

AI for Bharat Hackathon

Powered by **aws**



Team Name : VISIONARY_CODERS

Team Leader Name : VAIBHAV SHAW

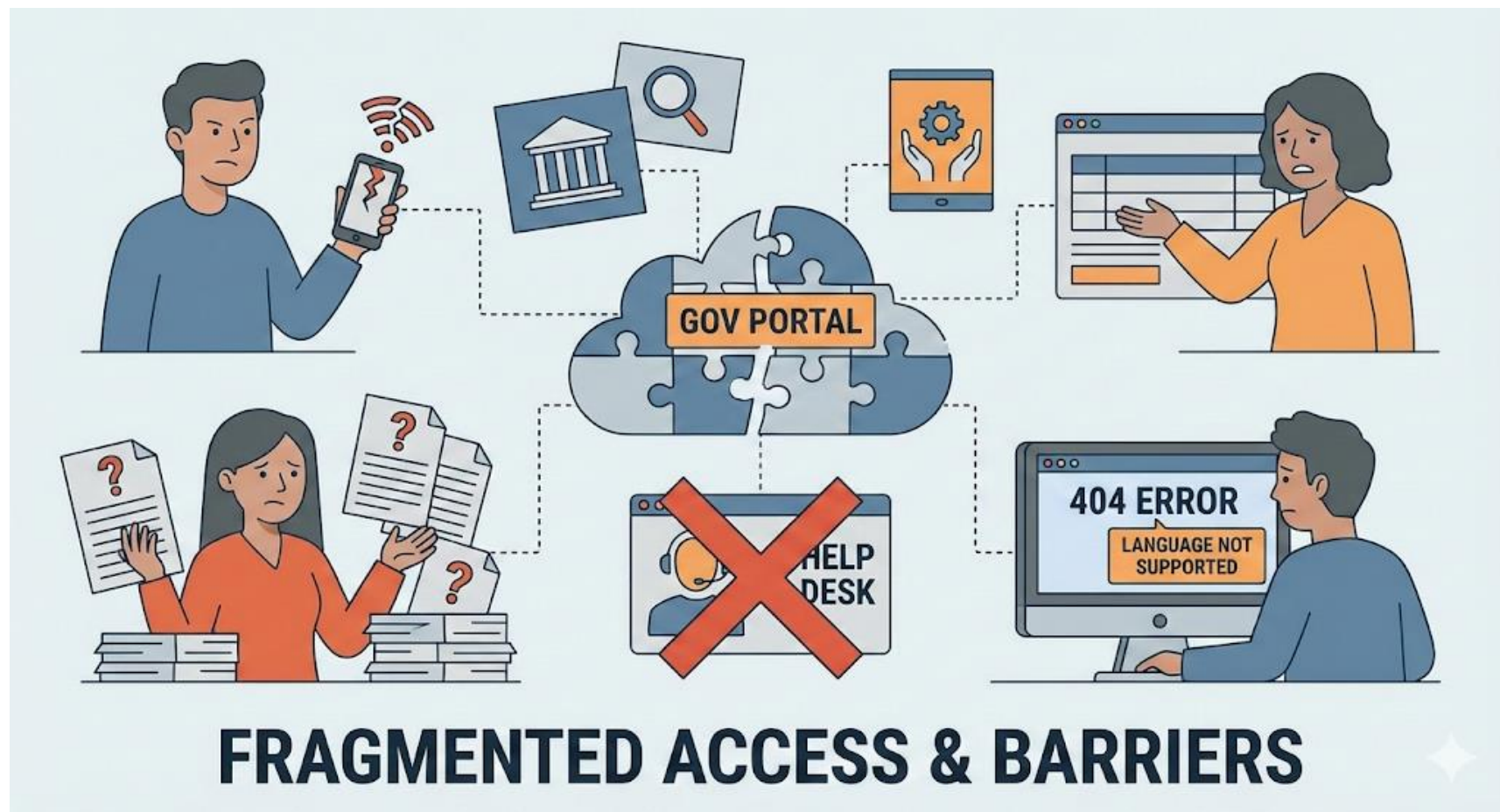
Problem Statement : AI for Communities, Access & Public Impact

Brief about the Idea:Problem Overview:

Citizens
Struggles with

- Fragmented government portals
- Language & literacy barriers
- Complex forms & procedures
- No unified help system
- Low-bandwidth connectivity

Result: **Missed schemes, failed applications, poor public-service access.**



Brief about the Idea:Proposed Solution- LokSathi AI:

- LokSathi AI is a comprehensive multi-package platform designed to bridge the gap between citizens and government services through a unified, voice-first & text-query interface. The system addresses critical challenges in civic service access including fragmented portals, language barriers, complex procedures, and connectivity issues. Built for low-bandwidth environments and basic smartphones, LokSathi AI provides step-by-step explanations of eligibility, required documents, and application procedures. By reducing dependence on middlemen and focusing on inclusion, accessibility, and real-world usability, the app empowers communities to independently access public resources and participate more effectively in social and economic programs.

— "The Digital Bridge between Citizens and Government Services." —

How is LokSathi AI Different from Existing Solutions?

- ❑ Existing platforms are full of text, complicated, and limited to certain languages.
- ❑ Most solutions need a reliable internet connection and some digital skills.
- ❑ LokSathi AI prioritizes voice and local languages.
- ❑ It is tailored for low-bandwidth situations and basic smartphones.
- ❑ It emphasizes guidance and understanding rather than just providing information.
- ❑ The platform employs a microservices architecture with six specialized packages: Civic Assistant, Document Center, Community Zone, Farmer & Rural, Education, and Admin & Government.
- ❑ Each package provides domain-specific functionality while sharing common infrastructure for voice processing, language translation, and portal integration.

How will it be able to solve the problem?

- Users interact using voice & text in their native language.
- AI understands user intent and retrieves accurate civic information.
- Provides **step-by-step guidance** for schemes and public services.
- Reduces dependency on middlemen and offline agents.
- Enables easy access to government benefits and opportunities.
- Guided access to the government schemes and document services.

USP of the LokSathi AI

- Voice-first & text-based interaction with multi-linguistic support
- Low-bandwidth optimization for rural connectivity
- Secure integration with government portals
- Real-time guidance and assistance
- Scalable microservices architecture
- Comprehensive analytics and reporting

List of features offered by the LokSathi AI



Detailed List of features offered by the LokSathi AI

- Civic Assistant: The AI-powered guidance module for scheme information and eligibility
- Document Center: The module providing guided access to government document services
- Community Zone: The module for local announcements and community programs
- Farmer Package: The specialized module for agricultural services and information
- Education Package: The module for educational services and scholarship information
- Admin_Package: The administrative interface for government officials
- Voice Interface: The speech recognition and synthesis system
- Chatbot: Users can ask query and know about schemes and eligibility using Voice and text-based chatbot.
- Portal Integration: The system connecting to external government portals
- Language Engine: The multi-linguistic processing and translation system
- Citizen: Any user accessing government services through the platform
- Administrator: Government officials managing content and analytics
- Intent Recognition: The AI system that understands user requests
- Document Guidance: The system providing step-by-step document application help

How LokSathi Simplifies Citizen Services

User Asks a Simple Question

A citizen presses the mic and speaks naturally, e.g., "How to apply for birth certificate?"



The AI's Comprehensive Response



Understands Intent & Finds the Portal

The AI opens the correct government portal, eliminating user confusion and searching.



Provides Step-by-Step Guidance

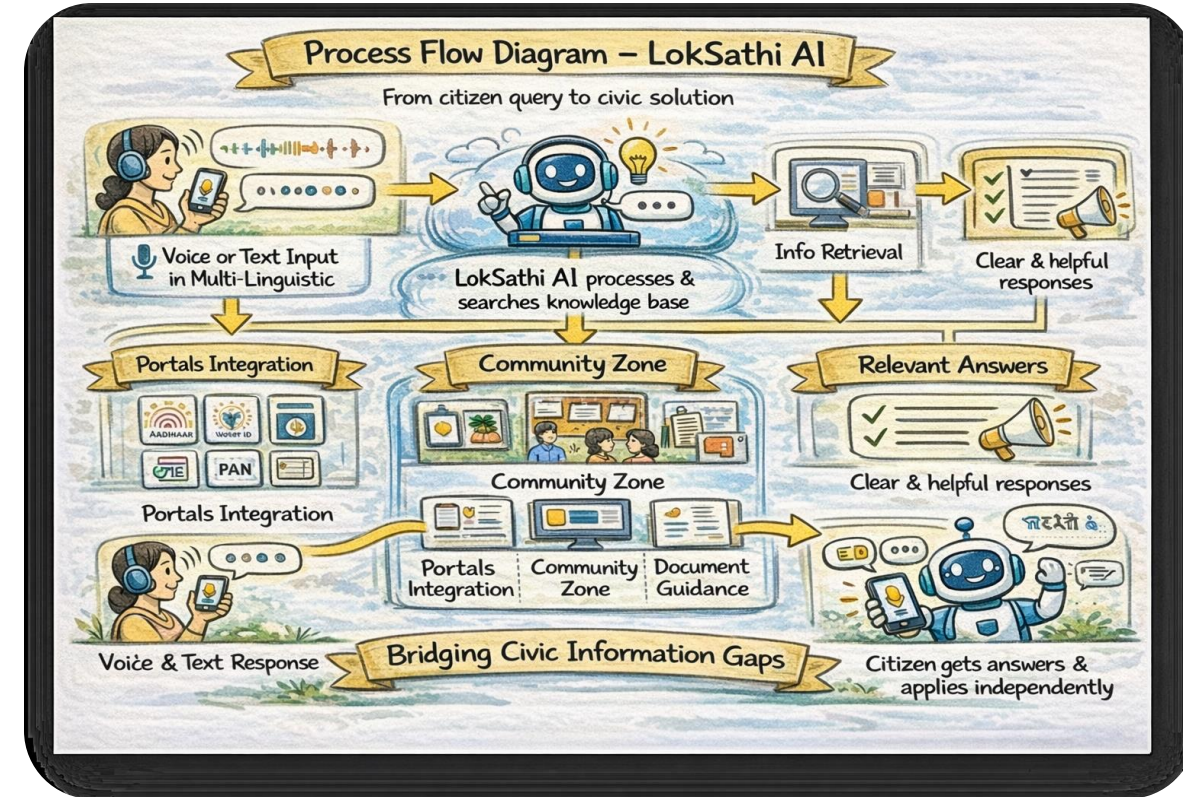
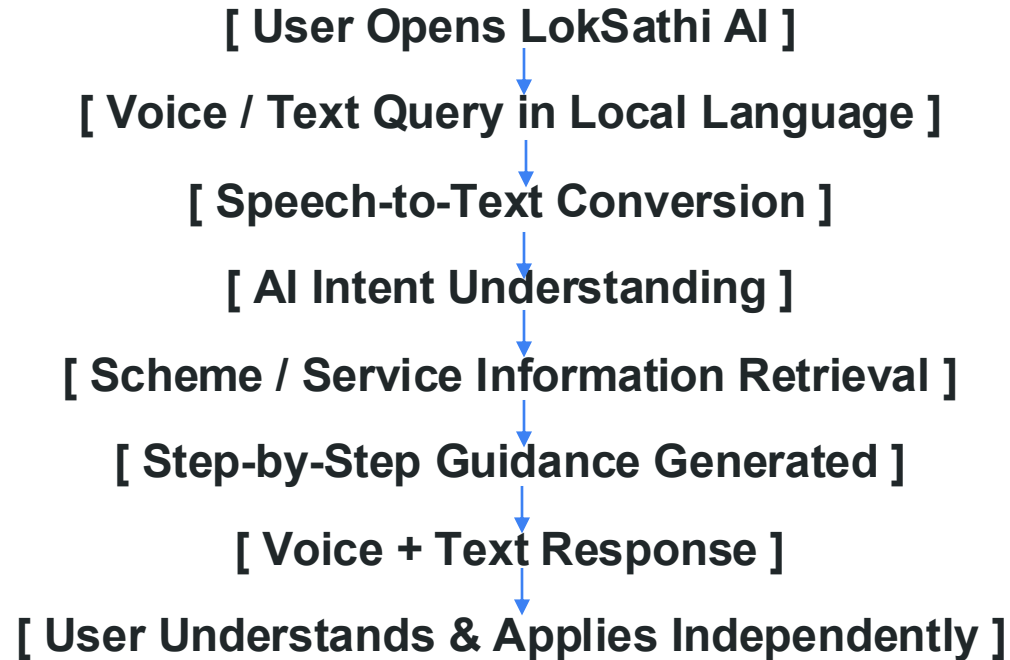
It explains the process in a local language and provides a document checklist.



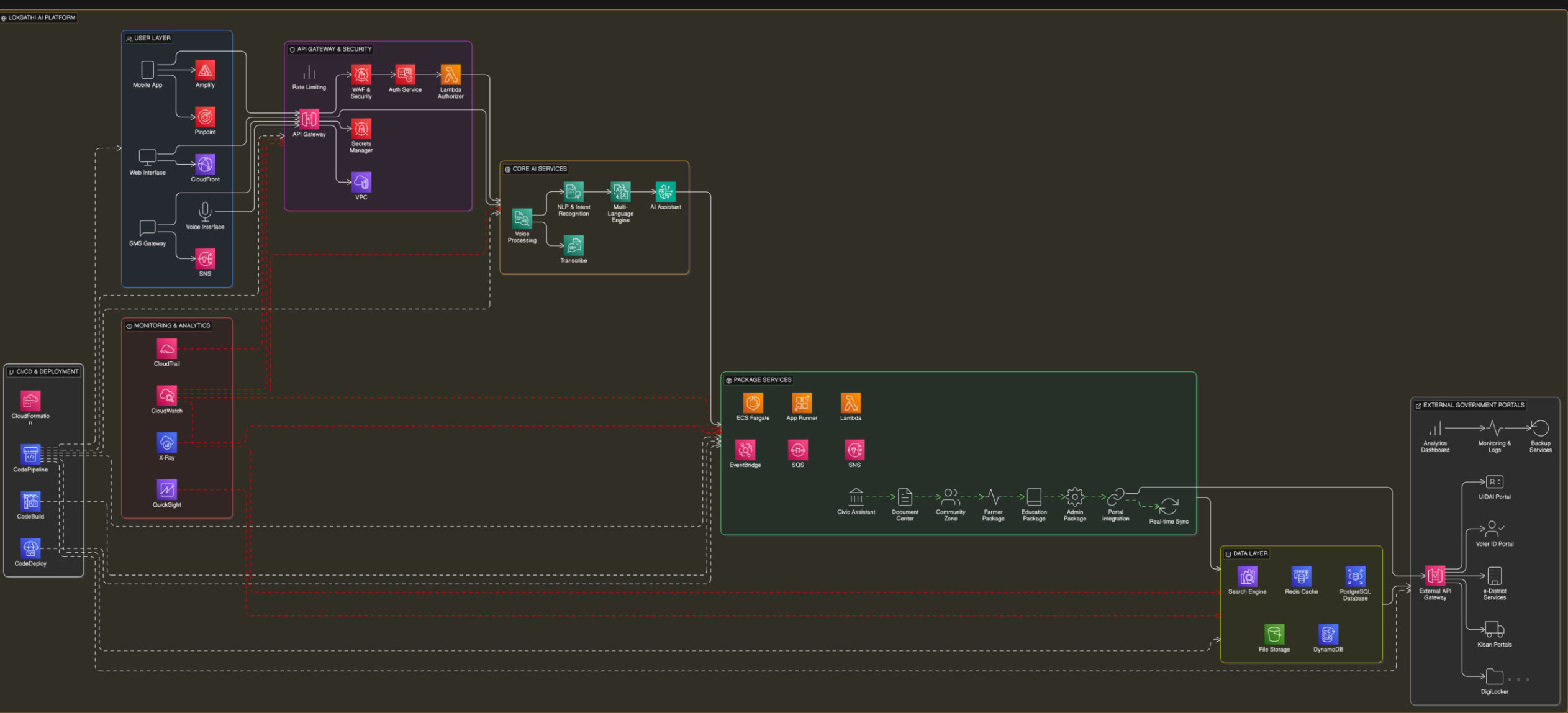
Delivers Info & Answers Questions

It offers to send links via SMS and can answer frequently asked questions.

Process flow diagram:



Architecture diagram of the proposed solution:



Wireframes of the LokSathi AI



Figma Wireframe for LokSathi AI

Scan it for Wireframe.

Technologies to be used in the solution:

Technology Stack

Frontend

- ☐ Next.js PWA
- ☐ Tailwind CSS
- ☐ Web Speech API (mic access)
- ☐ Service Workers (offline mode)

Backend

- ☐ FastAPI (Python)
- ☐ REST APIs
- ☐ Simple OTP auth

Hosting

- ☐ Docker
- ☐ Render / Railway / AWS EC2
- ☐ Cloudflare CDN
- ☐ Google Cloud

AI Layer

- ☐ Whisper (Speech-to-Text)
- ☐ Indic-TTS / AI4Bharat TTS
- ☐ Multilingual LLM (Llama / Gemma)
- ☐ RAG with FAISS vector store

Database

- ☐ PostgreSQL (schemes, FAQs, portals)
- ☐ JSON-based seed data

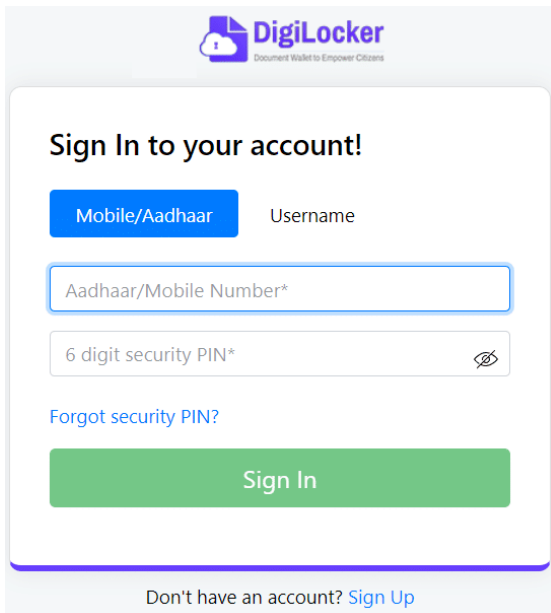
Estimated implementation cost:

MVP Cost Breakdown

Item	Cost (₹)	Cost (\$)
UI Development	40,000	500
Backend APIs	35,000	420
AI Integration	60,000	720
Dataset Prep	25,000	300
Cloud Hosting	10,000	120
Total MVP	₹1.7 – 2.0 Lakhs	~ 2,000 – 2,400 USD

Upcoming agenda

- Single Sign-On with Digi Locker
- OCR for document upload
- Auto form filling
- WhatsApp integration
- **Regional kiosks**




DigiLocker
Document Wallet to Empower Citizens

Sign In to your account!

Mobile/Aadhaar Username


Aadhaar/Mobile Number*

6 digit security PIN* 

[Forgot security PIN?](#)

Sign In

Don't have an account? [Sign Up](#)



Upload Files

Select files

You are currently using 2768 MB (12%) of your 21504 MB. [Add storage](#)

You can upload files up to 1024 MB. Files converted to Google Docs have smaller limits.

Google говорит на русском.jpg 0 B / 232 KB [Remove](#)

Drag and drop files here.

[Select more files](#)

Select conversion options

Only converted files can be edited online. [File types and size limits](#)

☐ Convert documents, presentations, spreadsheets and drawings to the corresponding Google Docs formats

☒ Convert text from PDF or image files to Google Docs documents. [How does this work?](#)

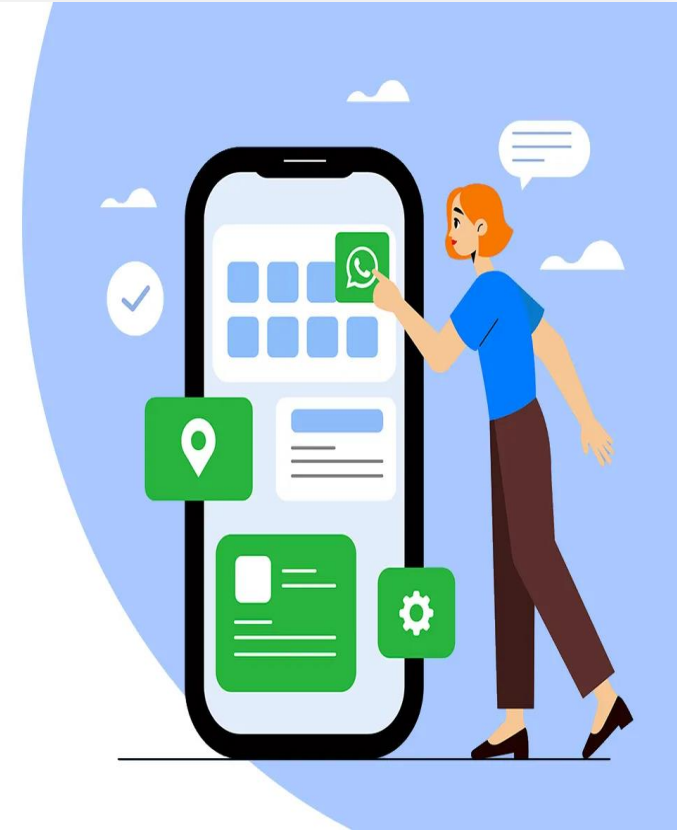
Document language: Russian

When uploading files, you agree to abide by the Google Docs Terms of Service and Privacy Policy. Do not upload or share any content that infringes copyrights or that you otherwise do not have the legal right to upload or share. [Learn more](#)

[Destination collection](#) [Private](#) **Start upload**

WhatsApp

Integration in Web Applications



Innovation partner **H2S**
HACK2SKILL

Media partner **YOURSTORY**

AI for Bharat Hackathon

Powered by **aws**

Thank You

