

# REQUIREMENT ANALYSIS

## What is the purpose of the database? What to do?

-The main purpose of our database is generally the names, genders, breeds, species, colors, dates of birth, medical procedures of the animals brought to the shelter from the moment they are brought to the shelter. It was taken over by its original owners and has a new home. To ensure that vaccine information, treatment and drug records are kept completely and completely.

-The purpose of the database is to manage these processes and keep the necessary data.

- Clients of the database can be shelters, breeders or volunteers.

- Our database stores information about owners and animals, and details of their relationship in the process of bringing animals back to the shelter.

-These relations are: animals brought to the shelter, shelter information, information of the person who wants to adopt an animal. The person who wants to adopt an animal sees all the information about the animal in detail, determines the animal he wants to adopt and adopts the animal.

- We get the address and gender information of the animal owners to find the region with the most animals and to see the gender distribution.

## Who are the users and what are their information needs?

-Users: usually shelter management and staff, veterinarians and pet owners.

-Thanks to the database application, volunteers can access animal and shelter information, bringers, shelter information, shelter officers can access animal and other user information.

## What problems does the system need to solve?

- The complexity of keeping information up to date in addition to monitoring data and process. Database: It makes it easy to find suitable shelters for those who bring them, to reach animal and animal health information for shelters, and to reach accurate animal and shelter information for volunteer owners.

## What input data is available in the database?

- The information of the animal chosen for adoption and the person who wants to adopt are available in the database of the shelters. Also, the information of the shelter where the animal was adopted and the information of the person or institutions that left the animal to the shelter are available in the database.

## **What kind of information should be stored in the database?**

- Animals' name, gender, breed, color, date of birth, previous medical operations, vaccination information, treatment and drug records.
- Personal information such as name, surname, e-mail address, home address, telephone number of the person who wants to adopt an animal.
- Shelter name, address, contact information.

## **Queries**

- How many of those who brought the animals wanted to take them back?
  - Which type of animal is the most wanted to be adopted?
  - Which is the most preferred color in the highly-owned type and least preferred in the least-owned type?
- How is the distribution among the animal species owned in 2023? (Which months have the highest and lowest rates of animal ownership?)
- In which provinces do animals meet their owners the most?
  - How is the age distribution of animal owners?

## **Cardinality Explanation:**

### **-Entity Sets**

- Animals: a.name, a.id, color, age, breed, sex, genus, birth date, animals\_health reports
- Bringers: type (person, institutions), b.phone\_num, bid, name
- Vet: address, vet\_name,
- Animal Sanctuaries: s.phone\_num, number of vacancies, capacity, sid, s.address, s.name
- Volunteer Owners: v.name, address, vid, v.phone\_num

## **E/R Diagram Explanation:**

There is information of animal shelters in our database.

Bringers bring their animals to the shelter they have chosen, if there is a quota in that shelter.

All data about these animals are recorded in the database.

After the veterinary examination, the animals in the shelter are placed in the shelter and the health reports of the animals are recorded in the database.

Volunteer owners can view the information of the animal they want to adopt through the database and easily access the contact information of the shelter.

In this way, the animals desired to be adopted are brought together with their owners.

Finally, the new owners' information is also stored by the database.

## E/R DIAGRAM

