



Independent University, Bangladesh

School of Engineering Technology and Science

Department of Computer Science and Engineering

PROJECT PROPOSAL FORM

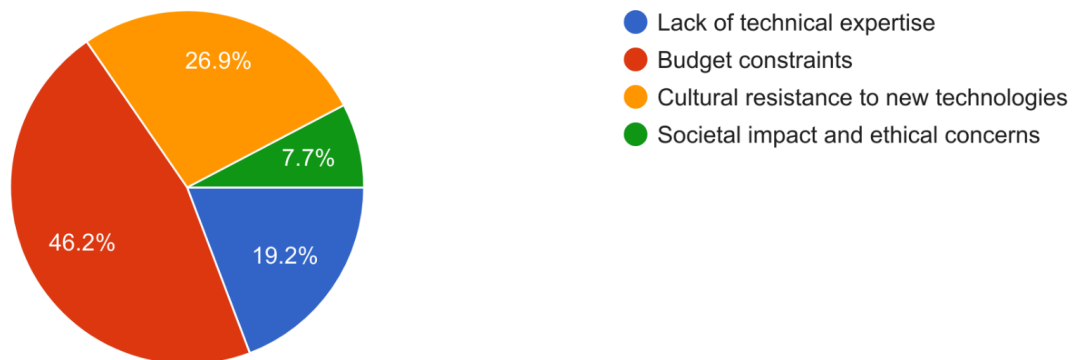
SEMESTER: Spring 2025

PROJECT TITLE: AssistAI: Self-Controlled Robot for Learning & Assistance

Survey to develop a process for complex engineering problems considering cultural and societal factors (use pie chart):

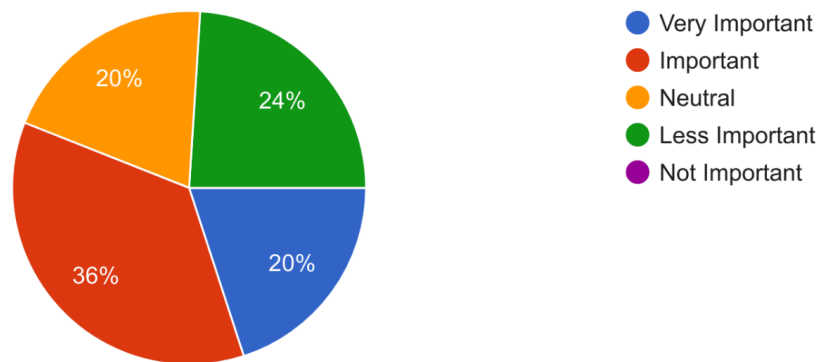
What is the biggest challenge in solving complex engineering problems?

26 responses



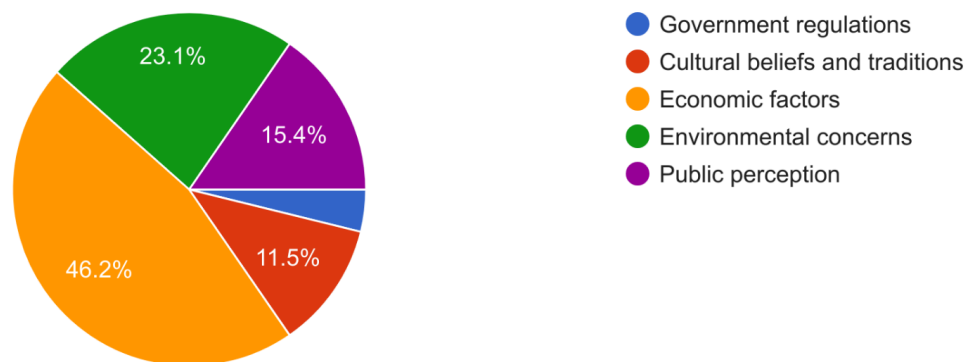
How important is it to consider cultural and societal factors in engineering solutions?

25 responses



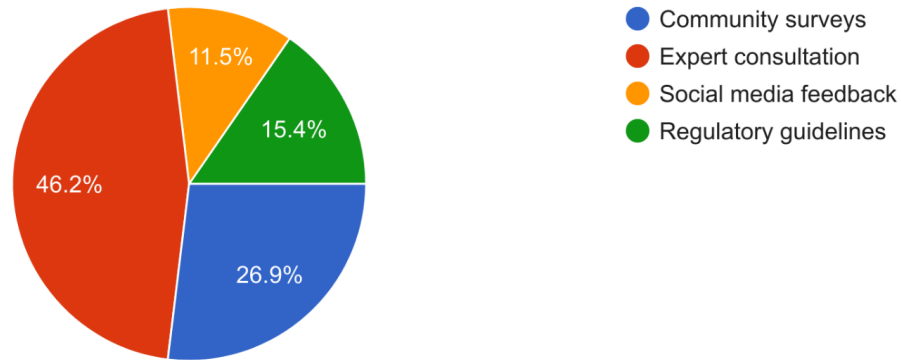
Which factor influences engineering decisions the most in your region?

26 responses



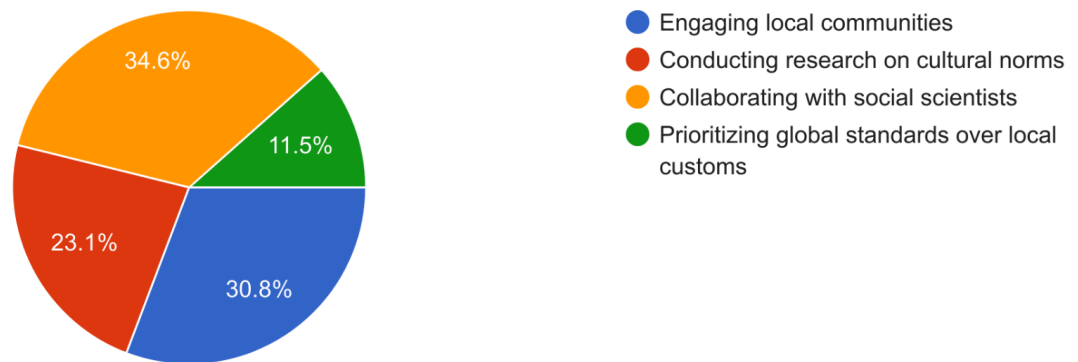
How do you assess the societal impact of an engineering solution?

26 responses



What is the preferred approach for integrating cultural factors in engineering projects?

26 responses



GOALS AND BENEFITS OF THE PROJECT:

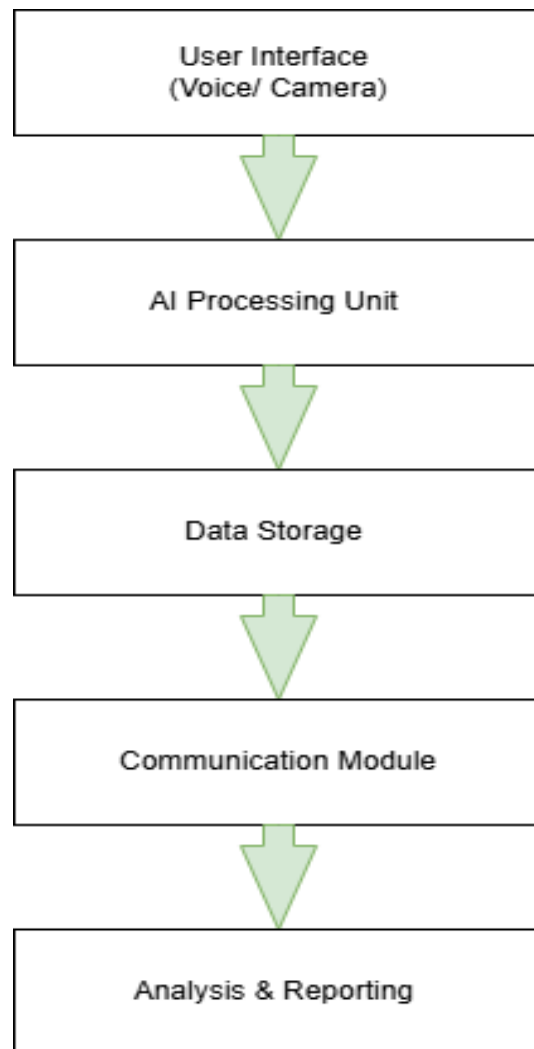
Goals of the Project:

The AssistAI: Smart Robotic Partner aims to make daily life better by offering an AI-powered robot that fits into users' routines. It wants to boost convenience, productivity, and safety by helping with schedules, reminders, and smart home control. The robot will use advanced natural language processing and machine learning to understand users' habits and preferences, providing a custom experience. It will move on its own inside homes and can charge itself at a charging station, ensuring uninterrupted assistance. Additionally, AssistAI will feature face detection to recognize users and personalize interactions, provide reminders for tasks and events, and even talk with children to offer companionship and educational support. AssistAI will learn continuously and update its software to keep up with new tech, ensuring long-term relevance and adaptability.

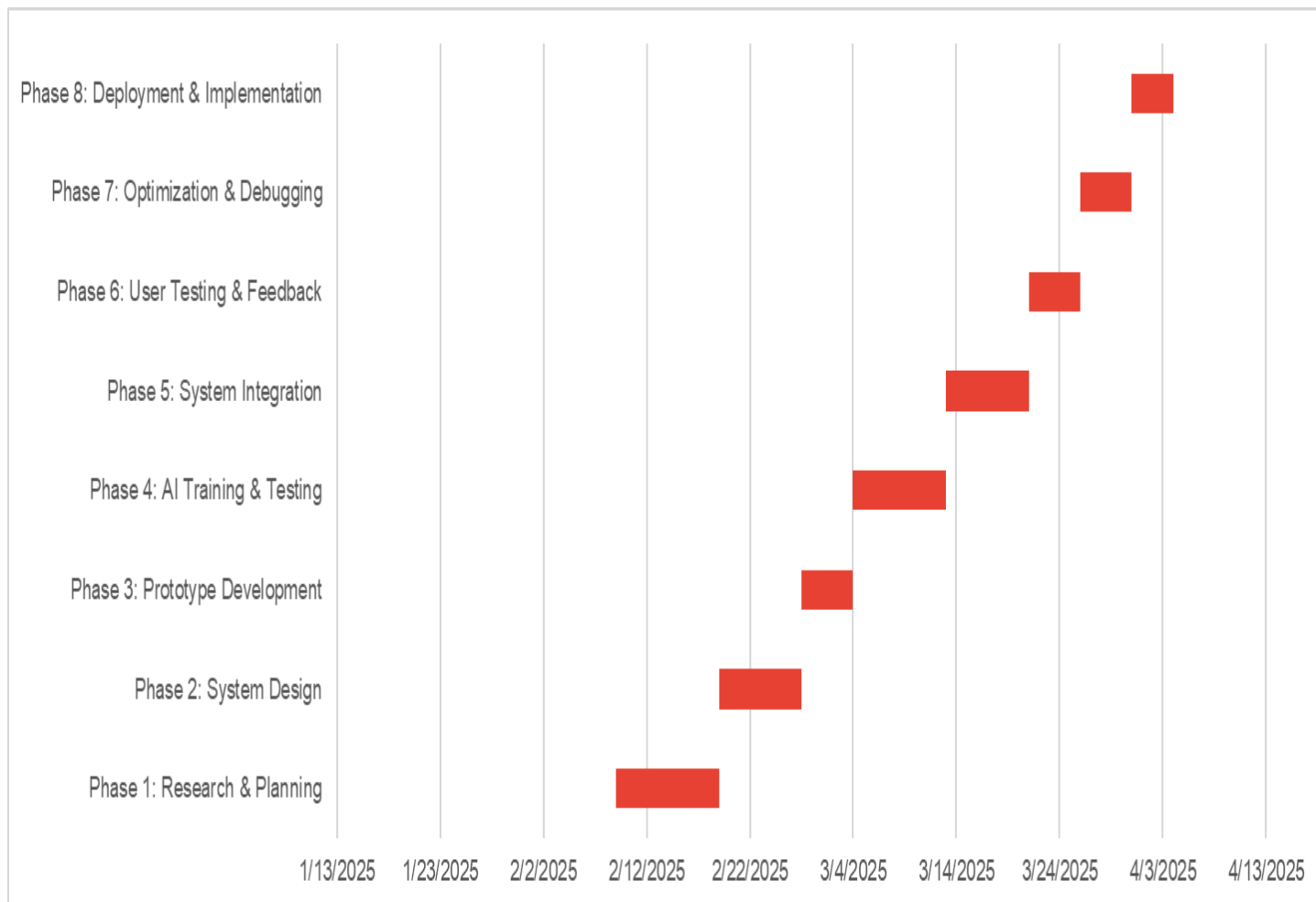
Benefits of the Project:

AssistAI brings a lot of good things to the table. It makes life better by cutting down on work, helping you manage your time, and keeping you company. When you hook it up to your smart devices, you can control your appliances and home systems, which is great for smart homes. It also keeps your place safe with real-time monitoring and alerts. People with disabilities find it helpful because they can use it without their hands, and it helps them with daily tasks. With face detection, it offers personalized interactions, and its ability to talk with children provides companionship and educational support. AssistAI learns and gets better over time, so it's a good long-term investment in AI robotics. It's shaping how we'll use automation at home and work in the future.

EXPERIMENTAL BLOCK DIAGRAM:



PROJECT TIMELINE (GANTT CHART):



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COMMENTS BY COURSE TEACHER:

COURSE TEACHER'S NAME

COURSE TEACHER'S SIGNATURE

DATE

GROUP MEMBERS

(Maximum 4 students are permitted to carry out a single Project. However, depending on the capability of the students, 3 number of students may be allowed but not less than that)

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