

Indian Language Toolkits

Breaking Language Barriers – Empowering Communication in Various Sectors through Multilingual AI

Oct-2025



About Bhashini

 **3 Billion+**
Total Inferring


 **450 +**
Total Active
Customers

 **100 +**
Total Usecases

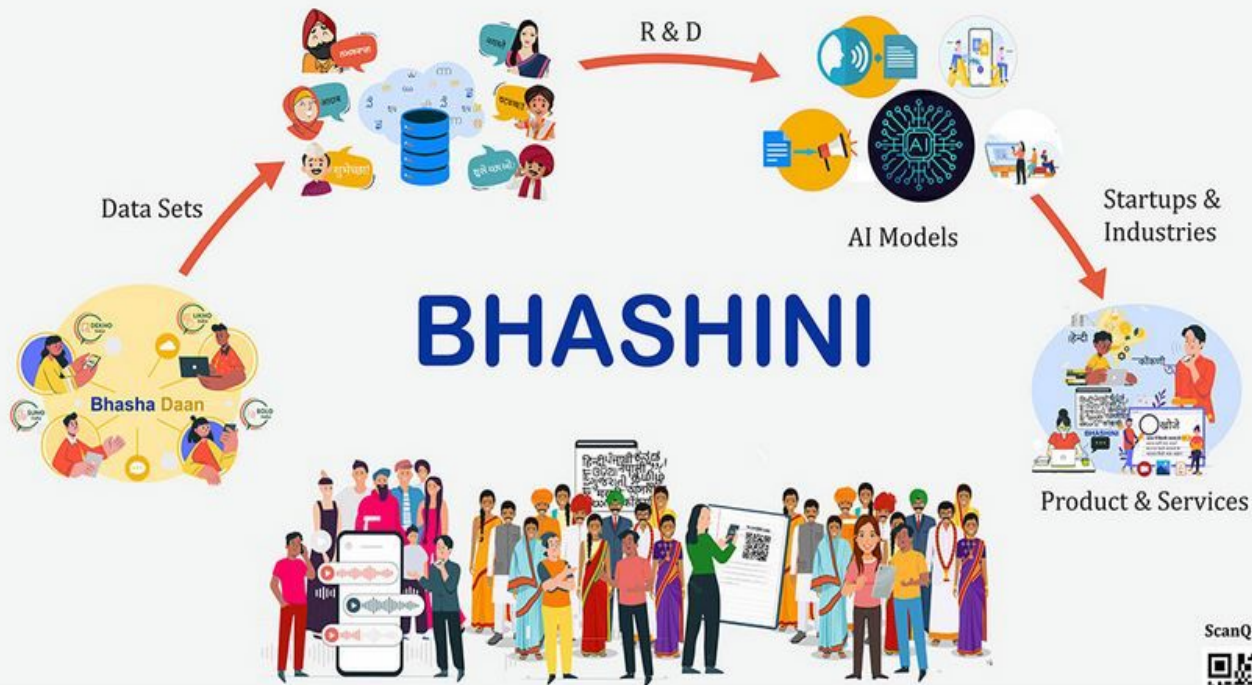
 **20 +**
Languages
Supported

 **20 +**
Language
Services

 **350 +**
Total AI Models

 Ministry of Electronics &
Information Technology
Government of India

 Digital India
Power To Empower **BHASHINI**



#Bhashini

www.bhashini.gov.in

#BhashaDaan

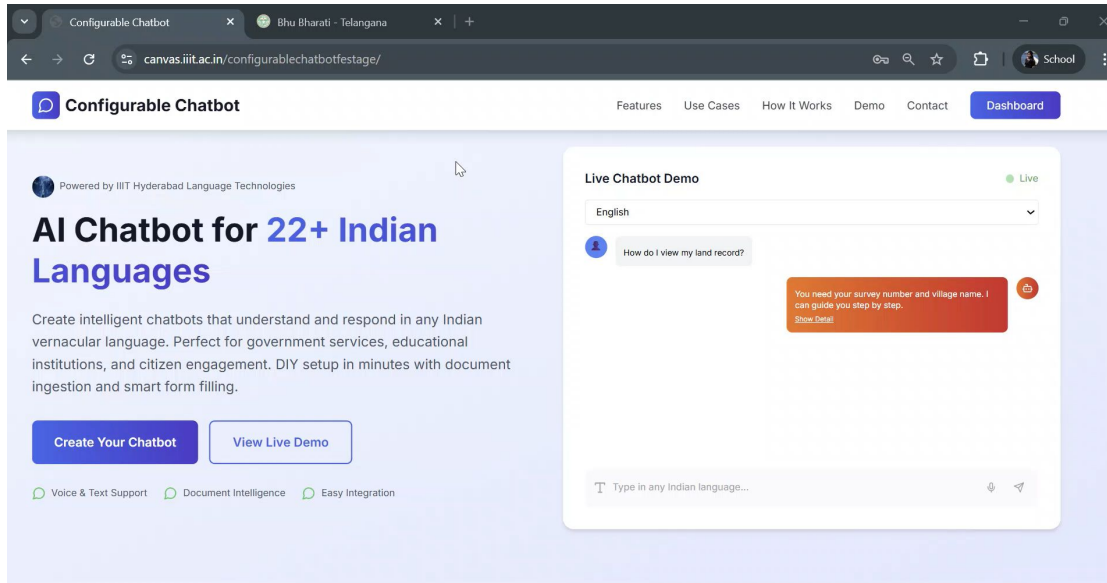
ScanQRCode



<https://bhashini.gov.in/>



Bhashini Use Case Demo



The screenshot displays the 'Configurable Chatbot' website. The browser's address bar shows the URL 'canvas.iit.ac.in/configurablechatbotfestage/'. The website's header includes a navigation menu with links for 'Features', 'Use Cases', 'How It Works', 'Demo', 'Contact', and a 'Dashboard' button. The main content area features the title 'AI Chatbot for 22+ Indian Languages' and a description: 'Create intelligent chatbots that understand and respond in any Indian vernacular language. Perfect for government services, educational institutions, and citizen engagement. DIY setup in minutes with document ingestion and smart form filling.' Below this text are two buttons: 'Create Your Chatbot' and 'View Live Demo'. At the bottom of the main section, three icons represent 'Voice & Text Support', 'Document Intelligence', and 'Easy Integration'. On the right side, a 'Live Chatbot Demo' window is open, showing a chat interface with a language dropdown set to 'English'. A user message asks 'How do I view my land record?'. The chatbot's response is: 'You need your survey number and village name. I can guide you step by step.' with a 'Show Detail' link. The input field at the bottom of the chat window says 'Type in any Indian language...'.



Megathon Challenge : Innovative solutions Leveraging Bhashini Models

- Build an innovative application which leverages Bhashini models (ASR, MT,TTS, OCR)
- Enable seamless cross-language communication for the domains of interest.
- A Complete deployable *mobile / mobile-responsive web application should be built (Full stack application leveraging Bhashini models)*
- Deliverables : (i) source code (ii) demo video (iii) usage and installation documentation (iv) clear dependency specifications

Deployability, Usability, Seamless working of modules and optimal resource utilization



Domains and Scenarios Of Interest

- Domains – Pick anyone
 - ❖ Tourism
 - ❖ Healthcare
 - ❖ Workplace-Bank
 - ❖ Agriculture
- Scenarios – Address at least 4 scenarios
 - ❖ Scenarios provided are indicative.
 - ❖ You are free to imagine any relevant scenarios



Tourism : Enhance Travel Experience of a tourist(s) in alien land



Healthcare : Make The Experience Seamless at a hospital



Agriculture: Empower farmers and Agri professionals to access and disseminate information



Workplace-Bank : Enable Employees, Customers & Vendors work seamlessly



Every application should have the below aspects embedded into their solution

1. A real-time speech to speech component
2. A document, image, text, or website being translated to text or speech
3. A scanned document, image or video with text being translated
4. Query , extraction and summarization of content (text, doc , video, audio)
5. Application should be multi modal (cover at least two modalities) : text, video, audio, image
6. Must use the Bhashini languages APIs (ASR, MT, TTS and OCR)
7. Bringing together the selected scenarios into a seamless “usable” application is key. Should not look like bits and pieces joined together.
8. Efficient usage of resources, since language models are heavy and GPU intensive.

Bonus

1. < 10 sec delay for real-time speech to speech
2. A conversation style content translation i.e., for content to speech output
3. Model adaptation (Bhashini models available as open source maybe adapted as per the application requirements)

Judging will be based on how many of these constraints are met.



Key guidelines

- The scenarios provided are indicative to trigger ideation.
- In all scenarios assume there will be a English speaking person apart from people who can speak only local language. And there are people who speak mixed languages
- Data needed for the applications to be built or demoed is the responsibility of the participant (google it)
- Any additional models and APIs for technologies needed for their solution but not available on the Bhashini sandbox may also be leveraged e.g LLMs or pre-post processing models.
- You will not be held responsible for accuracy of the Bhashini models. How you put them to use and meet the scenario requirements is the key.
- GPUs & training datasets will not be provided for model training . You need to manage on your own



Use Bhashini models innovatively to address multilingual interactions — effectiveness of your solution is key

Evaluation Rubric

Innovation

Solutioning & Features
Usage of Models

Translational Modalities

Realtime Speech-to-Speech
Multi-modality Handling

Design & Architecture

Resource Utilization
Performance

Application Experience

UI cleanliness
Integrated functionality

Presentation

Documentation
Demonstration

Bonus

Realtime S2S <10sec
Conversational Speech
Model Adaptation



Anuvaadhub – The Bhashini Sandbox



- Playground of Indian Language Translational models
- Bhashini Consortium Models + Open Source : MT, TTS, ASR, OCR
- Provides Benchmarking tools and Leaderboards for models
- APIs to integrate into your applications
- Can play-around with the models using Tryout feature
- ☐ SignUp ☐ LogIn ☐ Access Models ☐ Request API Access ☐ Admin Approval ☐ Use APIs

<https://anuvaadhub.com/>



View Leaderboard. Try out various models. and pick the ones that suit best to your requirement



Moving Ahead...

1. You will have continued access to AnuvaadHub

- 1. You can build your applications using this playground*
- 2. Adapt and benchmark these models*

2. Engage with Bhashini Consortium to pursue your NLP journey

