Innovation partner H2S

Media partner YOURSTORY

AI for Bharat Hackathon

Powered by aws

Team Name : E4engineers

Team Leader Name : Shalini Rawat

Problem Statement : Underprivileged children in India lack access to simple, affordable technology education due to language and resource barriers.

Brief about the Idea:

BharatTech Guru is an AI-powered, local-language tutor designed to help underprivileged children in India learn technical concepts such as basic programming and computer fundamentals in simple Hindi. The system uses AI to provide beginner-friendly explanations using real-life Indian examples, acting as a free personal tutor accessible anytime.

Your solution should be able to explain the following:

How different is it from existing solutions?

- Most platforms are English-first and assume prior knowledge
- Existing AI tools are not designed for poor or first-generation learners

How does it solve the problem?

- Explains concepts in local language
- Uses very simple, step-by-step explanations
- Removes dependency on expensive coaching

USP (Unique Selling Point):

- Beginner-first, Bharat-first AI tutor
- Designed specifically for underprivileged children
- Simple explanations using daily-life Indian examples

List of features offered by the solution

Local language explanations (Hindi-first)

Simplified technical concepts

“Explain even simpler” option

Real-life Indian examples

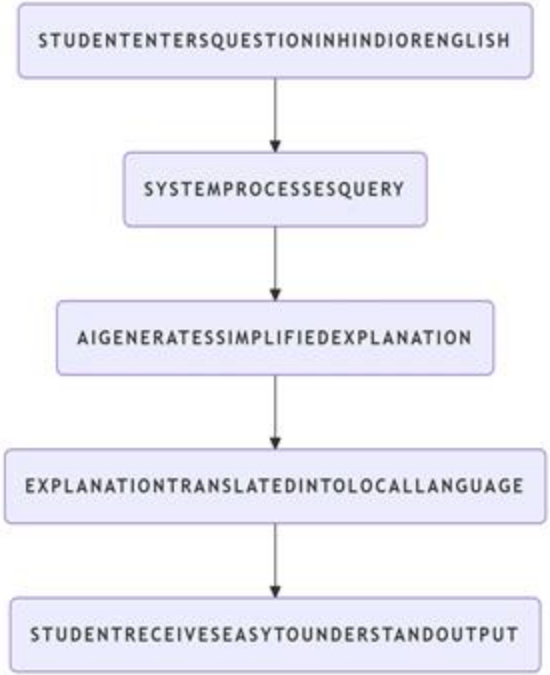
Low-bandwidth friendly design

Accessible on basic devices

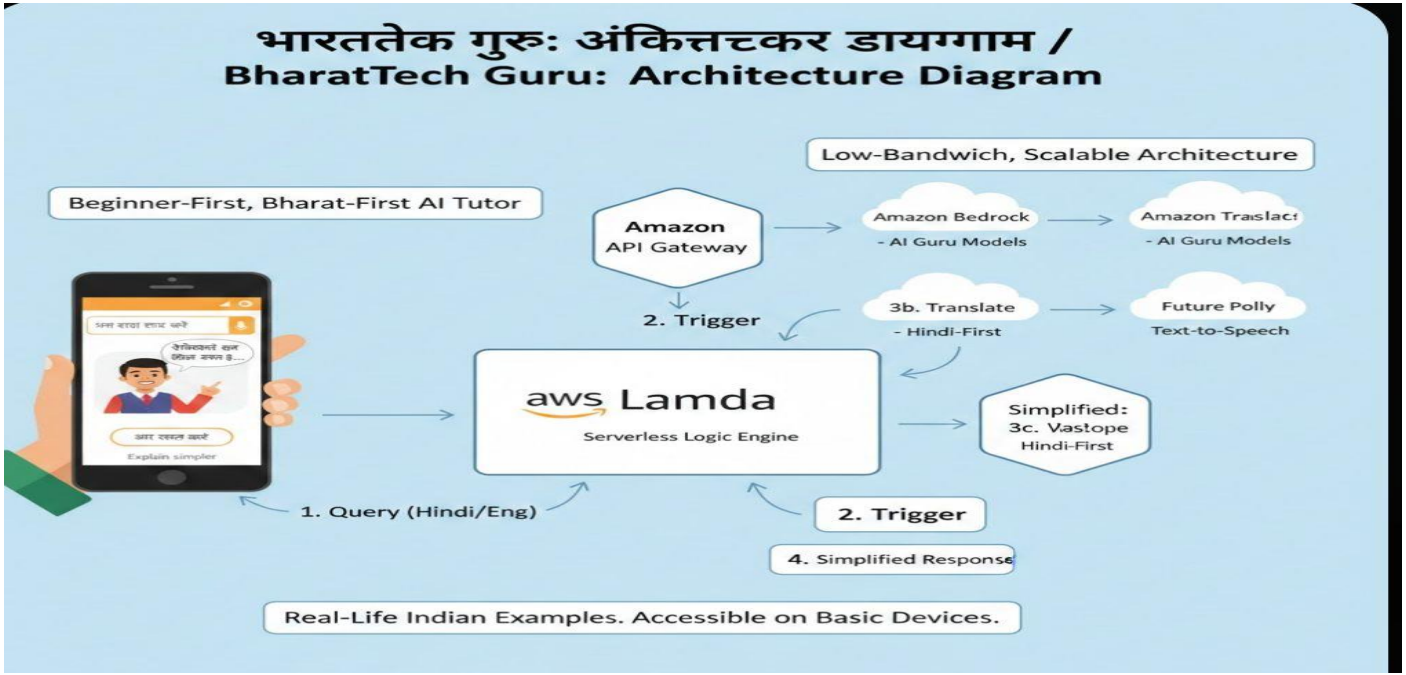
Process flow diagram or Use-case diagram

Process Flow:

1. Student enters a question in Hindi or English
2. System processes the query
3. AI generates a simplified explanation
4. Explanation is translated into local language
5. Student receives easy-to-understand output



Architecture diagram of the proposed solution:



Technologies to be used in the solution:

Technologies Used:

- Amazon Bedrock – AI-based explanation generation
- AWS Lambda – Serverless backend processing
- Amazon API Gateway – API communication
- Amazon Translate – Language translation
- Amazon S3 – Frontend hosting
- Amazon Polly – Voice-based output (future scope)

Estimated implementation cost (optional):

Estimated Cost:

- Low cost due to serverless architecture
- Pay-as-you-use model
- Suitable for students and NGOs
- Scalable without heavy infrastructure investment

Add as per the requirements for the hackathon:

Alignment with AI for Bharat:

- Focus on underprivileged Indian children
- Promotes inclusive and accessible education
- Supports Digital India and Skill India initiatives
- Designed for real-world social impact

Innovation partner H2S | Media partner YOURSTORY

AI for Bharat Hackathon

Powered by aws

Thank You