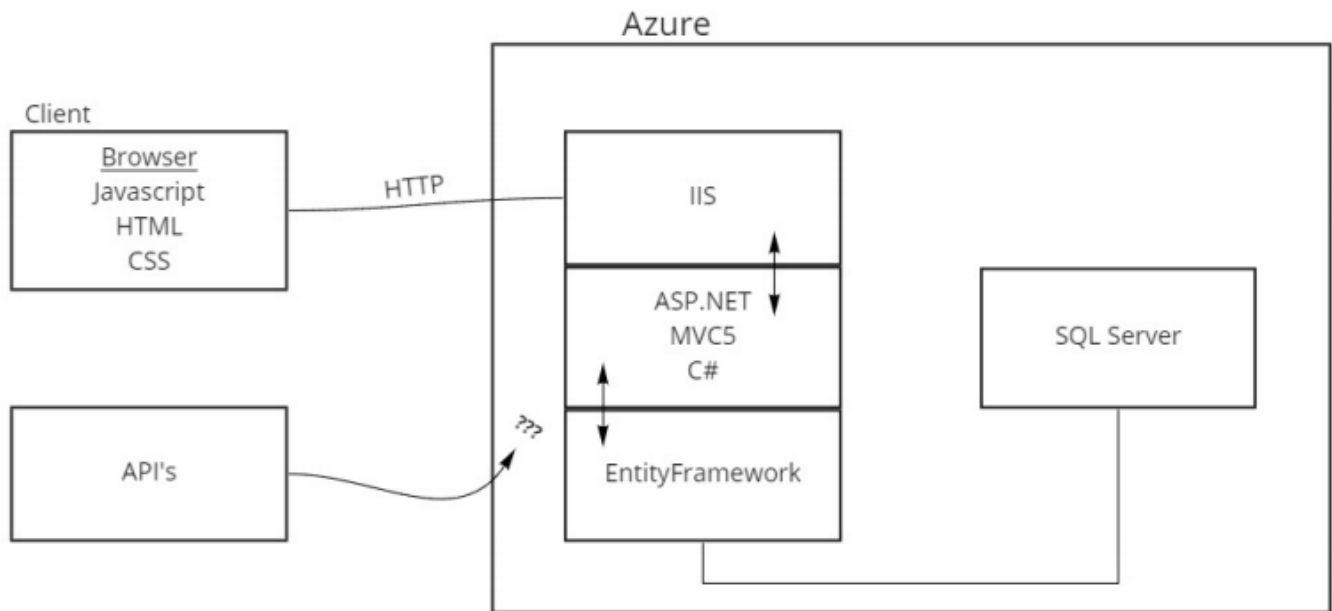# Milestone Four ⇒ Team Project: Petopia! ⇒
1st Refinement → Diagramming
Preliminary/potential API's for our app
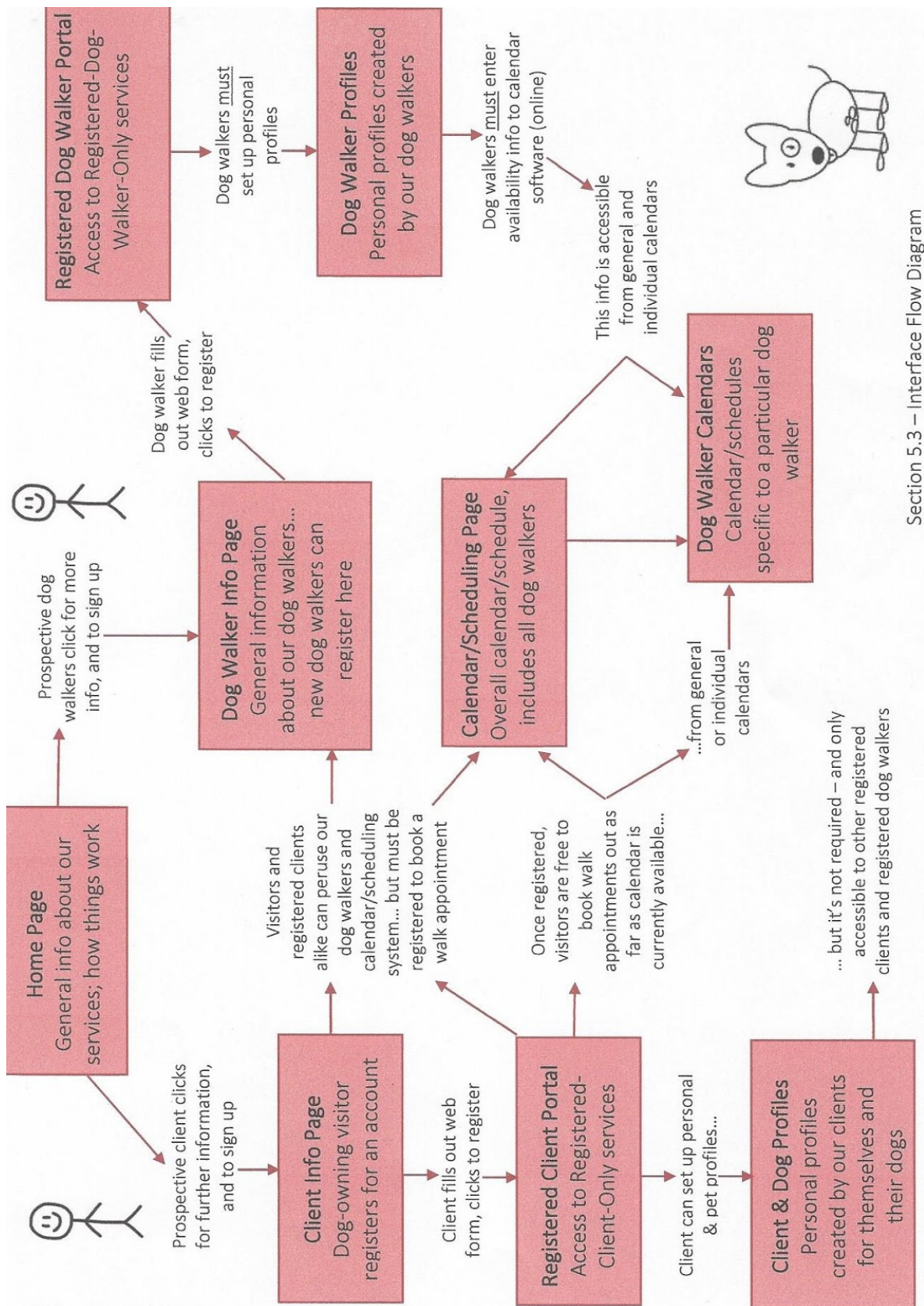
1st Refinement: Architecture Organization Diagram:

API's we are considering -- or already know we will need:

➔ Sign in with Google account (and/or Facebook?)

➔ Captcha (to prevent bots)

➔ Something to facilitate private messaging & "check-ins"

➔ Something to facilitate calendars and scheduling

➔ Something to facilitate payments from Pet Owners to Pet Care Providers

➔ Background checks for potential Pet Care Providers (but is that really an API?)

➔ Badges for Pet Care Providers to signify their areas of expertise?

➔ A rating/review system?

Initial Flow-Sequence Diagram:

Home Page
General info about our services; how things work

Prospective dog walkers click for more info, and to sign up

Dog Walker Info Page
General information about our dog walkers... new dog walkers can register here

Dog walker fills out web form, clicks to register

Registered Dog Walker Portal
Access to Registered-Dog-Walker-Only services

Dog walkers must set up personal profiles

Dog Walker Profiles
Personal profiles created by our dog walkers

Dog walkers must enter availability info to calendar software (online)

This info is accessible from general and individual calendars

Dog Walker Calendars
Calendar/schedules specific to a particular dog walker

Calendar/Scheduling Page
Overall calendar/schedule, includes all dog walkers

...from general or individual calendars

Visitors and registered clients alike can peruse our dog walkers and calendar/scheduling system... but must be registered to book a walk appointment

Once registered, visitors are free to book walk appointments out as far as calendar is currently available...

Prospective client clicks for further information, and to sign up

Client Info Page
Dog-owning visitor registers for an account

Client fills out web form, clicks to register

Registered Client Portal
Access to Registered-Client-Only services

Client can set up personal & pet profiles...

Client & Dog Profiles
Personal profiles created by our clients for themselves and their dogs

... but it's not required – and only accessible to other registered clients and registered dog walkers

Section 5.3 – Interface Flow Diagram

Initial E-R Diagram:
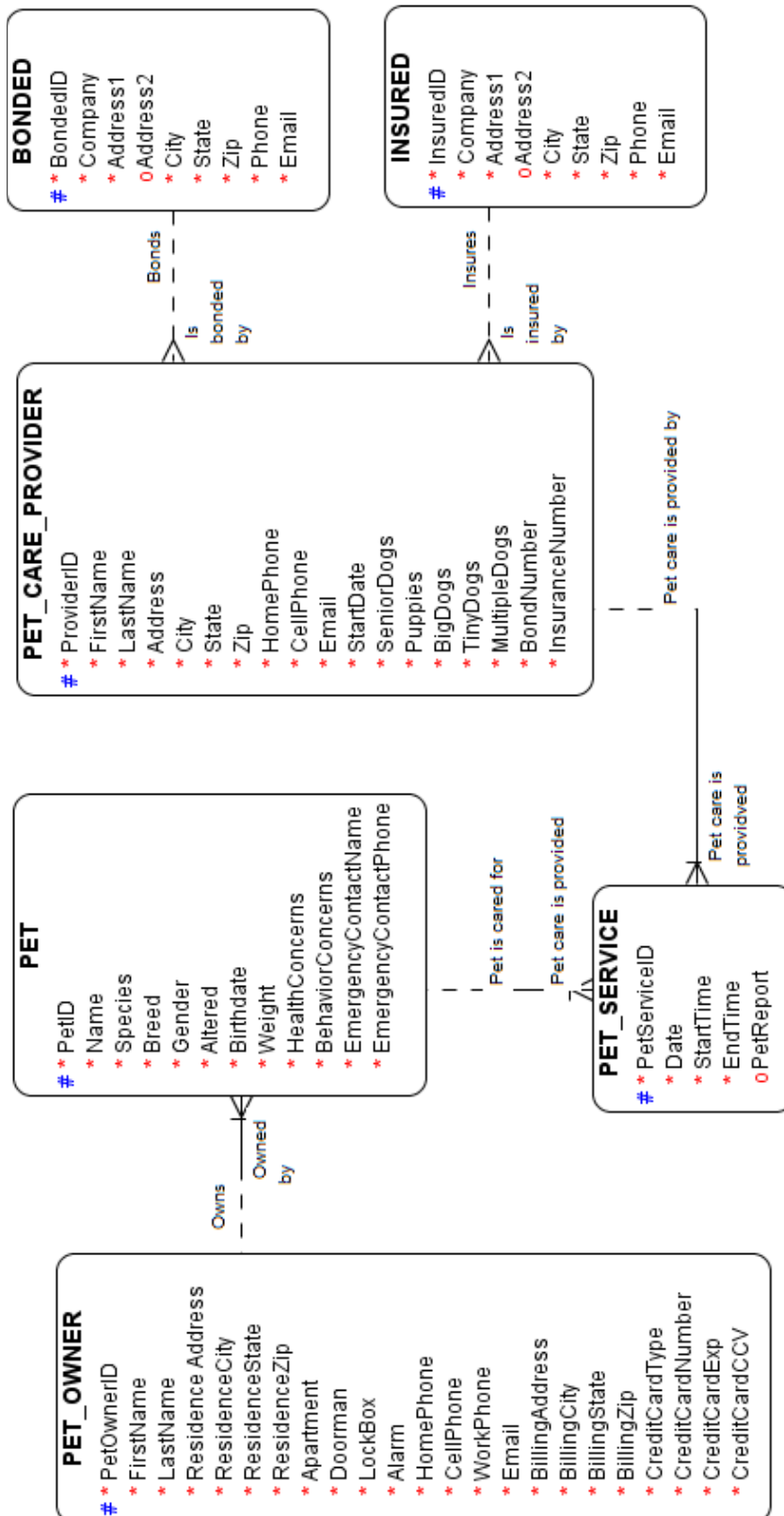
Completed with Oracle Data Modeler

Then I remembered it doesn't explicitly show Foreign Keys -- they are implicitly implied with the relationship arrows

PET_OWNER: FK → UserID

PET: FK → PetOwnerID

PET_SERVICE: FK → PetID
                PetOwnerID
                ProviderID

PET_CARE_PROVIDER: FK → UserID
                FK → BondedID
                FK → InsuredID

This ERD had been designed just for the service company -- not directly for a web app/site…

SO -- of course, we will also need a table **"USER"** that simply contains:
   ➔ UserID
   ➔ Username
   ➔ Password
   ➔ user_type

Once registered, user will be directed to the form which corresponds to their "user_type"... that form data will go into the appropriate table as seen here

Wireframe(s):

Working on those… we are finding a decent means to make one
Plus we are still thinking on initial design so far as how it will *look*.

Note:
Yes, these are the same ERD and Interface/Flow Diagram from last week.
I somehow thought they were supposed to be for last week and did them early.

Those haven't really changed since last week, with our additional inception
processes… so we are still using them!

The Interface/Flow Diagram is a sort of "Use Case Diagram" as well.