## Criteria A - Planning

## **Defining the problem**

The client is Bhola Dahal, who works as a veterinarian doctor in Bhadrapur Animal Hospital in Nepal. He is responsible for diagnosing animals during their appointments and providing them with the appropriate treatment and required medicines.

In the hospital, currently, a new physical folder is created for each new animal containing all of its information and a number is assigned to each animal which is used to sort the folders. Bhola is required to find a folder whenever an animal returns to the hospital or whenever an animal staying in the hospital requires special treatment. This method of storing the patient's information takes quite a long time and thus is very inefficient.

He also does not have access to the amount of each of the types of medicine in stock in the hospital. Thus, he is required to physically check the stock room whenever he needs a type of medicine and sometimes, the medicine may even be out of stock in which case he has to give the patient's owner a prescription. This problem is also time consuming and inefficient.

I decided to provide Bhola with an IT solution to this problem. The problem should allow him to easily search for patient folders by storing the patient information on a database. It should also allow him to easily determine the quantity of a medicine left in stock.

## **Rationale for solution**

I decided to computerize the folders containing the patient information in a database as it is much easier to search for and there is a lower risk of the patient information getting lost. The quantity of the medicines will also be stored in a database in order to determine whether a type of medicine is running low.

I chose to use java for the following reasons:

- It is object-oriented
- It allows graphical interfaces to be created
- It can run on different computer systems

I decided to use GUI with java as it is quite simple to utilize and will not require Bhola to do lots of training to learn to operate the program.

## **Criteria for success**

- Various information about a patient is stored (generated unique ID number, type of animal, gender of animal, address, name of owner, number of owner, email of owner, disease of animal, type of treatment required, day of release if known, medical history)
- Appointments are created and filtered through based on doctor or date
- Treatment bills for patients are created based on the number of days that they stay in the hospital
- A doctor is assigned to a patient (same doctor can be assigned to multiple patients) in order to search for patients based on doctor
- Quantity of medicines at hospital are stored and reduced if they are utilized

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