APPLICATION DEVELOPMENT 1 (DESKTOP)

Team Project Final Report

GitHub：*https://github.com/LeahFu/WLH-Group.git*

Project Title: Pet Adoption System

Group Name: WLH Group.

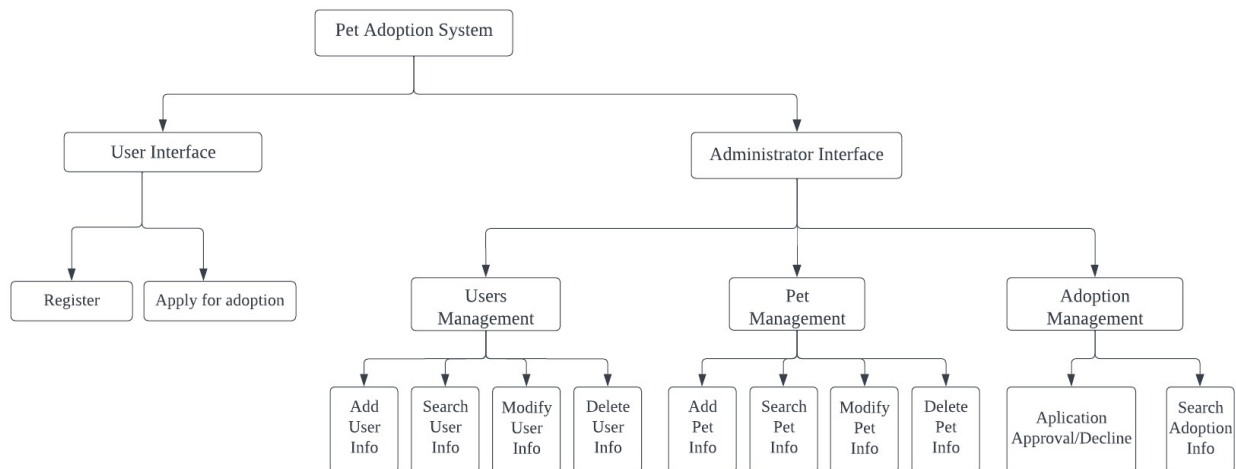**Group Members:** Wei Zhu, Lei Fu, Hua Zhang

1.Project Scope：

We all know that pets as the best medicine to relief human stress and depression, they are tame, friendly, and loyal. However, not all pets are lucky to have great and good master. Our pet adoption system would provide a platform for the pet adopters and animal shelters.

The Pet Adoption System contains two interfaces: users' interface and administrator interface.

In the **users' interface**. We provide register/sign in function, apply adoption function, and search function.

In the **administrator interface**. We will have users' management, pet management and adoption management. Under each part, we will provide functions like add, search, modify, and delete functions.

The detailed information is following:

In this system, we will have two databases**: users database and pets database**.

Users database: to store the users' information, like userId, username, email, address, etc.

Pet database: to store the pets' information, like ID, name, type, age, gender, adoption info, etc.

Project Users, Actors, Vendors, Actuators f. Project Properties.

- User: Someone who likes small animals and can afford to take care of them.
- Actor: register, pets, welfare organization
- Actuator f: A public welfare organization

2. Project Functionalities

2.1 Pet Adoption REST API

We create a pet adoption REST API, it includes three parts.

(1) User

We can use [http get] to get all users or get user by ID, use [http post] to and new users, use [http put] to update User's information. And using [http delete] to delete one user by ID.

User	^
GET /api/User/GetAllUsers	⌄
GET /api/User/GetUserById/{id}	⌄
POST /api/User/AddUser	⌄
PUT /api/User/UpdateUser	⌄
DELETE /api/User/DeleteUserById/{id}	⌄

(2) Pet

We can use [http get] to get all pets or get pet by ID, use [http post] to and new pet, use [http put] to update pet's information. And using [http delete] to delete one pet by ID.

Pet	^
GET /api/Pet/GetAllPet	⌄
GET /api/Pet/GetAllPetById/{id}	⌄
POST /api/Pet/AddPet	⌄
PUT /api/Pet/UpdatePet	⌄
DELETE /api/Pet/DeletePetById/{id}	⌄

(3) Adopt

We can use [http get] to get all pets or get pet by ID, use [http put] to update pet's information is the pet is adopted.

Adpot ⌃

GET	/api/Adpot/GetAllPet	⌄
GET	/api/Adpot/GetAllPetById/{id}	⌄
PUT	/api/Adpot/AdoptPet	⌄

2.2 Main menu

Our pet adoption system has three main functions, they are User Management, Pet Management and Pet Adoption Management. Click the any of the buttons, it will navigate to relative interface.
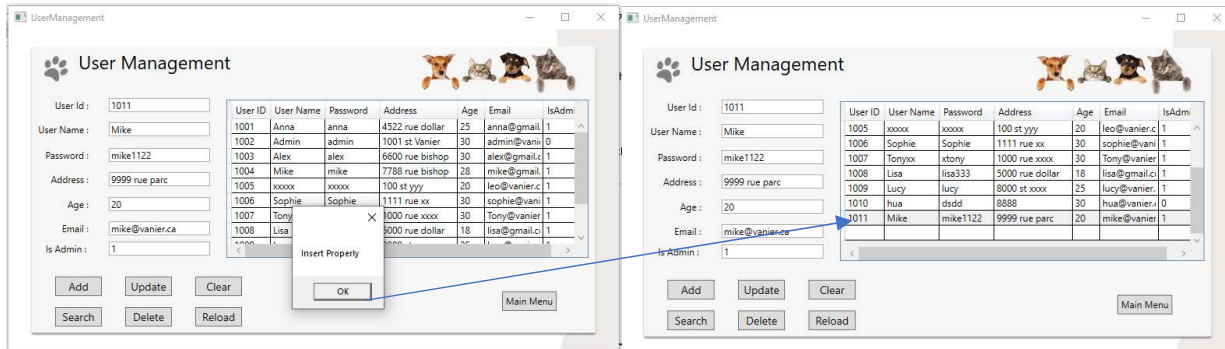

2.3 User Management

When click any line of the user list table, the text boxes will be automatically filled by the data which you select. You can use <Clear> button to clear all contents of the text boxes.
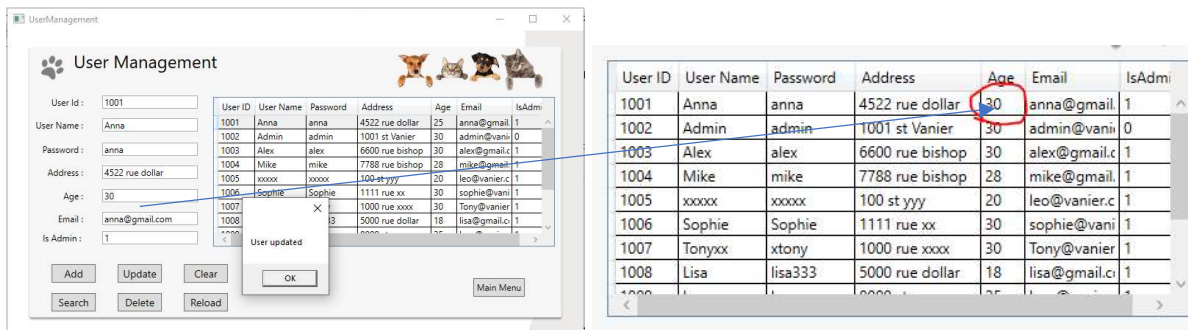
- Add

    Input User ID, Username, Password, Address, Age, Email and Is Admin, then click the <Add> button, when add succussed, it will pop-up success dialogue box, and a new record add to database. Click <reload>, the new record will be found.
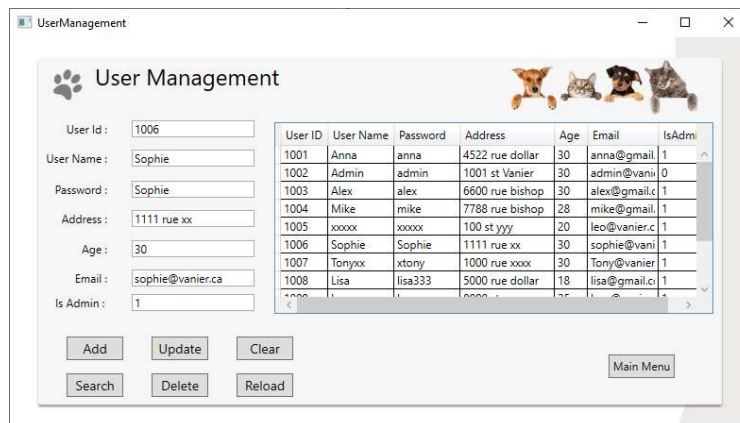

- Update

    Select any record of the list, then modify any attribute you want, then click the <Update> button, when update succussed, it will pop-up success dialogue box, and this record will be updated in database. Click <reload>, the updated record will be found.
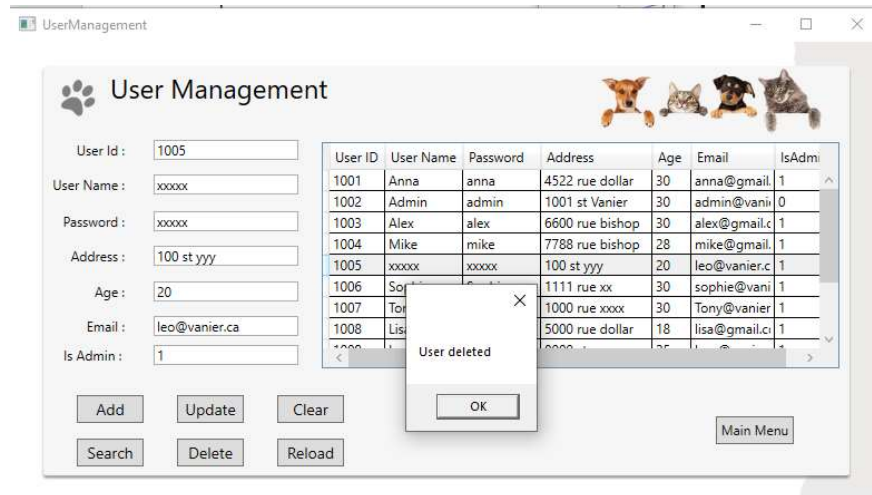

- Search

    Input User ID which you want to get, then click the <Search> button, the Username, Password, Address, Age, Email and Is Admin will be displayed.

- Delete

Select any record of the list, then click the <Delete> button, when delete succussed, it will pop-up success dialogue box, and this record will be deleted in database.
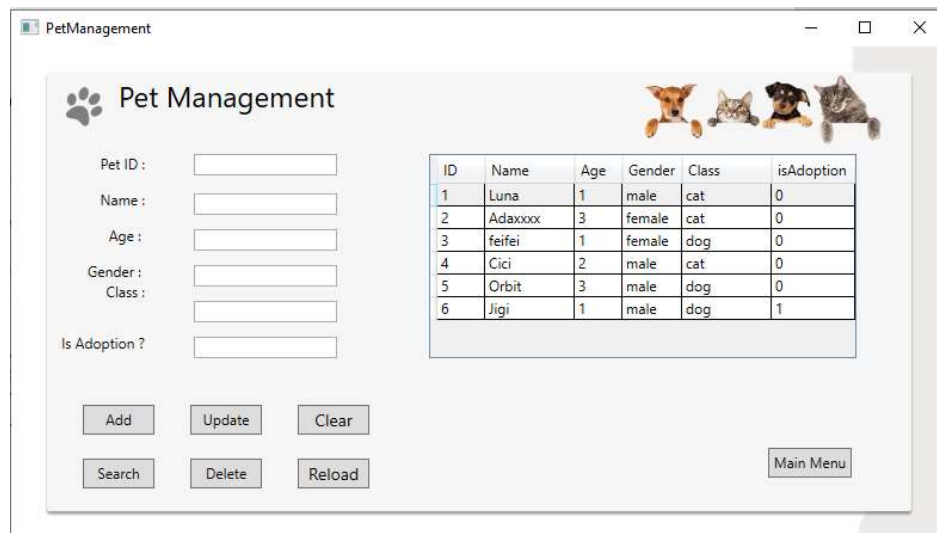

- Reload

Any time when you want to refresh the data list, you can click <Reload> button, then the refreshed record will be displayed.
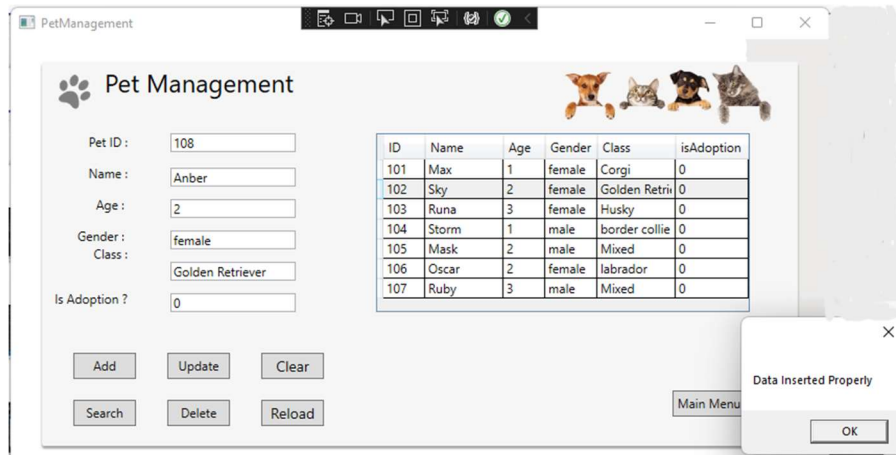
2.4 Pet Management

When entering this page, the list box on the right will automatically display the pet information stored in the database. You can use <Clear> button to clear all contents of the text boxes.
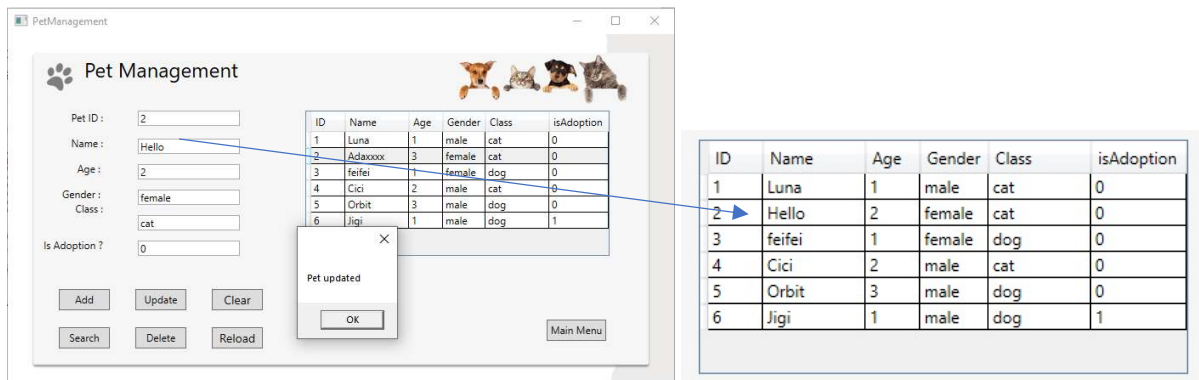

- Add

Input Pet ID, Name, Age, Gender, Class, and Is Adoption, then click the <Add>button, when insert succussed, it will pop-up success dialogue box, and a new record add to database. Click <reload>, the new record will be found.
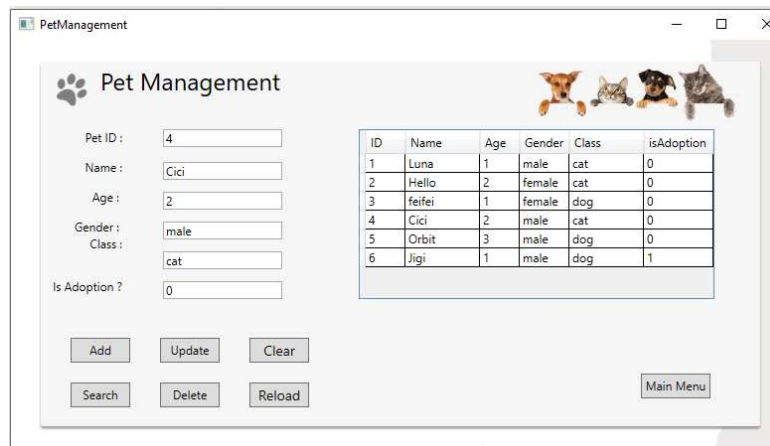
- Update

   Select any record of the list, then modify any attribute you want, then click the <Update> button, when update succussed, it will pop-up success dialogue box, and this record will be updated in database. Click <reload>, the updated record will be found.
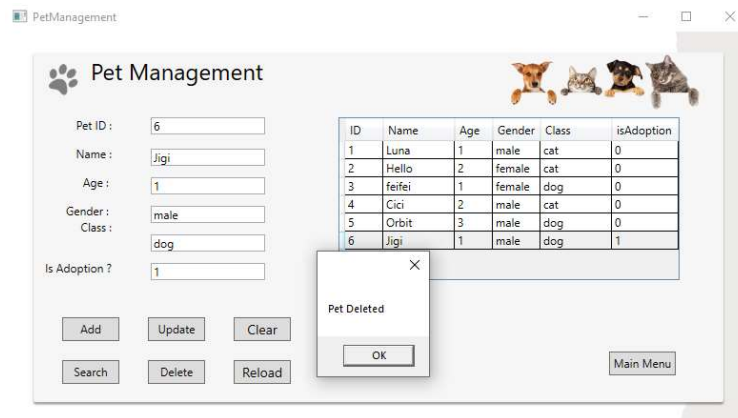

- Search

   Input pet ID which you want to get, then click the <Search> button, the Name, Age, Gender, Class, and Is Adoption will be displayed.

- Delete

Select any record of the list, then click the <Delete> button, when delete succussed, it will pop-up success dialogue box, and this record will be deleted in database.
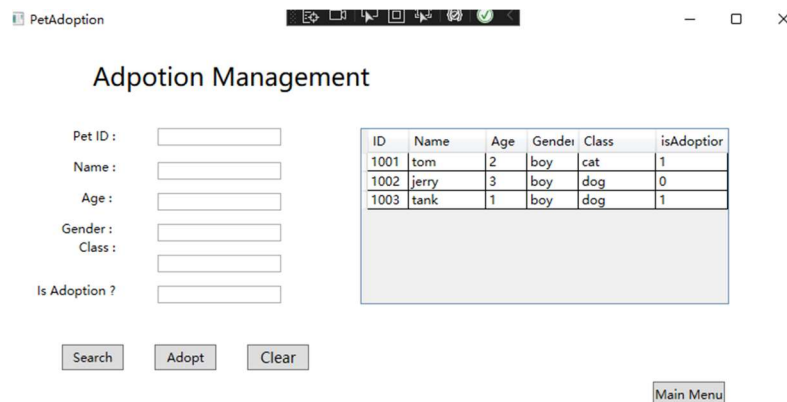

- Reload

Any time when you want to refresh the data list, you can click <Reload> button, then the refreshed record will be displayed.

2.5 Pet Adoption Management

When entering this page, the list box on the right will automatically display the pet information stored in the database.

When isAdoption is 0, that means this pet could be adopted, you can choose this pet.

Then click <Adopt>, the status of ID 1002 pet has been changed.

3.Project Setup

DATABASE: MSSQL

PROGRAMMING: C#

IDE: Visual Studio 2022

FRAME: ASP.net Web API, WPF Application Framework

4. Work Progress in Future

In the future, the system will add the user register and login function. And for the pet adoption, we will add the function that if the client want to adopt one of the pets, he/she will be asked for applying first, once it is approved, then the pet adoption status will be changed.