningful connections between students and mentors.

Through real-time chat, discussion forums, and video sessions, rural students gained access to career guidance, academic resources, and structured mentorship, significantly improving their awareness of future opportunities. Volunteers actively participated in knowledge-sharing and skill-building, creating a collaborative learning

ecosystem where students could engage, ask questions, and receive guidance tailored to their needs.

In conclusion, RuralSangam successfully demonstrated the potential of technology-driven mentorship and peer learning in empowering rural students. With continuous improvements and wider adoption.

### **Working Model vs. Simulation/Study:**

The **RuralSangam** project began as a **simulation and conceptual study**, focusing on the challenges faced by rural students and the opportunities for bridging educational gaps through digital mentorship. During this phase, we designed detailed workflows, mapped user interactions, and proposed a scalable architecture based on real-world needs.

Following the study, a **basic working model** (prototype) was developed to demonstrate the platform's core functionalities. This includes:

- **User registration and profile creation** for schools, mentors, and volunteers.
- **Discussion forums and chat modules** for guided communication.
- A **mentorship system** allowing structured knowledge sharing.

The simulation helped validate the idea, while the working model showcases its practical implementation. Together, they form a solid foundation for future enhancements and large-scale deployment.

### **Project Outcomes and Learnings:**

Key Outcomes:

- Successfully developed RuralSangam, a web-based mentorship platform connecting rural students with urban peers and mentors.
- Implemented real-time chat, discussion forums, and video sessions, fostering interactive learning and engagement.
- Provided structured mentorship programs, helping rural students gain career guidance and educational awareness.

- Established progress tracking and feedback mechanisms to improve learning outcomes.
- Designed a scalable and cloud-hosted infrastructure, ensuring long-term accessibility and expansion.

#### Learnings from the Project:

- Bridging the digital divide is possible through accessible and scalable technology solutions.
- User engagement strategies like interactive sessions and structured mentorship improve platform effectiveness.
- Collaboration between students, mentors, and institutions plays a crucial role in knowledge-sharing and community-driven learning.
- Scalability and adaptability are essential to accommodate growing user bases and evolving educational needs.
- Continuous feedback and iteration help refine the platform, ensuring a better user experience and improved learning outcomes.

#### **Future Scope:**

The RuralSangam platform has the potential to expand its impact and reach by incorporating new features and technologies. Future developments can focus on enhancing personalized learning experiences, increasing accessibility, and integrating with existing educational and mentorship initiatives.

#### Potential Future Enhancements:

- **Mobile Application:** Develop a mobile-friendly version to improve accessibility for students in remote areas with limited access to desktops.
- **Gamification & Rewards:** Introduce gamified elements like badges, leaderboards, and certifications to encourage active participation and learning.
- **Industry & NGO Collaborations:** Partner with corporates, NGOs, and government bodies to provide structured mentorship programs and sponsorships.

- Accessible and Inclusive Platform: Optimized for mobile and low internet settings, ensuring widespread usability.
- Internship & Scholarship Opportunities: Facilitate connections between students and scholarship programs or internship opportunities.