

# AI for Bharat Hackathon

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Team Name : Loop Lords

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Problem Statement : The "Trust Gap" in Digital Bharat: 800M+ users are online, but the elderly and rural population are vulnerable to vernacular scams (Digital Arrests, Fake UPI QRs) that existing tools cannot detect.

## Brief about the Idea

### Saterix: The Cognitive Firewall for India's Next Billion Users

#### Multimodal AI Security Agent

Powered by Amazon Bedrock

#### Upload Screenshots & Voice Notes

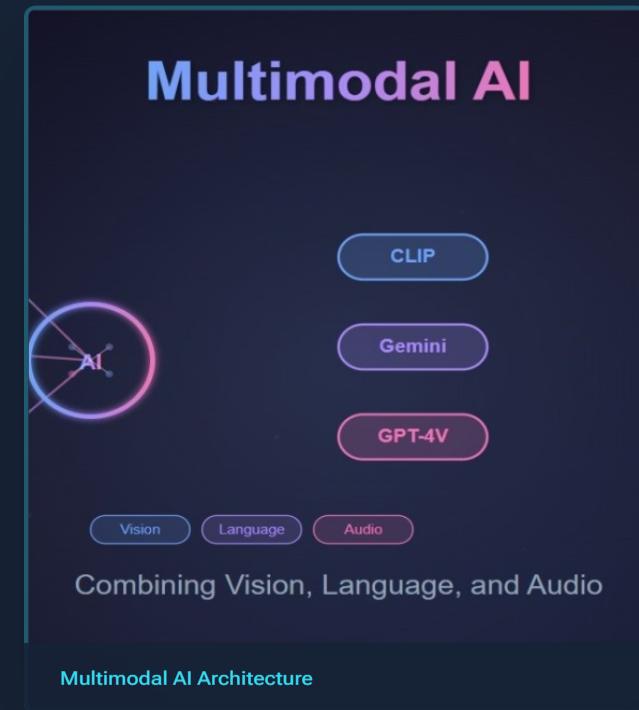
UPI QRs, Bills, or Voice Messages

#### AI "Sees" & "Hears" Threats

Computer Vision + Audio Intelligence

#### Vernacular Explanations

Simple Hindi, Bengali, or Tamil



# Solution & USP

## → Differentiation

**Existing Tools (Truecaller):** Blacklist phone numbers

**Saterix:** Analyzes intent & content • Detects fake bills from new numbers

## 💡 Problem Solving

Bridges **Digital Literacy Gap** with simple voice messages

*"Dadi, this is a fake bill. Do not pay."*

## ◆ USP

**Multimodal Intelligence:** Analyzes Audio + Vision + Text simultaneously

Detects sophisticated Digital Arrest & deepfake scams



Empowering the Next Billion Users

# List of Features

## Visual Threat Detection

Amazon Titan Multimodal scans screenshots for:

Fake Bank Logos

Forged Seals

Malicious QRs

## Audio Forensics

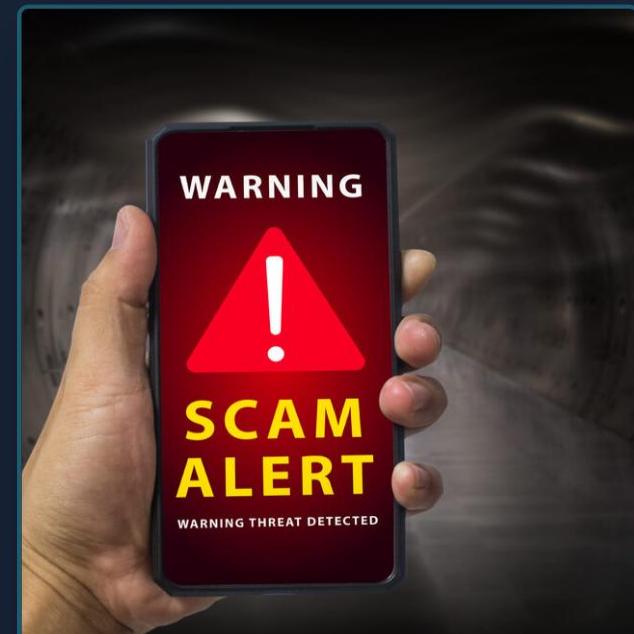
Amazon Transcribe + Claude 3.5 Sonnet detect panic keywords:

"Police Case"

"Account Freeze"

## Vernacular Defense

Instant alerts in **10+ Indian languages** for elderly users



Advanced Threat Detection System

# Process Flow Diagram

## INPUT

User uploads Screenshot or Voice Note



## PROCESSING

Data sent to AWS Lambda



## INTELLIGENCE

### Image

→ Amazon Titan (Visual Analysis)

### Audio

→ Amazon Transcribe (Text Conversion)

### Reasoning

→ Claude 3.5 Sonnet (Scam Verdict)

## OUTPUT

Risk Score (Safe/Unsafe) + Local Language Audio Alert



# Wireframes

## Streamlit Mobile Web App Interface



### Upload Button

Large, accessible button for uploading screenshots or voice notes



### Result Card

Clear **Red/Green** safety indicator with risk score



### Audio Alert

Voice explanation in user's native language

-first phone.  
the most.

The JioThings Android/iOS app

 **Usage Manager**  
Allow selected contacts and apps for safety

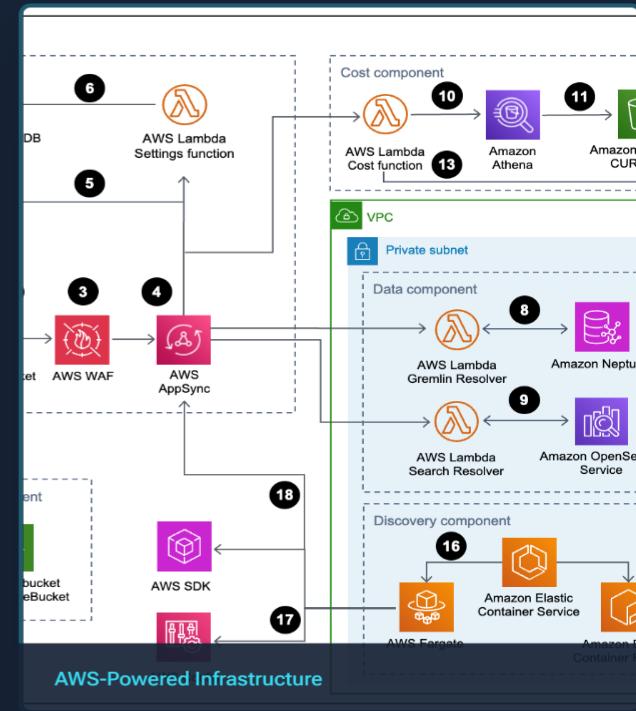
 **Always Available**  
Battery that lasts up to 7 days

799/-

User-Friendly Interface Design

# Architecture Diagram

-  **Frontend**  
Streamlit (Mobile Web App)
-  **API Layer**  
Amazon API Gateway
-  **Compute**  
AWS Lambda (Serverless)
-  **AI Engine**  
Amazon Bedrock (Claude 3.5 & Titan)
-  **Storage**  
Amazon S3 (Evidence Repo) + DynamoDB (User Logs)



# Technologies Used



## Amazon Bedrock

Foundation Models: Claude 3.5 Sonnet, Titan Multimodal



## Amazon Q

Accelerates code development and debugging



## AWS Lambda

Serverless, event-driven backend logic



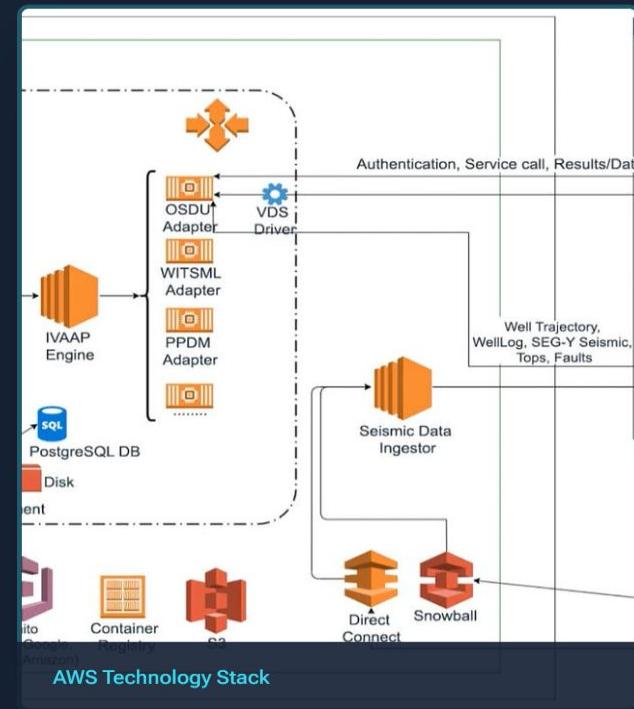
## Amazon Transcribe

Converting vernacular audio to text



## Streamlit (Python)

User interface development



# Estimated Implementation Cost

## ↘ Infrastructure Cost: Low

Serverless architecture means we **only pay when a user scans a scam**

## Revenue Model (B2B2C)



### Freemium

Free for individual users



### Family Shield ₹49/mo

Alerts sent to children if parents receive scam calls



### Bank API

Banks pay per API call to verify high-risk transactions

## Cost-Benefit Analysis

Serverless Compute	Low
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AI Processing	Scalable
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Maintenance	Minimal
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Revenue Potential	High
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## Impact on Bharat



### Protects Financial Dignity

Safeguards the elderly and vulnerable from financial exploitation and fraud



### Reduces Massive Financial Loss

Prevents ₹22,845 Crore annual loss to cyber fraud in India



### Builds Digital Trust

Fosters confidence in Digital Rupee and UPI ecosystem for the next billion users



### Secure Digital Bharat

Empowering India's next billion users with AI-driven security

**800M+**

Users Protected

Innovation partner



Media partner



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Thank You

