PDA: Software Development

Analysis and Design
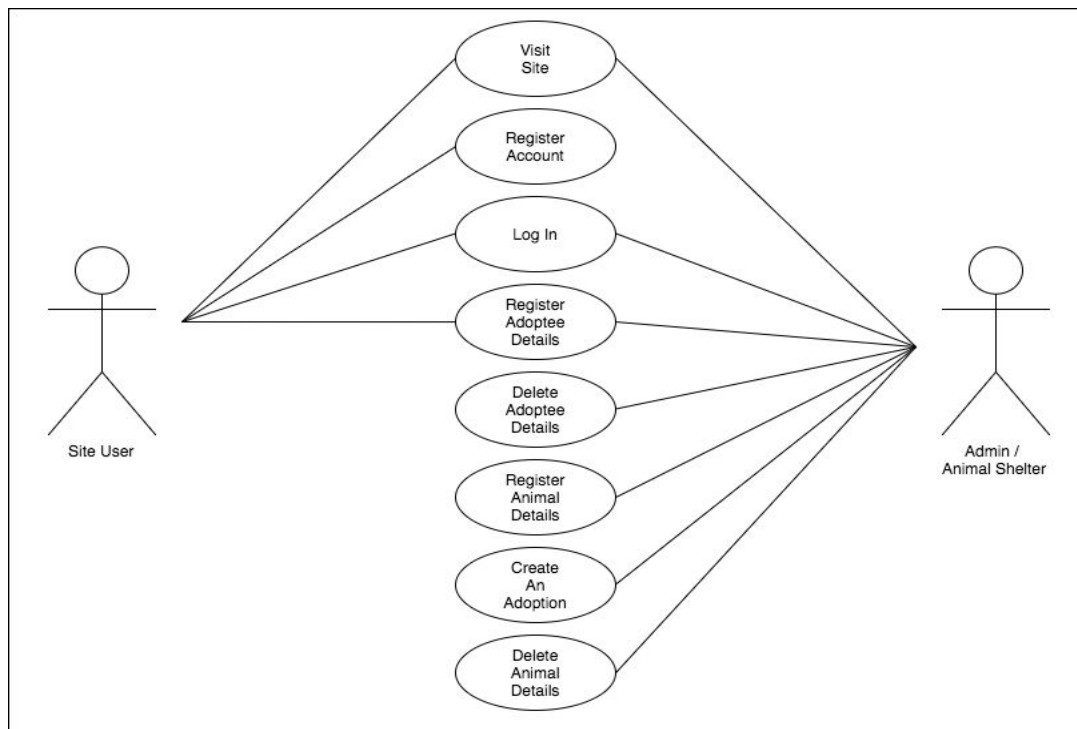Level 8

Iain Paterson
Cohort E15
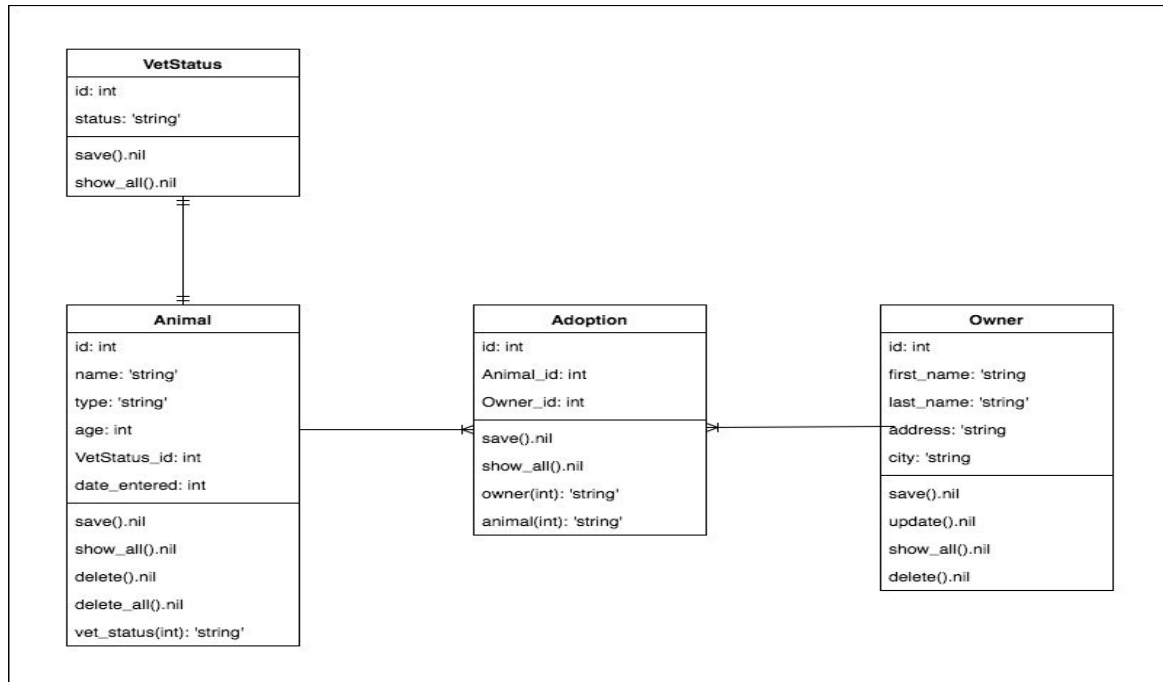
A.D 1
Use of a 'Use Case Diagram'
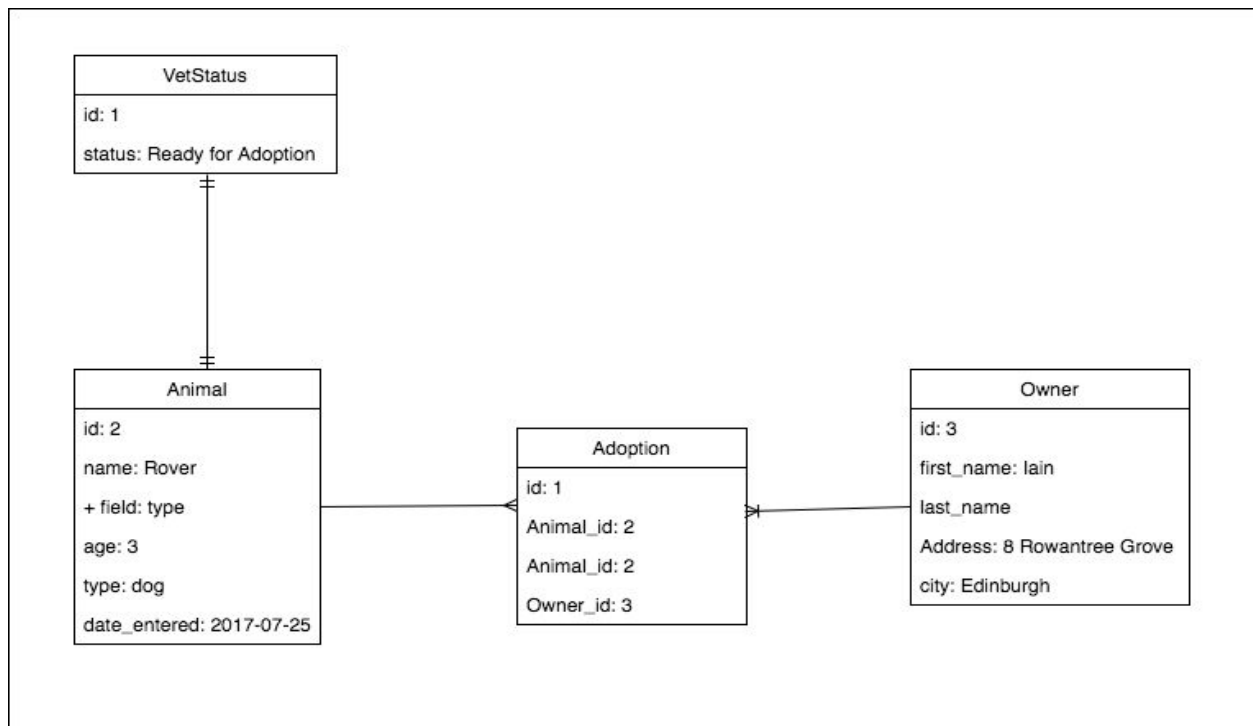

A.D 2
Use of a 'Class Diagram'

VetStatus

id: int
status: 'string'

save().nil
show_all().nil

Animal

id: int
name: 'string'
type: 'string'
age: int
VetStatus_id: int
date_entered: int

save().nil
show_all().nil
delete().nil
delete_all().nil
vet_status(int): 'string'

Adoption

id: int
Animal_id: int
Owner_id: int

save().nil
show_all().nil
owner(int): 'string'
animal(int): 'string'

Owner

id: int
first_name: 'string'
last_name: 'string'
address: 'string'
city: 'string'

save().nil
update().nil
show_all().nil
delete().nil

A.D 3
Use of an 'Object Diagram'

VetStatus

id: 1
status: Ready for Adoption

Animal

id: 2
name: Rover
+ field: type
age: 3
type: dog
date_entered: 2017-07-25

Adoption

id: 1
Animal_id: 2
Animal_id: 2
Owner_id: 3

Owner

id: 3
first_name: Iain
last_name
Address: 8 Rowantree Grove
city: Edinburgh

A.D 4
Use of an 'Activity Diagram'
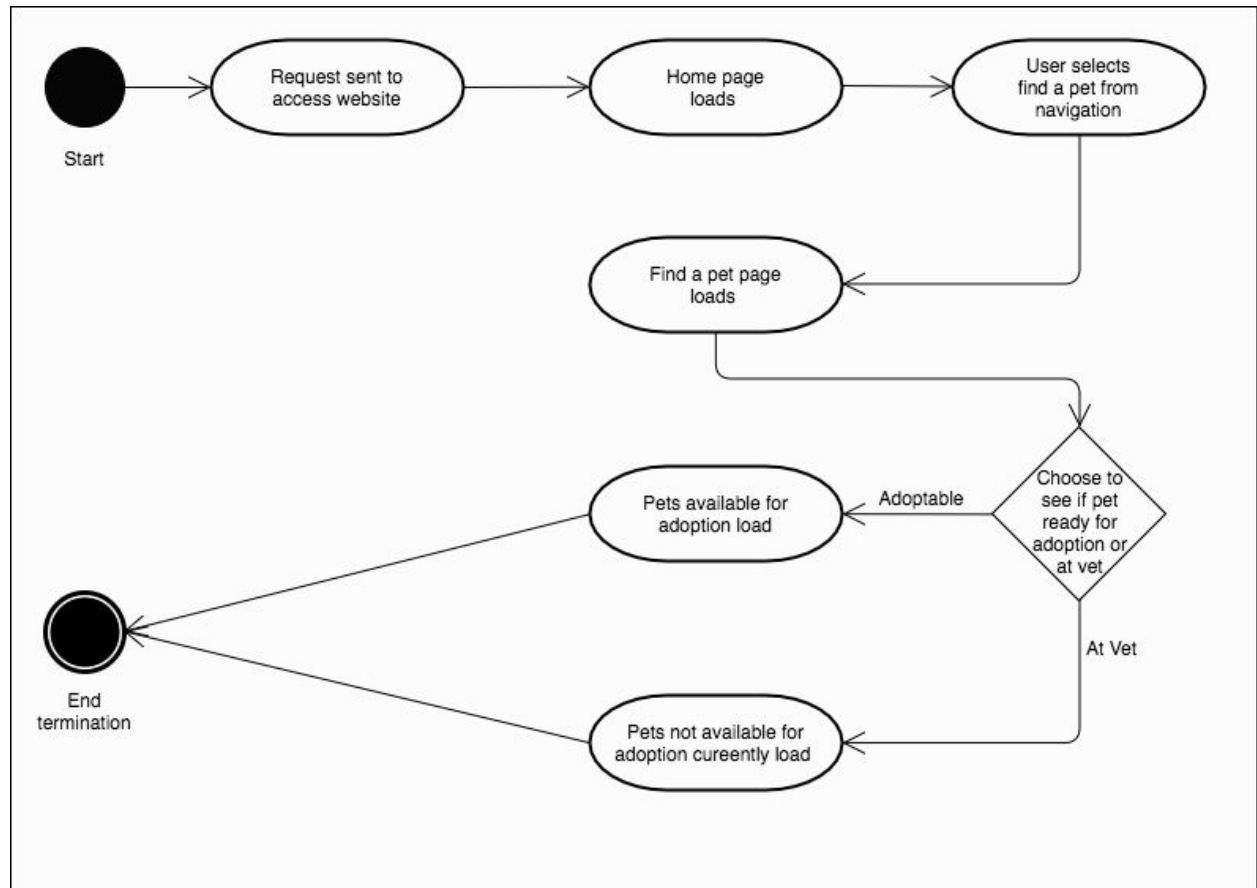
A.D 5
Use of an 'Inheritance Diagram'

Competitor

+ NationalCountry: enum

+ medals: [ArrayList]

+ SportPlayed: enum

+ getCountry( ): enum

+ getMedals( ): [ArrayList]

+ getSport( ): enum

+ addMedal(enum): enum

Athlete

+ name: String

+ getName( ): String

AthleticTeam

+ teamMembers: [ArrayList]

+ getTeamMembers( ): [ArrayList]

+ addAthlete(String): [ArrayList]
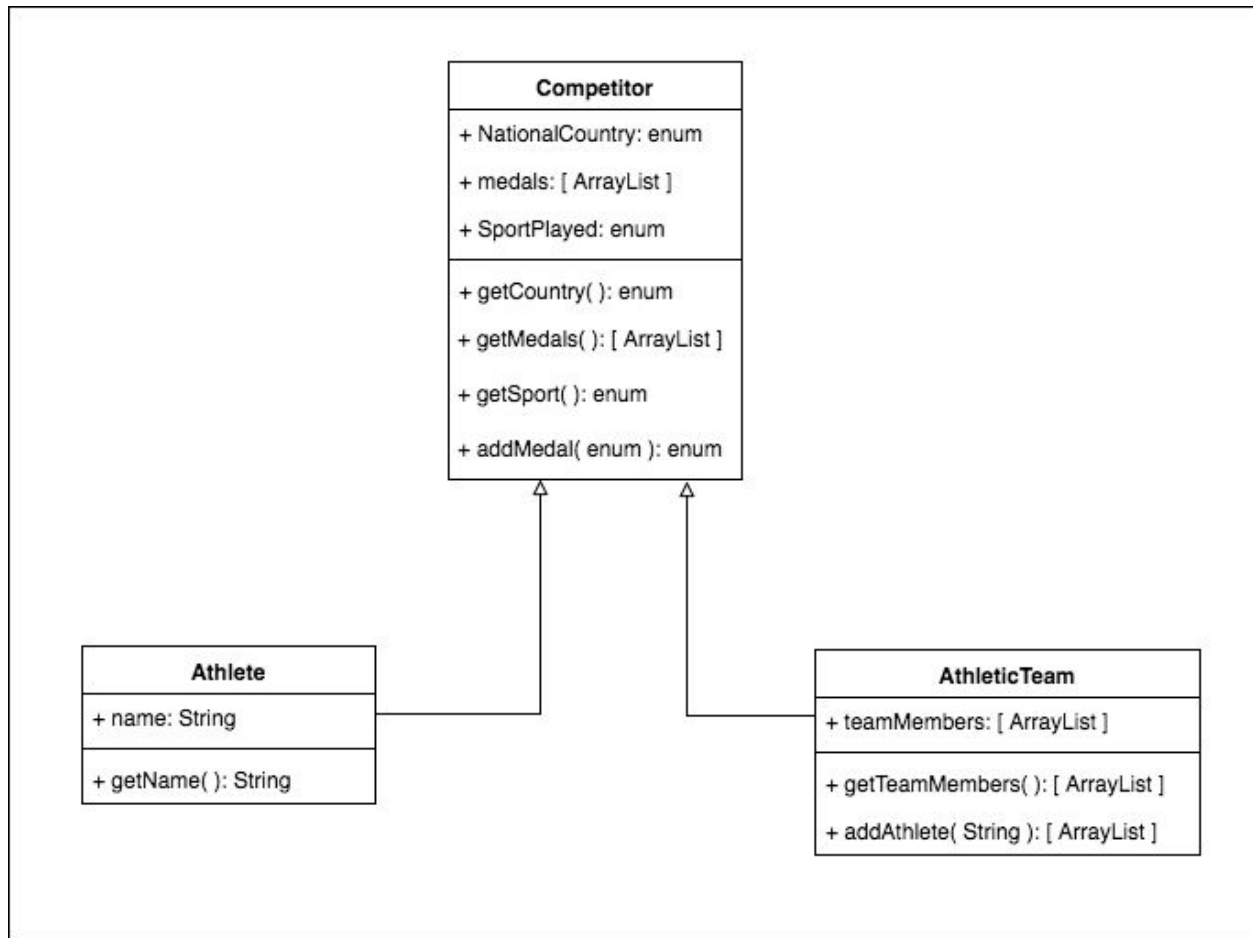
A.D 6
Implementations Constraint Plan

Constraints	Possible effect of constraints	Solutions
Hardware and Software platforms	The web app may display differently across different browser platforms	Do thorough browser testing across multiple browser platforms. Especially the more common browsers such Safari, Chrome, Firefox, IE and Edge.
Performance Requirements	The performance may suffer due to lack of memory. If this were to happen the web app may crash or run extremely slowly.	Refactor code within the app to limit memory use and enable app to run as efficiently as possible
Persistent storage and	The backend database of the	Have data be stored in as

transactions	web app may require a substantial amount of memory to save information.	efficient way as possible
Usability	Users with disabilities such as blindness or vision impairment may not be able to use the web app appropriately	Make web app adhere stringently to accessibility standards such as alt text on images and using proper syntax within code. This will aid screen readers better access to the content.
Budgets	Tight budget may limit the amount of features and functionality available to the web app	Meet the desired mvp of the client brief. If budget doesn't allow for expansion, leave out additional features and functionality
Time	Time scale may also affect features, functionality and styling. The MVP may not be met by the deadline for the app launch	Thorough planning at the beginning of the project will remove some of the risk involved and give the team a direction to pull in.