

PROJECT ABSTRACT

Pet Adoption Portal

This project is a web portal that connects animal shelters with people looking to adopt. Shelters list pets with photos, age, temperament and verified health records; adopters browse, filter and submit structured applications; shelters review applications and schedule meet-and-greets. An admin moderation queue keeps every listing verified before it goes live. Suitable for B.E./B.Tech final-year projects in Computer Science, IT and Web Development.

01. Title

Pet Adoption Portal.

02. Introduction / Background

Animal shelters do heroic work, but most still advertise adoptable pets through scattered social-media posts that get buried in days. Genuine adopters cannot browse reliably, and shelters drown in unstructured "is this available?" messages. This project builds a dedicated adoption portal with two sides: a public browse experience with photos, filters (species, age, size, good-with-kids) and detailed pet profiles, and a shelter side with listing management, health-record tracking and an application review pipeline. The adoption application is a structured form — housing type, pet experience, reasons — so shelters evaluate serious applicants instead of chat messages. A verification step keeps listings trustworthy: every pet's vaccination and vet-check status is recorded before the listing goes live. The demo ships with realistic shelter and pet data so the whole flow works end to end.

03. Problem Statement

Animal shelters do heroic work, but most still advertise adoptable pets through scattered social-media posts that get buried in days. Genuine adopters cannot browse reliably, and shelters drown in unstructured "is this available?" messages. This project builds a dedicated adoption portal with two sides: a public browse experience with photos, filters (species, age, size, good-with-kids) and detailed pet profiles, and a shelter side with listing management, health-record tracking and an application review pipeline. The adoption application is a structured form — housing type, pet experience, reasons — so shelters evaluate serious applicants instead of chat messages. A verification step keeps listings trustworthy: every pet's vaccination and vet-check status is recorded before the listing goes live. The demo ships with realistic shelter and pet data so the whole flow works end to end.

04. Objectives

- Implement pet listings with photos: shelter-managed listings with multiple photos, breed, age, gender, size, energy level and temperament notes.
- Implement verified health records: vaccination, deworming, neutering and vet-check status tracked per pet; listings show a verification badge only when records are complete.
- Implement smart filters: filter by species, age group, size, gender, city and traits like good-with-kids or good-with-pets.
- Implement structured adoption applications: multi-section application form (adopter details, housing, pet experience, motivation) with a reference number per submission.

- Implement shelter review pipeline: applications move through submitted -> under review -> home visit -> approved/declined, with status visible to the applicant.
- Implement admin moderation: new shelter accounts and pet listings pass through a verification queue before going public.
- Implement favourites & alerts: adopters can save pets and get notified when a matching new listing appears in their city.

05. Proposed Methodology

(1) A shelter registers, passes admin verification, and creates pet listings with photos and the pet's details. (2) The shelter (or its vet) records the pet's health data — vaccinations, deworming, neutering — and the listing earns its verified badge. (3) Adopters browse and filter pets by species, age, size and traits, and open a pet profile for the full story and health record. (4) The adopter submits the structured application form; it is stored with a reference number and linked to the pet. (5) The shelter reviews applications in its dashboard, shortlists candidates, and schedules a home visit or meet-and-greet. (6) On approval the listing is marked adopted and archived; declined applicants receive the decision with the shelter's note. (7) Admins moderate new shelters and listings, and can suspend accounts that violate listing standards.

06. System Architecture / Working

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07. Hardware / Software Requirements

- Frontend: HTML5, CSS3, JavaScript (responsive)
- Backend: PHP (Laravel) or Node.js + Express
- Database: MySQL (shelters, pets, health records, applications)
- Image handling: upload, resize and thumbnail generation
- Auth: role-based (adopter, shelter, admin)
- Notifications: email on application status changes
- Deployment: shared hosting or VPS

08. Expected Outcomes

A complete, working Pet Adoption Portal system, delivered built-to-order: the full application source code, database schema with seeded demo data, and the viva kit (report, PPT, Q&A). The report documents the known limitations and design targets honestly.

- Complete web application source code (frontend + backend)
- Database schema with migrations and seeded shelter/pet data

- Browse, pet profile, application and shelter-dashboard modules
- Admin moderation queue
- Project report PDF (background, system design, database schema, methodology)
- PPT presentation for final review
- Viva Q&A preparation document (role-based auth, image handling, workflow state machines)

09. Applications

- Animal shelters and rescue NGOs listing adoptable pets
- Municipal animal-welfare bodies managing adoptions
- Foster networks coordinating pet placements

10. Future Scope

- Adoption-fee handling with payment integration
- Map-based shelter and pet search
- In-app messaging between adopters and shelters