

# SARA AI COMPANION

<b>Problem Statement</b>	In today's fast-paced world, people struggle with managing daily tasks, information overload, and accessing quick solutions for health, education, and productivity. Existing AI assistants lack personalization, multilingual support, and offline adaptability, making them less effective in diverse and resource-limited environments.
<b>Objective</b>	The main objective of Sara is to create an <b>AI-powered personal assistant</b> that provides intelligent, multilingual, and interactive support for everyday needs. Sara is designed to improve productivity, offer health guidance, aid learning, and enhance accessibility. .
<b>Features of Project</b>	<ul style="list-style-type: none"><li>• <b>Voice &amp; Text Interaction:</b> Smooth conversational interface in multiple languages.</li><li>• <b>Health &amp; Wellness Support:</b> Tracks wellness, gives basic health guidance.</li><li>• <b>Educational Aid:</b> Helps students with queries, explanations, and problem-solving.</li></ul>

	<ul style="list-style-type: none"> <li>• <b>Smart Scheduling:</b> Reminders, to-do lists, and task management.</li> <li>• <b>Personalization:</b> Learns user preferences and adapts accordingly.</li> <li>• <b>Cross-Platform Availability:</b> Works on mobile, web, and desktop.</li> </ul>
<b>AI Involved</b>	<ul style="list-style-type: none"> <li>• <b>Natural Language Processing (NLP):</b> Human-like conversations (Gemini API).</li> <li>• <b>Speech Recognition &amp; TTS:</b> Real-time voice interaction (SpeechRecognition + gTTS).</li> <li>• <b>Recommendation System:</b> Suggests relevant tasks, content, or health tips.</li> <li>• <b>Multilingual Support:</b> AI trained for Indian &amp; global languages.</li> </ul>
<b>Tinkering Involved</b>	<ul style="list-style-type: none"> <li>• <b>Front-End Development:</b> CustomTkinter (desktop), Flutter (mobile).</li> <li>• <b>Back-End AI Integration:</b> Gemini API &amp; Hugging Face models.</li> <li>• <b>Audio Processing:</b> gTTS &amp; speech recognition for seamless communication.</li> <li>• <b>Task Automation:</b> APIs for reminders, notifications, and utilities</li> </ul>

<b>SDGs</b>	<ul style="list-style-type: none"> <li>• <b><u>SDG 3 – Good Health &amp; Well-being:</u></b> Promotes wellness awareness.</li> <li>• <b><u>SDG 4 – Quality Education:</u></b> Provides AI-based learning support.</li> <li>• <b><u>SDG 9 – Innovation &amp; Infrastructure:</u></b> AI-driven everyday innovations.</li> <li>• <b><u>SDG 10 – Reduced Inequalities:</u></b> Multilingual &amp; inclusive AI.</li> </ul>
<b>Expected Outcomes</b>	<ul style="list-style-type: none"> <li>• <b><u>Improved Productivity:</u></b> Smart reminders &amp; AI assistance save time.</li> <li>• <b><u>Accessible Learning:</u></b> 24/7 support for students</li> <li>• <b><u>Better Health Awareness:</u></b> Encourages wellness &amp; preventive care.</li> <li>• <b><u>Inclusive AI:</u></b> Supports both rural &amp; urban communities.</li> </ul>