



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

DECLARATION

The project titled “**AI-Integrated MERN Stack Website for a Christian Learning NGO with Real-Time Chatbot Support**” has been mentored by **JASDEEP SINGH HANSPAL**, organized by SURE Trust, from December 2024 to April 2025, for the benefit of the educated unemployed rural youth for gaining hands-on experience in working on industry relevant projects that would take them closer to the prospective employer. we declare that to the best of my knowledge the members of the team mentioned below, have worked on it successfully and enhanced their practical knowledge in the domain.

We Team members, hereby declare that we have solely worked on this project under the guidance of my mentor. This project has significantly enhanced my practical knowledge and skills in the domain.

Name

Mr. Sagar Raj- (**Backend Leader**)

Ms. Thejaswini- (**Frontend Leader**)

Mr. Karunesh Kumar Singh- (**Chatbot Leader**)

Mr. Aman Raj G25 FSD (Chatbot Team)

Mentor

Mr. Jasdeep Singh Hanspal
Senior Technical Manager at Microsoft

Signature

Seal & Signature

Prof. Radhakumari
Executive Director & Founder



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SURE Trust



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Executive Summary

During the internship at SURE Trust, we worked on various frontend and backend development projects including mini-projects and one major MERN stack project for a Christian Learning NGO. These projects helped me understand real-world applications of web technologies including React.js, Node.js, MongoDB, and chatbot integration using Dialogflow. We gained practical experience in responsive design, API integration, state management in React, and building scalable and optimized backend systems.



Introduction

Background and Context

- The project is initiated by a Christian Learning NGO committed to offering high quality technical education in domains like MERN, MEAN, AWS, Azure, Android, Django, and Java.
- A web-based solution is needed to facilitate course visibility, student enrollment, and support services.
- The platform is being developed using the MERN stack (MongoDB, Express.js, React.js, Node.js), chosen for its flexibility and performance.
- A key component of the system is the integration of an AI-powered chatbot to provide instant, intelligent assistance to users.
- The chatbot and website will operate seamlessly together, offering 24/7 guidance on course selection and batch schedules.
- GitHub is used for version control and collaboration among the development team.
- The system will prioritize responsive design and accessibility, aligning with WCAG standards to ensure usability for all.
- Cloud deployment on platforms like AWS or Azure will ensure availability and scalability.
- The project embodies both a technical challenge and a social mission to support digital literacy.
- By combining technology and education, the NGO aims to make a lasting impact on community-based learning.