**Final Project INFO 5100**

**Stray Animal Rescue System**

**Key Word: Swing GUI, SQL, OOD, Real-time System**

**Problem Background:** With the growing number of stray animals, the rescue measures for them has gradually become a problem that requires more social attention.

The **purpose** of this project is to build a unified stray animal rescue system which combines the rescue center, hospital and stray animal adopter all together. By doing so, the whole rescue process can be more convenient and mature, injured stray animals can be directly sent to the hospital that can treat their diseases with higher success rate; adopters can also selectively adopt stray animals according to their personal circumstances.

**Application Key Functionalities - Rescue Center:**

* Workers can create, login and modify their rescue center work account;
* Workers should be able to add stray animals with their variety type and ill state;
* Workers can add different hospital information and save for further selection based on existing hospital information database;
* Workers can use intelligent sorting search function to find the best hospital choice for each animal for different conditions and then sent to the hospital for treatment;
* All these operations should be saved in a log and can be viewed at any time.

**Application Key Functionalities – Pet Hospital:**

* For each hospital, they have name, location, level and other necessary attributes;
* For each hospital, they have their own list of curable animals, like dog, cat, etc.;
* For each hospital, they have their own specialized disease direction, like disability, cold, diarrhea, etc.;
* For each cure treatment, there will have a success rate, if stray animals are successfully cured, they will be returned to the rescue center, unfortunately, stray animals may not be saved.

**Application Key Functionalities – Adopter:**

* Adopter can create, login and modify their user account;
* Initialize adopter information such as salary, house capacity, adopting pet status, etc., and all these information can be changed later;
* To successfully created adopter user account, adopter should enter their email address and get the verification code via email.
* Our System will determine your eligibility for adoption, if you meet the requirements, you will go into next step, or you will not be able to adopt the animal.

**Proposed Entities:**

Rescue Center, Rescue Center Manager, Log, Adopter, Stray Animal, Pet Hospital.

**Additional Features:**

Automatic refresh status, including adopter status and stray animal status.