

AI for Bharat Hackathon

Powered by **aws**



Team Name : PetScan

Team Leader Name :Rutwik Patil

Problem Statement :AI for Pet HealthCare

Problem Statement:

In India, rising pet ownership (especially in urban areas like Pune/Mumbai) faces high veterinary costs, delayed early detection of common issues (skin allergies, eye/ear infections, dental problems, mobility issues in dogs & cats), and limited access to affordable preventive care — particularly for middle-class families and indie/mixed breeds. This leads to preventable suffering, higher emergency expenses, and overburdened vets.



Brief about the Idea:

PetScan AI is a smartphone-only mobile app that lets Indian pet parents use their phone camera to scan dogs & cats for early signs of health issues. Powered by AI image analysis, it provides instant, affordable insights without any hardware. Freemium model makes preventive pet care accessible to millions.



How different is it from any of other existing Ideas?

- Zero hardware dependency (unlike collars like PetPace, Tractive, Satellai – ₹5k+ cost).
- India-first focus: Trained/tuned for indie dogs, mixed breeds, monsoon-related issues (fleas, mange, hot spots).
- Ultra-affordable: Free tier (5 scans/month) + ₹99/month premium vs pay-per-scan or expensive subs in MimiBowBow/TTcare.
- Purely software → faster iteration, lower barrier, scalable via app stores.

How will it be able to solve the problem?

- Enables proactive scanning at home → early alerts reduce vet visits by 20-30% (cost savings).
- India-first focus: Trained/tuned for indie dogs, mixed breeds, monsoon-related issues (fleas, mange, hot spots).
- Builds awareness & history tracking → pet parents act sooner on subtle signs.

USP of Proposed Solution

- Hardware-free AI pet diagnostics using everyday smartphone cameras.
- Localized for Indian pets & conditions.
- Truly affordable freemium model for mass adoption.
- Strong disclaimers + vet consultation push → ethical & trustworthy.

List of features offered by the solution

Key Features:

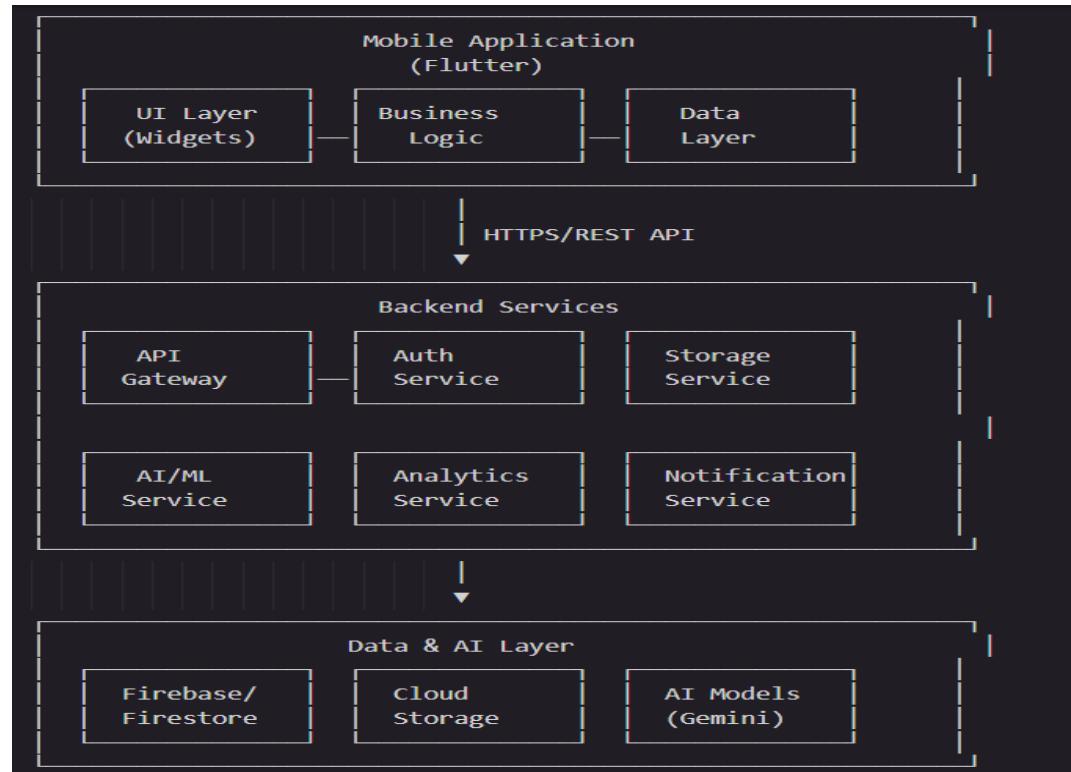
- Guided photo/video capture (eyes, skin, teeth, ears, paws, gait) with real-time overlays
- AI detection of 8-12 common issues (allergies, infections, tartar, mites, limping, etc.)
- Instant visual reports with probability, severity & annotated images
- Personalized pet profiles (breed, age, weight) for accurate insights
- Scan history & basic trends tracking
- Freemium: 5 free scans/month; unlimited for ₹99/month
- Multilingual support (English + Hindi/Marathi planned)
- Privacy-focused: Encrypted, anonymized data for AI improvement (with consent)

Process flow diagram or Use-case diagram

Add a flow diagram or a use case diagram or an architecture diagram.



Architecture diagram of the proposed solution:



Technologies to be used in the solution:

Tech Stack:

- Mobile Framework: Flutter (Dart)
- Backend & Auth: Firebase (or AWS Amplify for hackathon alignment)
- AI/ML: Google Gemini Vision API / Hugging Face (fine-tuned vision models) OR AWS Rekognition + SageMaker (if emphasizing AWS)
- Cloud Storage: Firebase Storage / AWS S3
- Payments (premium): In-app purchases via Google Play / Apple
- Analytics: Firebase Analytics
- Future: AWS Lambda for custom processing, Bedrock for advanced multimodal AI

Estimated implementation cost (optional):

- Development (Flutter + basic AI integration): ₹8-15 lakhs (outsourced) or self-build lower
- Cloud/AI API usage (initial 5k users): ₹5,000-15,000/month
- Total prototype phase: Under ₹2-3 lakhs (using free tiers of Firebase/Gemini)
- Scalable with AWS credits from hackathon

Add as per the requirements for the hackathon:

- Impact: Targets 10M+ urban/rural pet owners in India; reduces vet burden; promotes animal welfare.
- Scalability: App store distribution → millions of downloads.
- Inclusivity: Works on low-end phones; supports regional languages soon.
- AWS Alignment: Leverages AWS services for scalable, secure AI backend.

Innovation partner **H2S**

Media partner **YOURSTORY**

AI for Bharat Hackathon

Powered by 

Thank You

