PiyushAI Edtech
BUILD AI FOR AMRAVATI
Official Problem Statement — Participant Guide

Challenge ID	**BAIA-2025-01**
Challenge Title	Amravati City AI Guide — Conversational Digital Assistant
Organized By	**PiyushAI Edtech**
Domain	Conversational AI • Smart City • Civic Tech
Registration Fee	**₹499 per team**
Phase 1 Deadline	**15 April — 5-slide PPT (NO AI tools allowed)**
Languages Required	Marathi + English

Problem Background

Amravati is a vibrant city of 7 lakh+ people. Despite its rich culture and growing economy, citizens constantly face information gaps:

- A student doesn't know which affordable hostels are near their college
- A senior citizen can't find which government office handles their pension complaint
- A family arriving from a village at midnight doesn't know which hospital is open
- A small business owner doesn't know how to list their shop digitally
- A young professional misses the best events because there's no single local source

Existing tools like Google Maps and Justdial are incomplete and English-dominant. A Marathi-first, AI-powered city guide built specifically for Amravati can change everything.

The Problem Statement

> *Design and build an AI-powered conversational assistant that serves as a complete digital guide for the city of Amravati. A citizen must be able to ask anything about the city — in Marathi or English — and receive an instant, accurate, personalized response accessible via web browser Mobile App and/or WhatsApp.*

Required Features

Both core features are mandatory along with atleast one optional features must be implemented. Voice Assistant earns bonus points.

You will get bonus points if you work on more than one optional feature.

Feature 1 — Smart Chat Interface [Mandatory]

Natural language chat in Marathi + English. Must handle colloquial Marathi phrasing.

- "जवळचे उघडे हॉस्पिटल कुठे आहे?"
- "Best biryani under ₹200 near Amravati station?"
- "This weekend events for college students?"
- "PM-KISAN साठी काय कागदपत्रे लागतात?"

Feature 2 — AI-Powered Business Directory [Optional 1]

- AI-ranked results: distance + rating + relevance + opening hours
- Categories: Restaurants, Hospitals, Pharmacies, Coaching Centres, Hotels, Gyms, ATMs, and more
- Owner dashboard: businesses can self-register and update listings
- Minimum 50 realistic Amravati business entries for the demo

Feature 3 — Events & Activities Discovery [Optional 2]

- AI-recommended events based on user interests (tech, culture, sports, education)
- Event organizers can submit events for listing
- Filters: date, category, location, free/paid

Feature 4 — Government & Public Services Guide [Optional 3]

- Covers at least 10 central and state government schemes (PM-KISAN, PMFBY, Ladki Bahin Yojana, Ration Card, etc.)
- Step-by-step guidance: documents needed, where to apply, timeline
- Government office directory with location, hours, and contact
- Grievance redirection: AI identifies right department for citizen complaints

Feature 5 — Location & Maps Integration [Mandatory]

- GPS-based 'near me' search on mobile browser
- All results display distance from user
- "Get Directions" button opens Google Maps
- Map view showing multiple results plotted

Feature 6 — Voice Assistant in Marathi [BONUS — Extra 10 pts]

- Marathi speech-to-text input
- Text-to-speech response in Marathi
- Must work on Android Chrome browser

Phase-wise Submission Rules

Phase 1 — Idea & Design (Deadline: 15 April)

Submit a 5-slide PowerPoint ONLY. No code, no prototype required in Phase 1.

Slide	Title	What to Include
1	Team Introduction	Team name, member names, college, each person's role
2	Proposed Solution	What you will build, who it helps, why Amravati needs it
3	System Architecture	Diagram showing how frontend, backend, AI, and database connect
4	User Flowchart	Step-by-step user journey — how a citizen interacts with your assistant
5	Tech Stack	Every tool, framework, API, and database you plan to use + why
+ Extra	Optional	Any additional slides you feel strengthen your submission

⛔ **CRITICAL RULE — Phase 1: Absolutely NO use of ChatGPT, Claude, Gemini, GitHub Copilot, Midjourney, or ANY AI/LLM tool to create your slides, diagrams, or any part of your Phase 1 submission. This includes AI writing assistants and AI image generators. Any submission found to have used AI tools will be DISQUALIFIED without refund. Submissions are manually reviewed for AI-generated content.**

Phase 2 — Build & Submit (Deadline: 20th May)

Shortlisted teams build their full solution. AI tools are fully permitted in Phase 2.

- Detailed project presentation — max 10 slides
- Working, hosted demo URL — must be live and accessible (no localhost)
- GitHub repository with README, setup instructions, and architecture diagram
- 2-minute video demo walkthrough

Evaluation criteria for Phase 2: AI quality, feature completeness, Marathi UX, data accuracy, and scalability.

Phase 3 — Amravati AI Summit Finals (Date: 31st May)

Top 3 teams present live at the Amravati AI Summit.

- 10-minute live product demo on stage
- 5-minute audience Q&A session
- Audience Poll determines the winner

- All participants (not just finalists) get free Summit entry

Deliverables Summary

Phase	What to Submit	Important Rule
Phase 1	5-slide PPT via Google Form / email	**NO AI tools — strictly human-made**
Phase 2	10-slide PPT + hosted live URL + GitHub + video	AI tools allowed. App must be live, not localhost
Phase 3	Live on-stage demo at Amravati AI Summit	Present to audience — winner by Audience Poll

Suggested Tech Stack

Layer	Recommended	Alternatives
AI / Chat Engine	Claude API / OpenAI GPT	Gemini, Mistral, LLaMA
Frontend	React.js / Next.js	Vue.js, plain HTML+JS
Backend	Node.js + Express	Python Flask / FastAPI
Database	PostgreSQL + pgvector	MongoDB, Supabase, Firebase
Maps	Google Maps JavaScript API	Leaflet.js + OpenStreetMap (free)
Marathi NLP	Google Cloud Translation API	AI4Bharat IndicTrans
Voice (Bonus)	Web Speech API (browser)	Google Speech-to-Text API
Hosting	Vercel / Railway / Render	AWS Free Tier, DigitalOcean

Build the assistant that every Amravati citizen deserves.

Organized by PiyushAI Edtech