

Pet Adoption Project Documentation

System Description

User Operations :

Pet Adoption system with 2 user types (admins & adopters) allows multiple operations for admins and adopters to interact with the system in detail :

Admins operations :

- Create new account & fill his/her shelter info
- Edit Shelter Information
- Delete Shelter Information
- Add pets to shelter
- Remove pets from shelter
- Accept/Reject adoption requests made by adopters
- Logout of account

Adopter operations :

- Edit account info (name/password/email/phone number)
- View adoption request history
- Send request to adopt pets from different shelters
- Delete account completely
- View new notifications regards sent requests and their current status

File Handling :

System data is read once from specific text files saved in a CSV format and then changes are performed to the data structures saved during the program runtime and written to the files only once at the end of the program.

Data Validation :

Appropriate data validation is applied in every aspect when dealing with program data to ensure Correctness and completeness of stored data and prevent information conflicts when viewing and updating data.

JavaFX GUI :

System utilizes a dynamic GUI built with JavaFX following UX conventions to provide the user of the app with an easy and fun experience.

Input and Output scenarios

Adopter and Admins common scenes :

Login Scene :

Users can login as Adopter or as Admin using Username (unique for every user) & Password.

If the user left one of the input fields a notification will be shown demanding the user to enter username and password.

If the user entered data for an account that does not exist a notification will be shown telling the user that this account is not found.

If the user entered a valid username but wrong password a notification will be shown demanding the user to enter a valid password.

If the user entered a valid username and correct password he will be switched to the next scene (operations menu) depending on his role (admin or adopter).

Sign Up Scene :

If the user does not have an account he can create a new one using the Sign Up button at the bottom of the login page.

The user will be required to enter Name, Username, Email, Password , Phone Num and show his role from a combo box (admin or adopter).

When the user enters all the required data a Sign Up button appears when pressed a data validation process is performed where 2 users cannot have the same usernames or emails or phone numbers if so a notification will be shown telling the user that this account already exists.

If the chosen role is admin the Sign Up scene will take the user to a Fill in shelter info scene in case he entered correct data passed the validation

If the chosen role is adopter the Sign Up scene will show a notification telling the user that the account is created successfully and the user will be directed to the login scene.

Adopter Unique Scenes :

Adopter Menu Scene :

Once an adopter login the first scene appears is the menu scene with 6 buttons to allow user to move to the next scenes :

- Edit Account Info button
- My old Requests button → Adoption History
- Send Request button
- Logout button
- Delete account button
- Notification button → notifications are

Edit Account Info Scene :

The scene has 4 fields initially displaying the current adopter data (name / password / email/ phone number) and a back button (returns the user to the main menu of the adopter).

There is a confirm change button hidden by default and shown when the user changes any current data to a new data.

When the user changes the data in some fields and click on confirm a data validation process is performed on all data fields and a notification is shown telling the user that info is updated successfully :

- If the updated Email is already used by another user a notification will be shown telling the user that the email is already used and the same applies to the phone number.

My Old Requests Scene :

The scene initially has a combo box and view details and a back button (returns the user to the main menu of the adopter).

The user can choose a pet from the combo box pets displayed have an adoption status of rejected or accepted only.

When a pet is chosen and the view details button is clicked the details of the pet and adoption process is displayed (breed , age, date of adoption, status) from adoptions data.

Send Request Scene :

The scene initially shows a select shelter combo box and back button.

When the user selects the shelter he wants to adopt pets from, another combo box is shown to allow the user to select pet type (cat or dog). Then names of unadopted pets of the current chosen pet type are shown in another shown combo box. Once a pet name is chosen, pet details are shown in fields (Health Status, Breed, Age) and a submit button is used to send a request for admin (shelter owner) and adoption data is added and a notification is shown telling the user that the request was sent successfully.

Notifications window :

Notification window shows notifications about the status of the adoption requests made by the user. Once a notification is shown and will not appear again until the adoption request status changes.

Delete account button :

When clicked, a new window is opened for the user to confirm deletion operation. When confirmed, the account is deleted and the user cannot login again with the same credentials and all pets adopted by the user are marked as unadopted and other users can send adoption requests for these pets.

Admin Unique Scenes :

Admin Menu Scene :

Shown to the admin as the first scene after login, it contains multiple buttons that take the admin to different scenes to perform specific tasks:

- Edit Shelter Info button
- Delete Shelter Info button
- Add pet button
- Edit pet button
- Remove pet button
- Adoption Request button
- Logout button

Edit Shelter Info Scene :

Initially loaded with current shelter data owned by the active admin showing Name (cannot be changed), Location, Email and Phone number and a back button.

The admin can change the location , Email and Phone number of the shelter when he changes data and click on the confirm button a data validation is performed to ensure data correctness

- If the entered email or phone number is used by another existing shelter a notification appears for the admin to inform that the email or phone number is used already.

When the admin clicks on the Update button and all data is validated a notification appears telling that the info updated successfully.

Delete Shelter Info Scene :

Initially loaded with current shelter info and a combo box to select the field the admin wants to remove info in it and a back button.

After choosing the field from the combo box and clicking on the Delete button a notification appears telling the admin that the field info he chose has been deleted successfully and returns to the main menu.

Add Pet Scene :

The scene has 4 text fields and a combo box to choose the type of the pet the admin wants to add and a back button.

Initially a submit button is hidden and only shown to the admin after all the required information.

After choosing the pet type and filling the all fields and clicking on submit button a data validation process is performed where

- 2 pets from the same type cannot have the same name if so a notification appears telling the admin that this pet was added before.

If the data passed the validation process a notification is shown telling the admin that the pet was added successfully and takes the admin back to the main menu.

Edit Pet Scene :

The scene has 2 combo boxes for pet type and name and 2 text fields for viewing health status and age (data can be edited) and a back button.

After choosing the pet type the second combo box all the available unadopted pets from this type in the shelter after choosing the name of the pet the 2 text fields gets loaded with the current data of this pet and the admin can change these data and click on submit to apply the changes made also a notification appears notifying the admin that the pet data has been edited and takes the admin back to the main menu.

Remove Pet Scene :

The scene initially loaded with the current shelter name owned by the admin and a combo box for choosing pet Type and a back button.

After choosing the pet type another combo box appears to allow admin to choose the pet name of the chosen type he wants to delete from the shelter (only view unadopted pets) after choosing the pet name another 2 text fields (breed and age) appears with the data of the chosen pet and a Delete button to confirm deletion process and a notification appears notifying the admin that the pet is deleted.

Adoption Requests Scene :

The scene Initially loaded with a select pet type combo box and a back button.

When admin select the pet type another combo box to select the pet name (pets with requests from adopters) after choosing the pet name all the details of adoption process appears to the admin and a reject & accept button also appears after choosing the respond a notification appears telling the admin the request was rejected or accepted based on the button he pressed and takes the admin back to the main menu.