Animal Shelter System – Assignment 2

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Objective: Enhance the console-based shelter system

FOCUSING ON:

- Abstraction
- Interface implementation
- Composition

FEATURES ADDED:

- Medical records management
- Volunteer management
- Adoption processing

Object-Oriented Concepts Implemented

 Abstract Class : Animal Subclasses: Dog, Cat, Bird

Interface: Adoptable
 Methods: adopt(), returnToShelter()

• Composition :

Animal has a MedicalRecord
Volunteer maintains schedules and tasks
AdoptionForm associates with Animal

System Features

Medical Records:

Record treatments, dates, and veterinarian details.

```
Dog [ID: 1, Name: Max, Age: 1, Gender: Male, Breed: Labrador, Is Trained: Yes, Status: Available, Medical Records: 2]

Medical History:
- rabies vaccine | Date: 2025-05-02 | Vet: Dr. John Smith

Medical History:
- deworm treatment | Date: 2025-05-02 | Vet: Dr. John Smith
```

System Features

Volunteer:

Assign tasks and manage schedules.

```
Task assigned to James: Walk the dog
Volunteer: James
Email: james@email.com| Phone: 555-555-5555
Available days: Monday
Tasks:
- Walk the dog
```

System Features

Adoption Process:

Handle applications, approvals, and returns.

```
=== Adoption Form ===
Applicant: John Smith
Email: john@email.com | Phone: 555-555-555
Address: 124 St, Montreal, Qc H2H H2H
Home Type: House
Has Other Pets: Yes
Animal Requested: Max (ID: 1)
Status: PENDING
```