

# Vet Clinic Project

By Alexandra Yakovleva

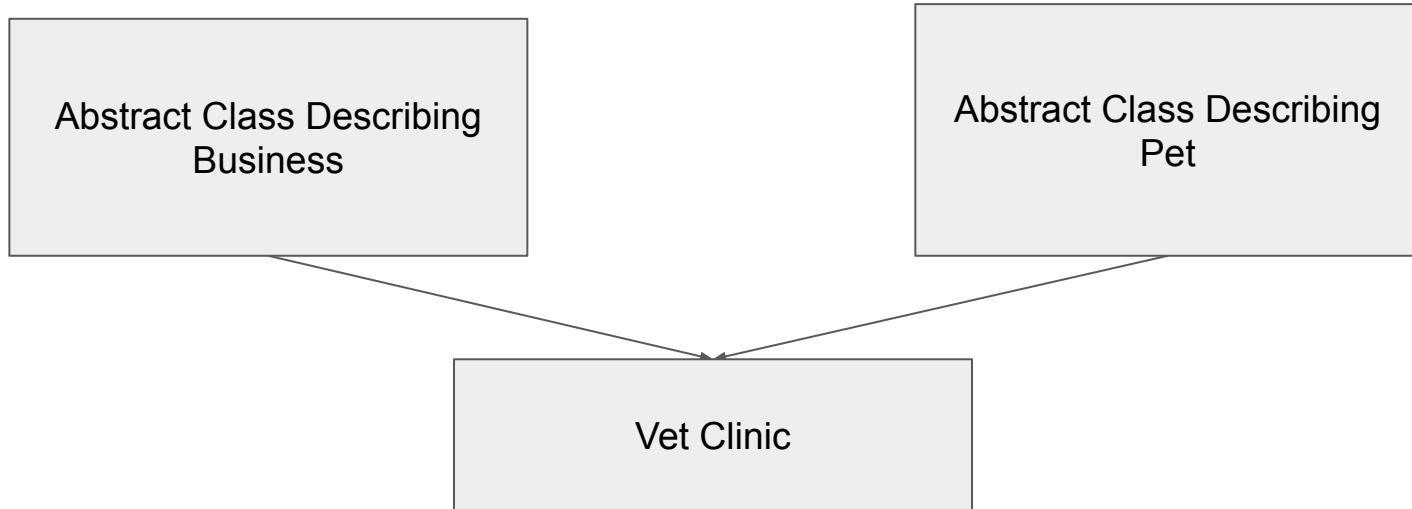
# Problem Statement

- Smaller independent practises, shelters, and non-profit SPCAs often can't afford sophisticated and robust appointment management and scheduling systems.
- To address it, there's need for an open-source, lightweight and modular appointment scheduling system designed specifically for vet clinics or shelters.

# Project Objectives

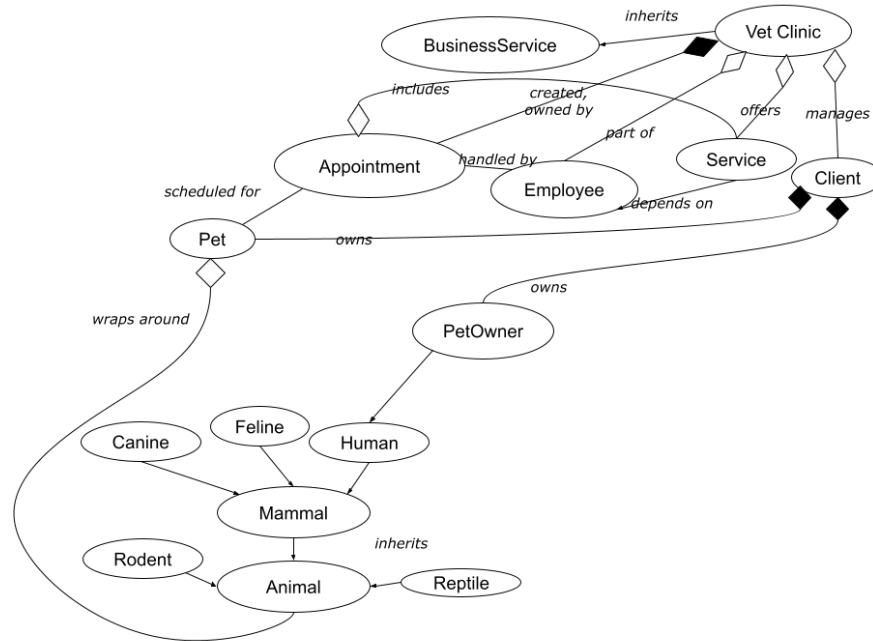
- Design and Implement virtual vet clinic management system in Python.
- Model real-world operations of a clinic using OOP.
- Demonstrate use of core programming constructs.

# Initial Approach:



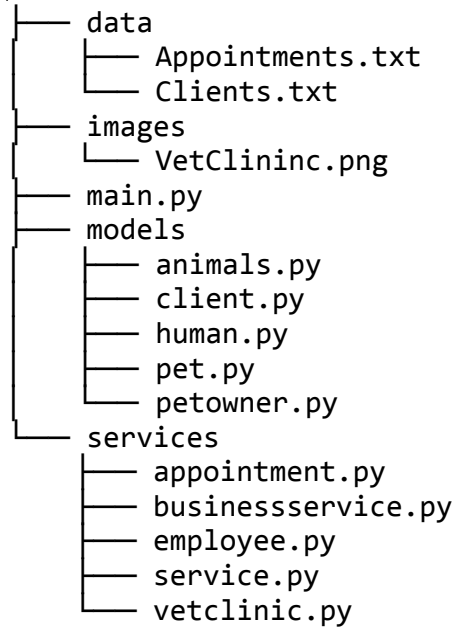
*Note: these are not UML-type shapes or arrows.*

# Final Project Diagram

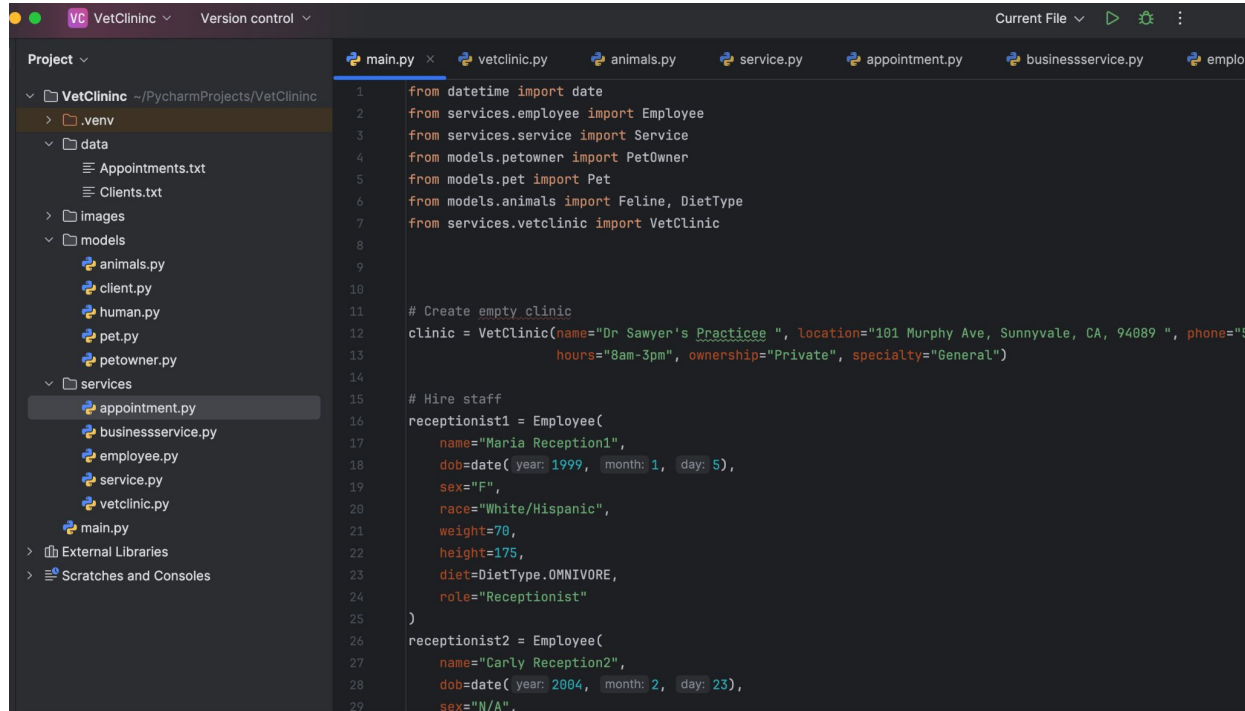


*Note: these are UML-type arrows.*

# Project File Structure



# Moving on to DEMO...



The image shows a PyCharm IDE window for a project named 'VetClinic'. The left sidebar displays the project structure, including folders like '.venv', 'data', 'images', 'models', and 'services', along with various Python files. The main editor area shows the 'main.py' file, which contains code for importing modules, creating a clinic instance, and hiring staff.

```
1 from datetime import date
2 from services.employee import Employee
3 from services.service import Service
4 from models.petowner import Petowner
5 from models.pet import Pet
6 from models.animals import Feline, DietType
7 from services.vetclinic import VetClinic
8
9
10
11 # Create empty clinic
12 clinic = VetClinic(name="Dr Sawyer's Practice ", location="101 Murphy Ave, Sunnyvale, CA, 94089 ", phone="5
13             hours="8am-3pm", ownership="Private", specialty="General")
14
15 # Hire staff
16 receptionist1 = Employee(
17     name="Maria Reception1",
18     dob=date(year=1999, month=1, day=5),
19     sex="F",
20     race="White/Hispanic",
21     weight=70,
22     height=175,
23     diet=DietType.OMNIVORE,
24     role="Receptionist"
25 )
26 receptionist2 = Employee(
27     name="Carly Reception2",
28     dob=date(year=2004, month=2, day=23),
29     sex="N/A",
```

# Issues

- Familiar with circular import
- Overcomplicated Appointments
- Half-implemented appointment scheduling logic where Appointments are functionally scheduled by VetClinic.



# Future Work

- PetOwner should have a wrapper object for VetClinic and schedule appointments through it.
- VetClinic should have methods corresponding to Service that would change Client's object: like vaccinate, neuter.
- VetClinic need to use SQL for logging/information or use pandas with SQL .
- Add basic GUI for client info or appointments.