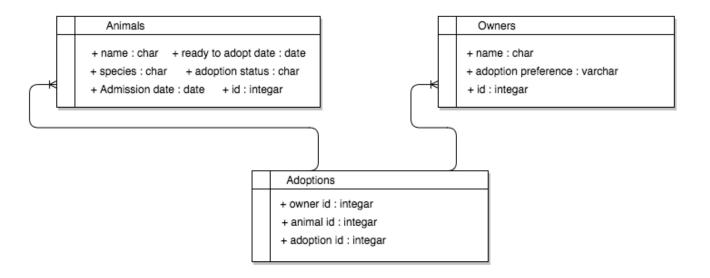


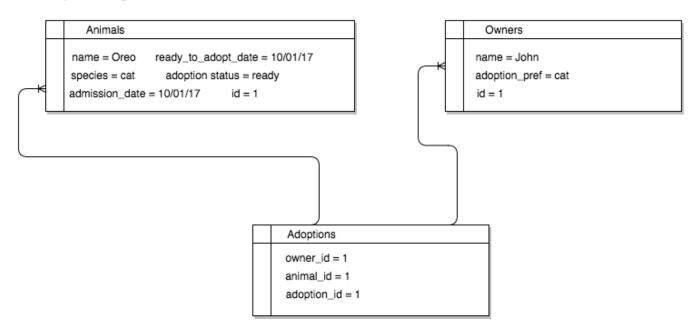
Above: This case diagram details the relationship between owners and adoption centre staff using the software. The majority of all functions are performed by the adoption center as this is business-facing product only so they are responsible for creating, showing, and updating. However when pets are adopted the owners are involved in the function.

Class and Object Diagrams

Class Diagram

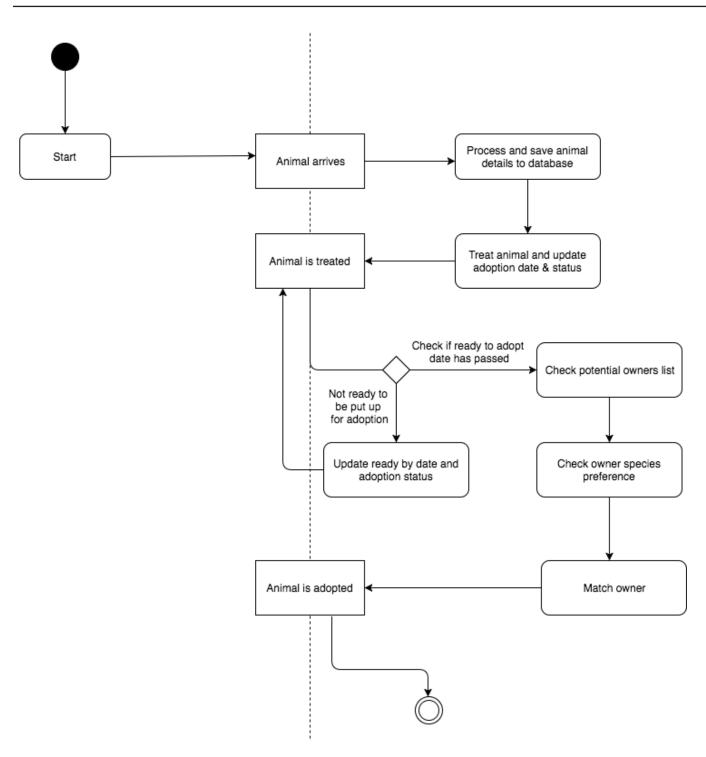


Object Diagram



Top: The above Class diagram details many of the necessary features of each class. For animals, necessary features such as adoption status, admission date and a ready to adopt date were required to allow the adoption centre to know when the pet can be adopted as well as how long it had been at the centre. A creation of a third table adoptions allowed me to create an instance of a new adoption which involved animals to be adopted and a list of owners maintained by the adoption centre.

Bottom: The object diagram shows how these elements come together. Referencing the ids of the owners and the animals allows the staff to know which entries come together to create a new adoption.



Above: As with the class diagram, the majority of the actions shown are the responsibility of the adoption centre. It is their job to process and save a new animals information to the database. From there, they treat and update the animals' adoption date and status. When the animal has been treated it is up to the adoption to check if the pet has reached its ready to adopt date. If not, the animal status and ready by date must be updated or if so, the adoption centre must check their list of owner information to select a match. From there the animal is adopted.

Implementation Constraints Plan

Constraint	Possible effect of constraint on product	Solution
Hardware and software platforms	Possible different screen resolutions on different devices such as phones, desktop or laptop. Responsive laptop design would need updated browsers. Would also need to check what database-type the adoption centre uses already.	Implement responsive layout and allow for planning for different devices. It would be necessary to double-check what browsers and devices the adoption centre is using. This could change the layout design to become more static and using different styling elements.
Performance requirements	Must allow the adoption centre to manage all their data.	Enable the ability to create, show, update and delete entries from their databases.
Persistent storage and transactions	Adoption centre would require a constant storage for its database we are creating.	Look into managing storage for the adoption centre.
Usability	The system would need to be easy to maintain.	Make sure to keep user-friendliness in mind.
Budget	Limited budget as it's for a small organisation.	Would have to watch how many extra features are included and look at what is achievable.
Time limitations	Project only has a week.	It's necessary to get the most important priority items completed.