Hello, Fuzzy Friend!

Fuzzy Friend
Pet Health AI

Group 6

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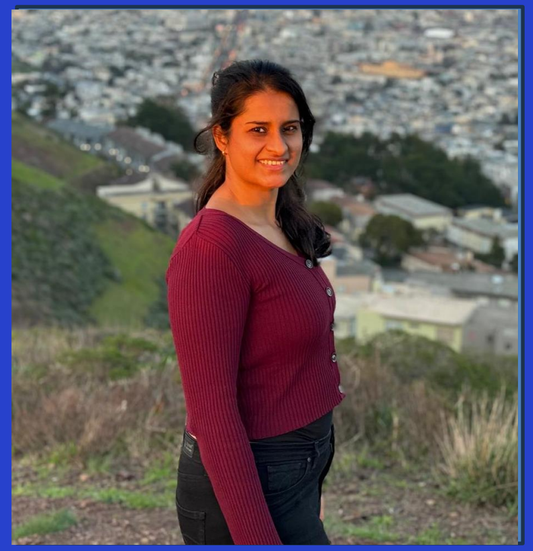
Our Team

Pooja Shah
UI Strategy & HR

Experienced HR professional driving people strategy, analytics, and organizational effectiveness.

Srinidhi Jagannathan
Product & Data Analytics

Turning complex data into actionable insights. Experienced in product strategy, AI/ML, and cross-functional collaboration.



Yi Zhang (Annie)
AI Quality & Safety Specialist

Risk & Compliance Mindset | AI Product Delivery | Strategic Analysis

Yaqing He (Rachel)
Project Mananger & GTM

Experienced professional in competitive intelligence research, go-to-market and business strategy.

The $40B Vet Care Market Has a Decision Gap

“Is my pet okay? Do we need to go to the ER now?”

52%

of US pet owners skipped vet care due to cost

37%

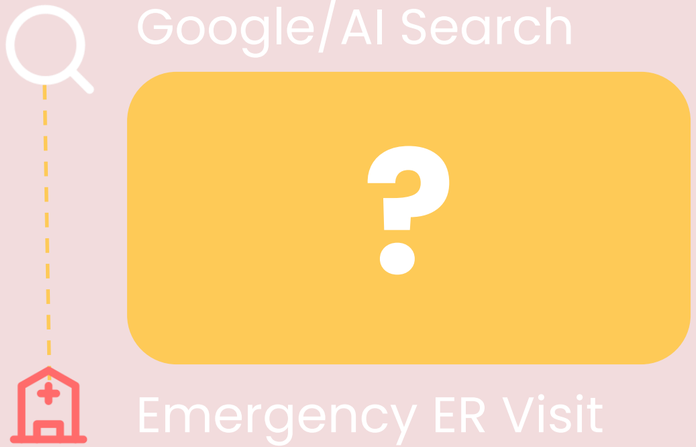
struggle with timely appointments

94M US pet households

Spent on vet care annually **$39.8B**

Average ER visit cost

$800 – $1,500



Telehealth market projected by 2034

$600M

Data sources: Access to Veterinary Care Coalition, American Veterinary Medical Association, American Pet Products Association, Precedence Research

Fuzzy Friend
Pet Health AI

AI-powered Symptom Triage

Product Vision: Clear answers in anxious moments — helping pet parents make confident care decisions for cats and dogs.

Competitive Gap

Feature	Typical Pet Health Apps	Fuzzy Friend
Symptom Analysis	**Basic static** checklists	**AI-guided triage** with context
Urgency Guidance	**No urgency grading** or generic advice (“see vet”)	**Clear urgency levels** (Low, Medium, High)
Personalization	**One-size-fits-all**	**Pet details (name, age, history)** throughout
Conversational Support	**Static forms** or text lists	**Interactive chatbot** that mirrors a conversation
Actionable Next Steps	**Generic** suggestion	**Suggests nearest ER** when urgency is high
Community Support	**Rare/limited**	Built-in **Forum for shared experiences**

What We Built

GPT-4 + RAG

AI-powered symptom triage for dogs & cats

Photo/Text Input

Risk level output

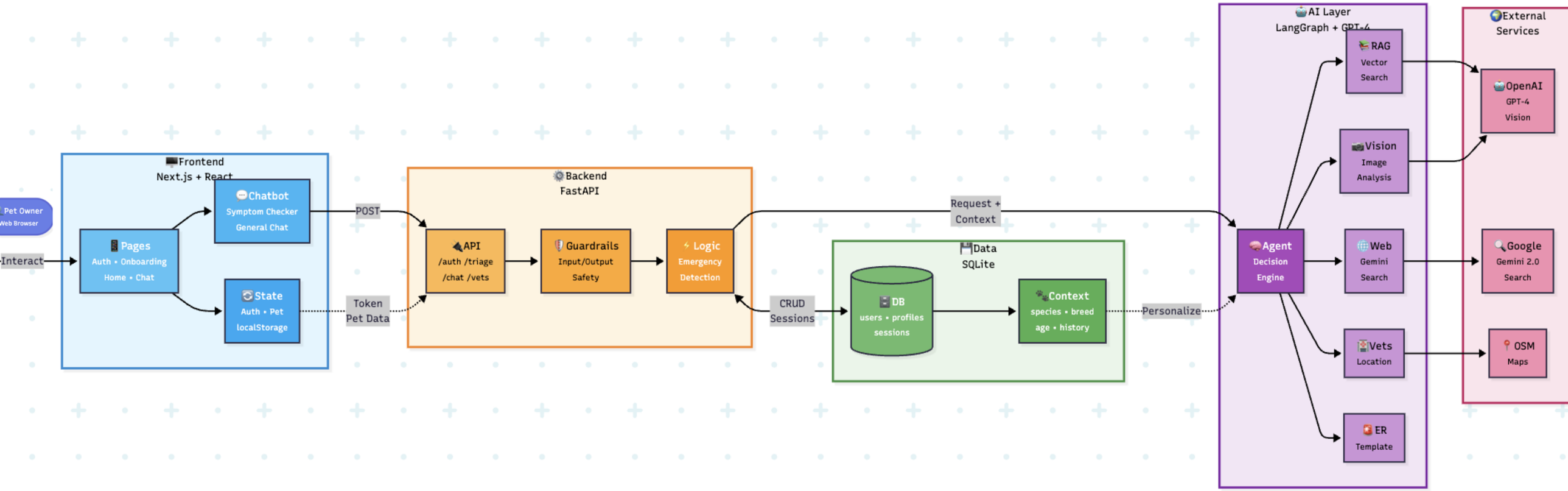
Safety-First

5-layer input + 6-layer output guardrails

Emergency Routing

Hard-coded paths for life-threatening cases

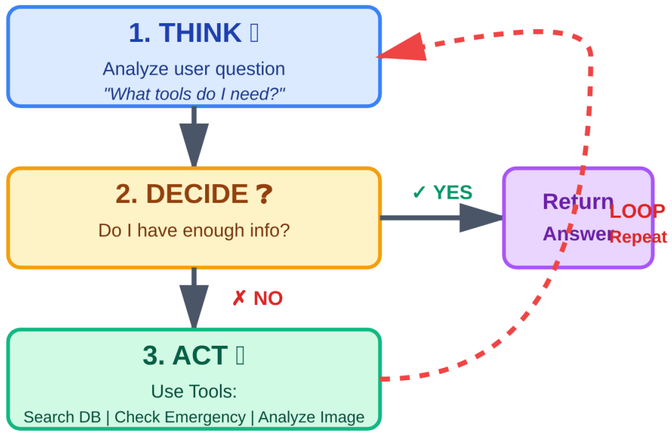
Architecture Diagram



Architecture Diagram

ReAct Agent: Smart Tool Selection

Reasoning + Acting = Intelligent Decisions



Available Tools (Agent Picks What's Needed)

- Vector Search
- ⚠ Red Flags
- Image Analysis
- Find Vets
- Web Search

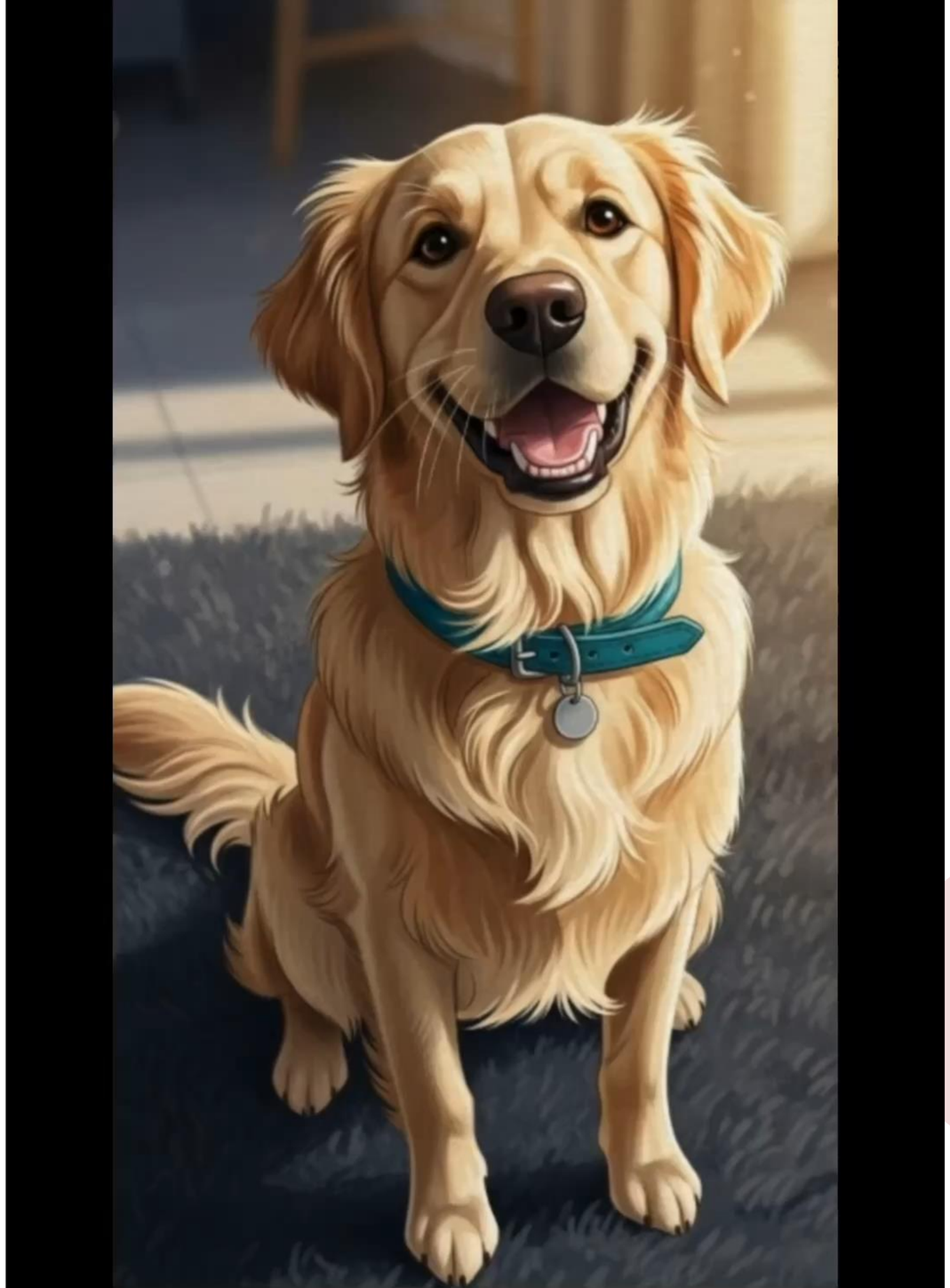
...and more

Why This Matters:

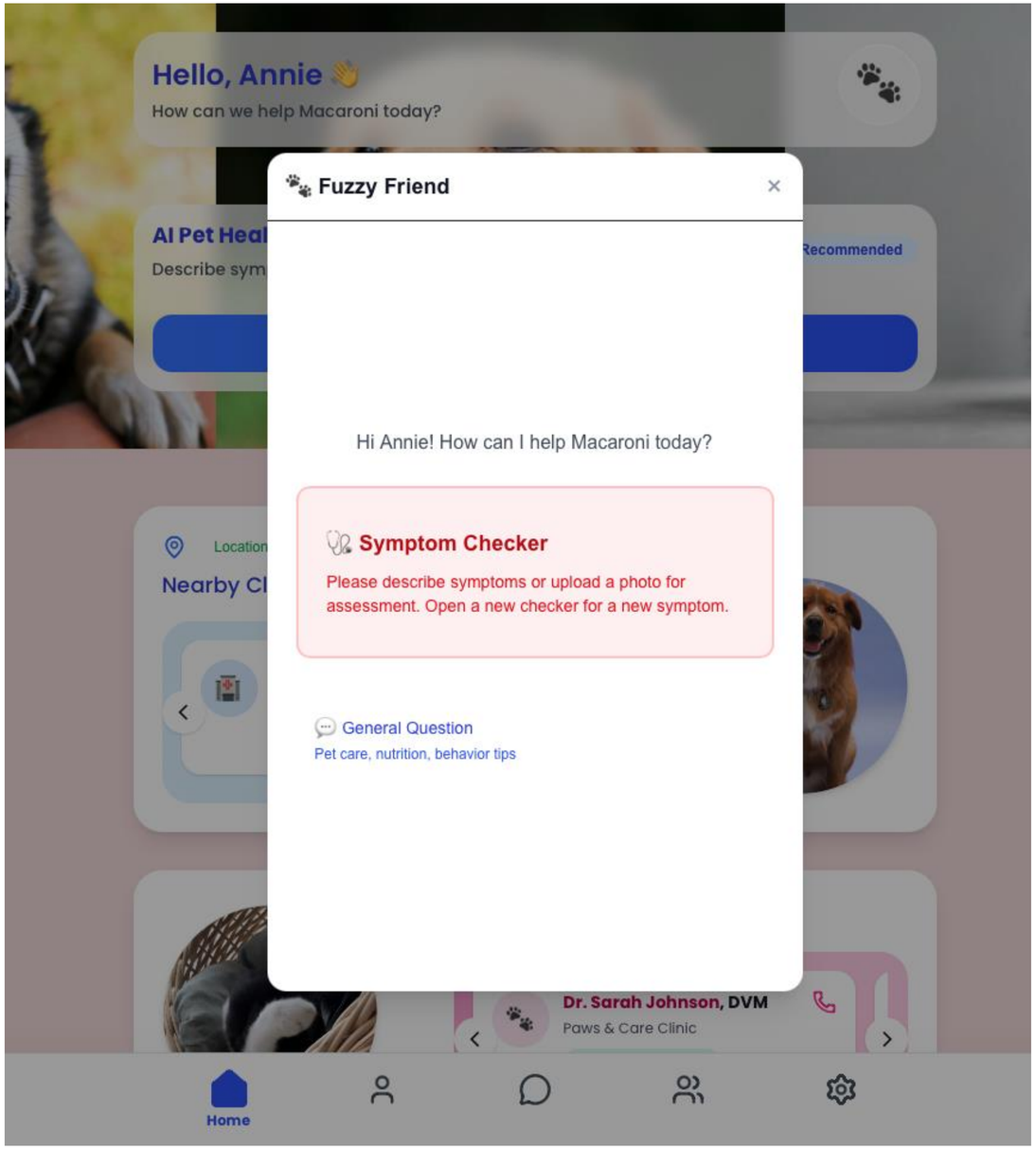
Simple chatbot: Always does the same thing

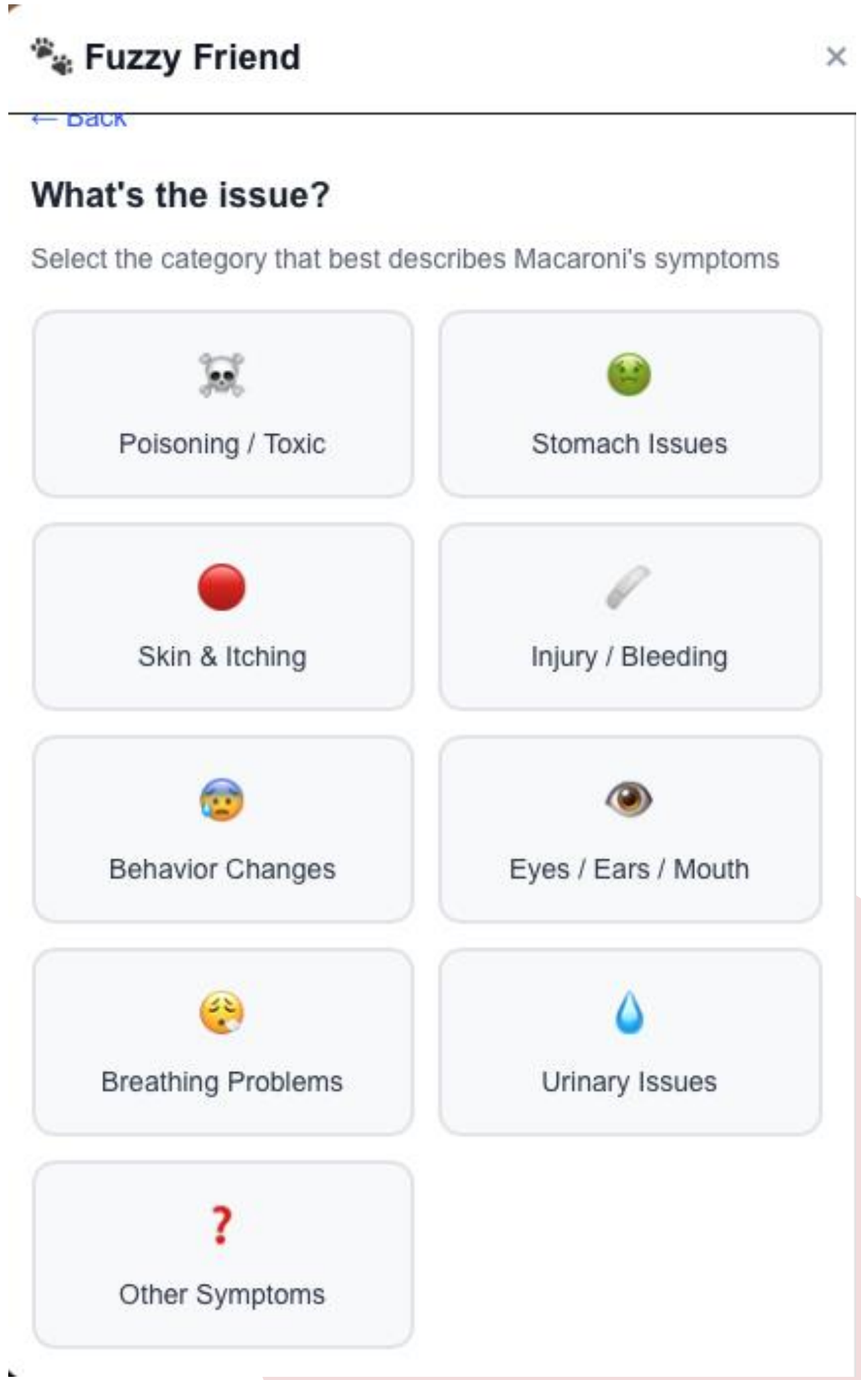
Our ReAct Agent: Thinks about what's needed, picks the right tools, loops until it has the answer

Product Demo



AI Pet Health Check





Screenshots

Symptom Checker

Fuzzy Friend ×

Poisoning / Toxic — Switch mode

Poisoning / Toxic

Describe Macaroni's symptoms in detail, or upload a photo for assessment.

What's the weather like today?

I'm a pet health assistant specialized in dogs and cats.
I can only help with pet health-related questions.
Please describe your dog's or cat's symptoms or health concerns.

Scenario 1

Eyes / Ears / Mouth

Describe Macaroni's symptoms in detail, or upload a photo for assessment.

I noticed some black discoloration on his gums. Could it be an infection?

[Image]

✅ **Monitor at Home**

Category: Ears, Eyes, and Mouth

Why:
• The black discoloration on the gums is not immediately life-threatening.
• No signs of bleeding, open wounds, or severe distress were noted.

What to do:
• Monitor the discoloration for any changes in size, color, or texture.
• Ensure your dog is eating and drinking normally.
• Schedule a vet appointment if the discoloration persists or worsens.

Watch for:
• Watch for changes in the discoloration.
• Look for any signs of discomfort or pain in your dog.
• Ensure there are no changes in eating or drinking habits.

⚕ This is not a veterinary diagnosis. If symptoms worsen or you're concerned, seek veterinary care immediately.

📷 Image Analyzed

Low

Scenario 2

Skin & Itching

Describe Macaroni's symptoms in detail, or upload a photo for assessment.

Macaroni's been scratching at his paws a lot lately, and today I noticed the area between his toes is scratched raw and there's a little bit of bleeding.

🚨 **EMERGENCY**

Category: Itching & Skin Issues

Why:
• Emergency symptoms detected: bleeding

⚠️ **Red Flags:**
• bleeding

What to do:
• Go to an emergency vet now
• Do not apply random human creams or medications

Watch for:
• Facial/throat swelling
• Breathing changes
• Mental status

📍 **Nearby Vets:**
• 🔴 ER United Veterinary Speciality & Emergency (3.24 mi)
Hours: Call to confirm
• Banfield Pet Hospital (3.39 mi)
Hours: Call to confirm
• Banfield Pet Hospital (3.42 mi)
Hours: Call to confirm
• Mid-Peninsula Animal Hoapital (4.46 mi) +1-650-325-5671
Hours: Mo-Fr 08:00-18:00; Sa 08:00-17:00; Su 09:00-17:00
• Veterinary Clinic (5.02 mi)
Hours: Call to confirm

⚕ This is not a diagnosis. If symptoms worsen, seek immediate care.

High

Scenario 3

Breathing Problems

Describe Macaroni's symptoms in detail, or upload a photo for assessment.

Macaroni suddenly developed a runny nose and keeps licking his nose. The discharge is continuous. What's going on?

📅 **Schedule Soon**

Category: Breathing Issues

Why:
• Continuous nasal discharge could indicate an upper respiratory infection or allergic reaction.
• Persistent licking of the nose suggests irritation or discomfort, which should be evaluated by a vet.

What to do:
• Schedule a veterinary appointment within the next 2-3 days to assess the cause of the nasal discharge.
• Monitor for any additional symptoms such as coughing, sneezing, or changes in appetite.

Watch for:
• Watch for any worsening of symptoms or new symptoms such as coughing or difficulty breathing.
• Ensure Macaroni remains hydrated and comfortable.

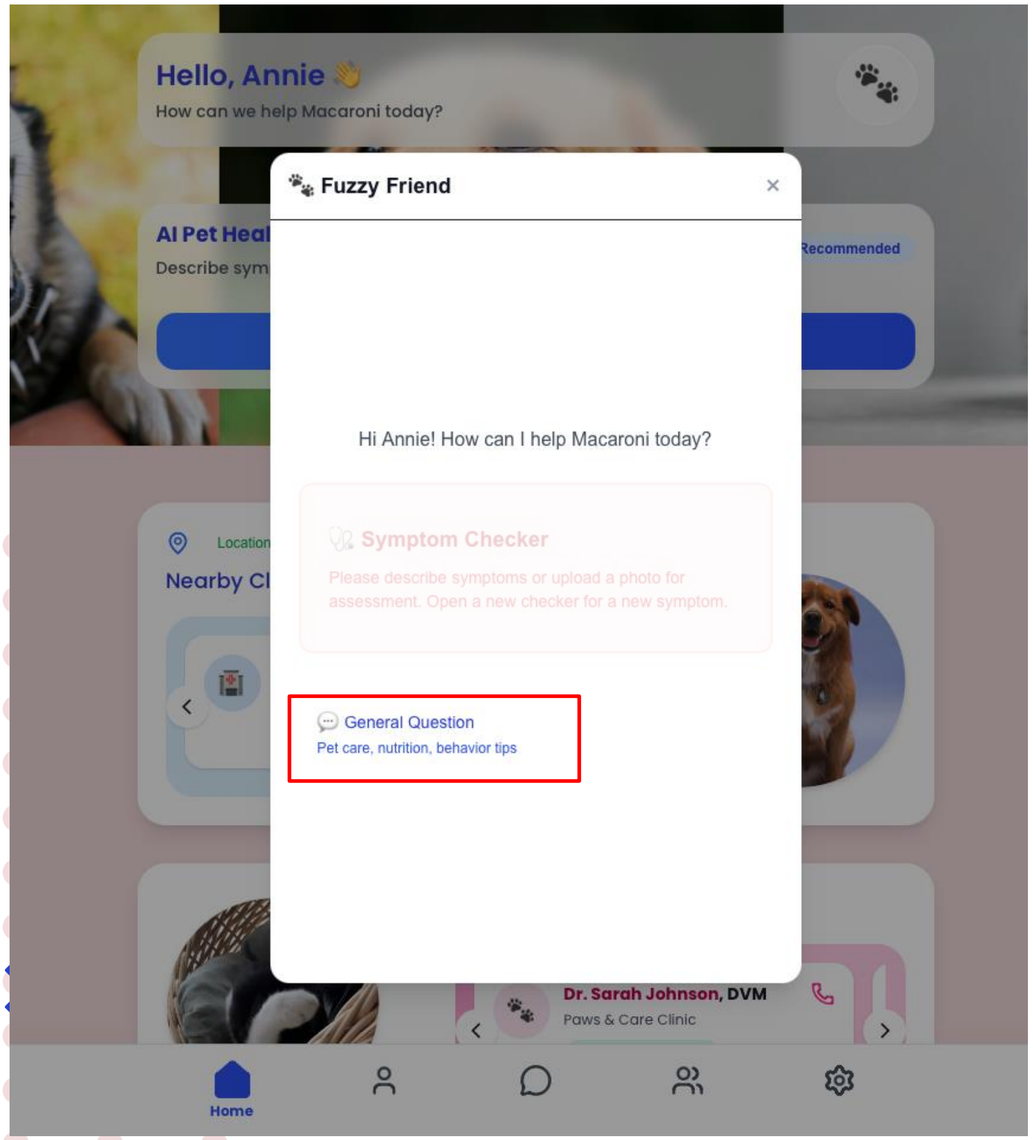
⚕ This is not a veterinary diagnosis. If symptoms worsen or you're concerned, seek veterinary care immediately.

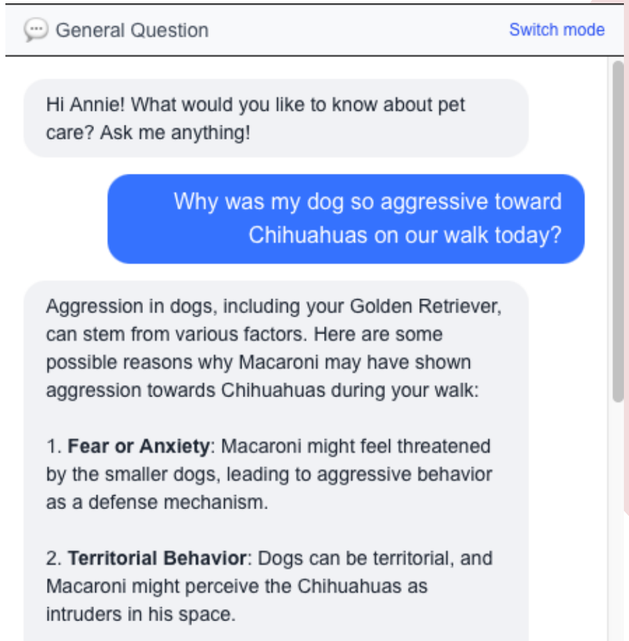
Medium

Scenario 4

Screenshots

General Question





Business Model: Freemium Subscription

Price Tiers

Tier	Price	Limits	Purpose
Free	**$0**	1 pet, 2 triages/month Rate limit for general chat	Acquisition funnel
Plus	**$6.99/mo**	1-2 pets, 2 triages/week	**Core monetization**
Pro	**$14.99/mo**	1-5 pets, 2 triages/week	Multi-pet households

$270K

ARR Potential

Year 1 target with 5% conversion of 50K downloads

Unit Economics

- **LLM API cost**: ~$0.01 per triage
- **Free tier** (12 triages/year): ~$0.12 API cost/user/year
- **Plus tier** ($83.88/year): ~$0.62 API cost

Data sources: American Society for the Prevention of Cruelty to Animals, 2023

Land with First-Time Pet Parents, Expand with Data Moat

High-quality data will always be our top priority to achieve our commitment.

01
Launch
Months 1-6

- TikTok/Instagram pet communities
- Pet adoption partnerships
- SEO/GEO content strategy

02
Growth
Months 6-12

- Convert free users to premium
- B2B pilot with pet insurance
- Community data donation launch

03
Scale
Year 1+

- Vet telehealth integration
- International expansion
- Vet clinic data partnerships
- Video symptom input
- Voice message in chats

Fuzzy Friend

Pet Health AI

Thank You!
Questions?

Appendix

Vector Database (18,909 records indexed):

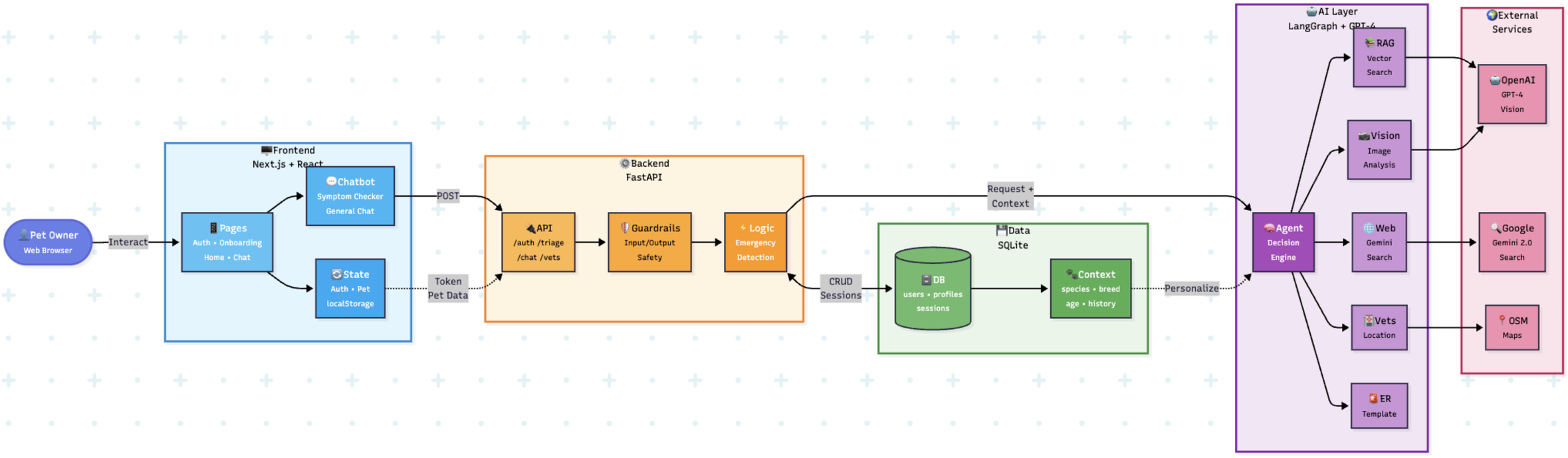
- 15,000 adverse event reports (openFDA API)
- 2,000 clinical notes + 2,000 symptom-condition pairs (HuggingFace dataset, MIT license)
- 594 pain assessments + 246 genetic risk profiles (Zenodo, Dryad - academic repositories)
- Image capability: Kaggle/Roboflow skin disease datasets
- Coverage: Dogs 71% | Cats 29% | 9 Body systems

LLM Knowledge We Leverage (no RAG needed):

- Merck Veterinary Manual, PetMD, VCA Hospital Library - public web content in base model
- ASPCA Toxic Plants List (700+ plants), WSAVA/AAHA clinical guidelines
- Reddit r/AskVet, Stack Exchange Pets - confirmed in GPT-4/Claude training data

Data Moat Roadmap:

- Near-term: Dog Aging Project (40K+ dogs, pending DUA approval)


Pet Owner
Web Browser
Interact
Frontend
Next.js + React
Pages
Auth • Onboarding
Home • Chat
Chatbot
Symptom Checker
General Chat
State
Auth • Pet
localStorage
POST
Token
Pet Data
Backend
FastAPI
API
/auth /triage
/chat /vets
Guardrails
Input/Output
Safety
Logic
Emergency
Detection
Request +
Context
CRUD
Sessions
Data
SQLite
DB
users • profiles
sessions
Context
species • breed
age • history
Personalize
AI Layer
LangGraph + GPT-4
Agent
Decision
Engine
RAG
Vector
Search
Vision
Image
Analysis
Web
Gemini
Search
Vets
Location
ER
Template
External
Services
OpenAI
GPT-4
Vision
Google
Gemini 2.0
Search
OSM
Maps