

Pet Companion

Goals and Background Context

Goals

- Provide busy pet owners with a single, organized place to manage all aspects of pet care
- Deliver smart, automated reminders for recurring activities (vaccinations, medications, grooming)
- Maintain a complete, vet-ready, exportable health and care history for one or more pets
- Reduce reliance on scattered tools (calendar, notes, paper, WhatsApp) to increase convenience and peace of mind
- Launch a consumer web-first experience that competitors lack

Background Context

Busy pet owners currently juggle multiple disconnected tools to track their pets' health, recurring care tasks, and medical records. This fragmentation makes it easy to miss important vaccinations, medications, grooming appointments, and creates stress when they cannot quickly access a complete history during vet visits.

Pet Companion solves this by offering a unified web platform centered around multi-pet profiles. It automates reminders, stores medical records, tracks grooming and vet visits, and provides an exportable, vet-ready history—all accessible from one convenient place. The web-first approach fills a clear market gap and directly addresses the #1 pain point of scattered information and forgotten recurring care.

Change Log

Date	Version	Description	Author
2025-02-07	0.1	Initial draft from project brief	John (AI PM)

Requirements

Functional

- FR1: Users can register and log in using email and password authentication
- FR2: Users can create, edit, and delete multi-pet profiles (species-agnostic)
- FR3: Users can upload and manage medical history records including surgeries, allergies, lab results, and vet notes
- FR4: Users can export medical records in a vet-ready format
- FR5: System provides automated reminders for vaccinations and medications based on schedules
- FR6: System provides reminders for recurring grooming activities (bathing, nails, teeth)
- FR7: Users can log vet visits with date, reason, professional, cost, and notes
- FR8: Users can view a complete chronological history of all pet care activities

Non Functional

- NFR1: The application is delivered as a responsive web-first experience accessible via standard browsers

User Interface Design Goals

Overall UX Vision

A clean, calm, and trustworthy interface that gives busy pet owners instant visibility into their pets' care needs. The experience should feel like a reliable assistant—simple, reassuring, and always up-to-date.

Key Interaction Paradigms

Dashboard-first navigation with a persistent pet selector. Quick-action cards for reminders and upcoming tasks. One-tap access to records and logs. Minimal navigation depth with clear visual hierarchy.

Core Screens and Views

1. Pet Dashboard (overview of all pets + upcoming tasks)
2. Pet Profile (details, medical summary, records)
3. Medical History & Records (chronological list + upload/export)
4. Reminders & Schedule (vaccinations, meds, grooming)
5. Vet Visit Log (add/edit entries)
6. Account & Settings

Accessibility: {None|WCAG AA|WCAG AAA|Custom Requirements}

WCAG AA

Branding

Clean, modern, pet-friendly aesthetic. Soft color palette featuring calming blues and greens. Friendly sans-serif typography. Subtle use of pet-themed icons without being cartoonish.

Target Device and Platforms: {Web Responsive|Mobile Only|Desktop Only|Cross-Platform}

Web Responsive

Technical Assumptions

Repository Structure: {Monorepo|Polyrepo|Multi-repo}

Monorepo

Single repository containing the full-stack web application. Simplifies development and deployment for an early-stage MVP.

Service Architecture

Monolith

Architecture: Monolith

A single cohesive backend service serving the web frontend. Enables rapid iteration on core pet-care features without operational overhead.

Rationale: Matches MVP focus on speed-to-market and low complexity. Web-first experience benefits from unified codebase.

Testing Requirements

Unit Only

Testing Approach: Unit tests for critical paths (reminders, record management, authentication)

Basic automated testing to ensure reliability of core features. Manual testing will supplement for UI validation.

Additional Technical Assumptions and Requests

- Deployed to a standard cloud hosting platform (Vercel/Netlify or equivalent) for fast web delivery
- Use of a managed database (PostgreSQL) for reliable relational data storage
- Email-based authentication via a proven provider (e.g., Supabase Auth or Auth0)

Epic List

1. **Epic 1: Foundation & Authentication** - Establish project setup, authentication system, and basic user account management to enable secure access.
2. **Epic 2: Pet Profiles** - Allow users to create, edit, and manage multi-pet profiles with species-agnostic details.

3. **Epic 3: Medical Records & History** - Enable uploading, viewing, and exporting vet-ready medical records including surgeries, allergies, and lab results.
4. **Epic 4: Reminders & Schedules** - Implement automated reminders for vaccinations, medications, and recurring grooming activities.
5. **Epic 5: Vet Visit Logging** - Provide functionality to log and track vet visits with details like date, reason, cost, and notes.

Epic 1: Foundation & Authentication**

Epic Goal:

Establish the foundational infrastructure and secure authentication system that enables all subsequent pet care features. This epic delivers a production-ready user account system with email/password login, account management, and the technical backbone required to support multi-pet profiles, medical records, and reminders.

Story 1.1: User Registration

As a new pet owner, I want to create an account with my email and password so that I can securely access the Pet Companion platform.

- System validates email format and password strength (minimum 8 characters, including letters and numbers)
- User receives a confirmation email with a verification link
- Upon verification, the account is activated and user is logged in
- Duplicate email addresses are rejected with a clear error message

Story 1.2: User Login

As a returning user, I want to log in with my email and password so that I can access my pets' information and care schedules.

- System authenticates credentials and creates a secure session
- Failed login attempts show generic error ("Invalid email or password") without revealing which field is incorrect
- Users can reset their password via email

- Session remains active for 30 days (remember me) or until logout

Story 1.3: Account Management

As a user, I want to update my account details and manage my profile so that my information remains accurate.

- Users can update email, name, and password from account settings
- Email changes trigger re-verification
- Users can delete their account (with confirmation and data export option)

Story 1.4: Security Foundations

As the product owner, I want basic security measures (HTTPS, input sanitization, rate limiting) so that user data is protected from day one.

- All endpoints enforce HTTPS
- Passwords are hashed using bcrypt or equivalent
- Basic rate limiting on login and registration endpoints
- Input validation on all user-provided data

Epic 2: Pet Profiles**

Epic Goal:

Enable users to create and manage multiple pet profiles as the foundation for all other features. This epic allows busy pet owners to centralize their pets' basic information in one place, supporting multiple species without restrictions, and serving as the attachment point for medical records, reminders, and visit logs.

Story 2.1: Create Pet Profile

As a pet owner, I want to create a new pet profile with basic details so that I can start organizing care for that pet.

- Users can add a pet name, species, breed, date of birth, gender, and weight
- Species field supports free-text entry (dog, cat, bird, reptile, etc.) with no restrictions

- Profile creation succeeds with only name and species required; other fields are optional
- After saving, the pet appears in the user's pet list and dashboard

Story 2.2: Edit Pet Profile

As a pet owner, I want to update a pet's details so that the information stays accurate over time.

- Users can edit any field in an existing pet profile
- Changes are saved immediately and reflected across all related features (records, reminders)
- Profile history is not versioned in MVP

Story 2.3: Delete Pet Profile

As a pet owner, I want to delete a pet profile so that I can remove pets no longer in my care.

- Users can delete a pet profile with a confirmation step
- Deleting a pet also removes associated records and reminders (or marks them inactive)
- A warning is shown before deletion explaining data loss

Story 2.4: View All Pets

As a pet owner, I want to see a list of all my pets so that I can quickly access any pet's information.

- Dashboard shows all pets in a grid or list view
- Each pet card displays name, species, photo (if uploaded), and upcoming reminders count
- Clicking a pet card navigates to that pet's profile page

Epic 3: Medical Records & History**

{"epic-goal": "Enable users to store, view, and export complete medical histories for their pets. This epic provides a centralized, vet-ready repository for surgeries,

allergies, lab results, and vet notes, directly addressing the pain point of scattered records and the need for quick access during vet visits.", "user-stories": "###

Story 3.1: Upload Medical Records

As a pet owner, I want to upload documents and notes related to my pet's medical history so that all records are stored in one place.

- Users can upload PDFs, images, or text notes for surgeries, allergies, lab results, and vet notes
- Each record is tagged with date, type, and optional description
- Files are stored securely and associated with the correct pet profile

Story 3.2: View Medical History

As a pet owner, I want to see a chronological list of all medical records for a pet so that I have a complete view of their health.

- Records are displayed in reverse chronological order
- Users can filter by record type (surgery, allergy, lab, note)
- Each record shows key details at a glance with option to expand for full view

Story 3.3: Export Medical Records

As a pet owner, I want to export my pet's medical history in a vet-ready format so that I can share it easily during appointments.

- Users can export all records or a filtered subset as PDF
- Export includes a clean, professional summary suitable for veterinarians
- Export is available from the pet profile or medical history view

Story 3.4: Edit or Delete Records

As a pet owner, I want to update or remove medical records so that the history stays accurate.

- Users can edit record details and replace uploaded files
- Deleting a record requires confirmation and removes it from the pet's history"}

Epic 4: Reminders & Schedules**

{"epic-goal": "**Epic Goal:**

Deliver automated reminders for vaccinations, medications, and grooming activities so busy pet owners never miss important recurring care tasks. This epic directly solves the top pain point of forgetting scheduled activities by replacing manual calendar entries with smart, automated schedules that users can trust.",

"user-stories": "### Story 4.1: Set Up Vaccination & Medication Reminders

As a pet owner, I want to create automated reminder schedules for my pet's vaccinations and medications so that I never miss critical health events.

- Users can add a reminder by selecting vaccine/medication type, frequency (e.g., annual, monthly), and start date
- System automatically calculates and schedules all future reminder dates
- Reminders are linked to the specific pet profile
- Users receive confirmation that the schedule is active

Story 4.2: Set Up Grooming Reminders

As a pet owner, I want to create recurring reminders for grooming tasks (bathing, nails, teeth) so that my pet stays well-groomed without manual tracking.

- Users can add grooming reminders with task type, frequency, and preferred time window
- System generates recurring reminders automatically
- Multiple grooming tasks can be scheduled independently for the same pet

Story 4.3: View and Manage Active Reminders

As a pet owner, I want to see all upcoming reminders across my pets so that I can stay organized and make adjustments as needed.

- Dashboard displays a consolidated list of upcoming reminders (next 30 days)
- Users can edit, snooze, or cancel individual reminder instances
- Reminders are grouped by pet for easy scanning

Story 4.4: Receive Reminder Notifications

As a pet owner, I want to receive timely notifications for upcoming care tasks so that I can take action before deadlines.

- Users receive email notifications 7 days and 1 day before each scheduled reminder
- Notifications include pet name, task details, and quick links to mark complete or reschedule
- Notification preferences are configurable in account settings"