Vision Statement

Project goals – The problem that we are trying to fix, nowadays in order to identify dogs, vets are injecting microchips into the skin of the dog and cats ears are cut to identify cats that are castrated, those methods are working, but hurt and mutilate the animal, moreover those methods are not prone to failure, in example dogs microchips can be taken out.

The main goal is to create an application for a user to take a picture of a dog's nose and be able to identify the dog if it is in the system, dog's noses are unique like human fingerprints and therefore by using image processing, computer vision and machine learning we are looking to find a humane solution.

Project scope –The project includes the following: Identifying dogs by their nose, showing the appropriate information of dog.

The project doesn't include other animals.

High-level features or requirements – A computer vision and machine learning model that Identifies the nose in the image, process the nose, and identify the specific dog.

The requirements include collecting a large database of images of noses and pairing them with dogs.

Major milestones and deliverables:

First milestone would be building a model or a service that can identify a nose in an image using machine learning or any other method.

Second milestone would be to apply image processing on the nose and get the important attributes that can lead for recognition of the unique nose.

Third milestone would be to use the information we have to apply a model that can match a nose to a dog.

For vets, workers of the municipality that capture or observe animals, dog owners and the general public. The application helps identify dogs by their nose, unlike other methods like microchips or other mutilation style marks, our application doesn't hurt the animal and easier for the general public to identify the dog.

Vadim Kachevski - 321711061

Shahar Niknazar – 316416668

Yosef Twito - 314732637