
Population Dynamics Simulation (PDS)

Test Plan

Prepared by:
Simay Cural, Na'ama Nevo,
James Settles, Walt Jones

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Executive Summary	3
Document Versioning	4
Project Description	5
Features	6
Feature Matrix	6
Test Steps	7
1 - Windows Startup	7
Process	7
Success	7
2 - Apple Startup	7
Process	7
Success	7
3 - Linux Startup	8
Process	8
Success	8
4 - Matching between Pets and Families	8
Process	8
Success	8
5 - GUI Design	8
Process	8
Success	9
6 - Fostering and Adopting Statistics	9
Process	9
Success	9

Executive Summary

Our Pet Rescue program strives to streamline the process of matching adopters and fosterers to pets who need a home. Currently, most pet rescues and shelters manually match pets to potential owners, which can get complicated and time consuming. Our program should accurately and efficiently place pets with people who are looking to either adopt or foster. It takes into account characteristics of the pet such as: Does the pet get along with other pets? Does the pet get along with children? Is it potty trained? Pre-existing health concerns? Additionally, information about the owners and their unique families will be considered too such as allergies, children, and experience. Lastly, this program should provide helpful statistics like how many foster parents end up adopting.

Document Versioning

Date	Owner	Comment
9/15/2022	Na'ama	Created Document, Updated Test Names
9/19/2022	Na'ama	Updated Test Steps

Project Description

Hope We Don't Get A C++ inc. is looking to enter the pet market space by creating a new pet rescue program. It will be a multiplatform program. Additionally, it is a standalone application that does not rely on the internet.

Pet Rescue uses a graphical user interface (GUI) to run the program. This will support a multitude of features. For example, it should streamline the process of adopting and fostering. It takes into account characteristics of the pet such as: Does the pet get along with other pets? Does the pet get along with children? Is it potty trained? Pre-existing health concerns? Additionally, information about the owners and their unique families will be considered. This includes factors such as the presence of allergies, children, and former pet experience. Lastly, this program should provide helpful statistics (like how many foster parents end up adopting) to help expand the agency's brand.

User Acceptance Testing Matrix

The test matrix enumerates tests to be conducted that verify the delivered system meets the requirements from the BRD. Following the matrix, the testing steps for each test are provided. Tests should be able to be completed without understanding of the internal technologies being used.

Feature Matrix

ID	Test Name	Comment	BRD ID
1	Windows Startup		s.1, s.2
2	Apple Startup		s.1, s.2
3	Linux Startup		s.1, s.2
4	Matching between pets and families		ux.1, e.4, e.6
5	GUI Design		ux.2
6	Fostering and Adopting Statistics		ux.1, e.1, e.2, e.3, e.7, e.8

Test Steps

1 - Windows Startup

Process:

1. Run the Database Program on a Windows computer.
2. Verify that the Create New Profile button opens the appropriate template.
3. Verify that the List of Profiles button opens the correct list of either family or pet profiles in a new window.
4. Verify that the edit buttons allow the user to type new input.
5. Verify that the save buttons update or add new families and pets in the database.

Success:

- The program opens the main menu window with no errors.
- Clicking the new profile button opens a new editable template profile for either a pet or a family.
- Clicking the list of profiles button opens a scrollable list of profiles, and clicking an item on the list opens a specific profile.
- The edit button makes the text fields editable, and the save button makes them not editable.

2 - Apple Startup

Process:

1. Run the Database Program on an Apple computer.
2. Verify that the Create New Profile button opens the appropriate template.
3. Verify that the List of Profiles button opens the correct list of either family or pet profiles in a new window.
4. Verify that the edit buttons allow the user to type new input.
5. Verify that the save buttons update or add new families and pets in the database.

Success:

- The program opens the main menu window with no errors.
- Clicking the new profile button opens a new editable template profile for either a pet or a family.
- Clicking the list of profiles button opens a scrollable list of profiles, and clicking an item on the list opens a specific profile.
- The edit button makes the text fields editable, and the save button makes them not editable.

3 - Linux Startup

Process:

1. Run the Database Program on a Linux computer.
2. Verify that the Create New Profile button opens the appropriate template.
3. Verify that the List of Profiles button opens the correct list of either family or pet profiles in a new window.
4. Verify that the edit buttons allow the user to type new input.
5. Verify that the save buttons update or add new families and pets in the database.

Success:

- The program opens the main menu window with no errors.
- Clicking the new profile button opens a new editable template profile for either a pet or a family.
- Clicking the list of profiles button opens a scrollable list of profiles, and clicking an item on the list opens a specific profile.
- The edit button makes the text fields editable, and the save button makes them not editable.

4 - Matching between Pets and Families

Process:

1. Select a family profile and click the match button.
2. Verify that a list of pets appears in a new window.
3. Click on the pets in the new window and ensure that the characteristics are compatible with those of the family.
4. Select a pet profile and click the match button. Verify that a list of families appears in a new window, and ensure that those families' characteristics are compatible with the pet.

Success:

- Family profile match button opens a new window with a list of pets that are all compatible with the family.
- The pet profile match button opens a new window with a list of families that are all compatible with the pet.

5 - GUI Design

Process:

1. Run the program and verify that the main menu button has buttons for new profile, list of profiles, and statistics.
2. Click the statistics button and verify it opens a new statistics window.

3. Select the pet option in the drop down menu. Click the new profile button and verify that a pet profile template window appears. Then click the list of profiles button and verify that a list of all pets appears in a new window.
4. Select the family option in the drop down menu. Click the new profile button, and verify that the family profile template window appears. Then click the list of profiles button and verify that a list of all families appears in a new window.

Success:

- The buttons for showing a list of profiles and creating a new profile successfully correspond to whether pet or family are selected in the drop down menu.
- The list of profiles is scrollable, and clicking on an item in the list opens a specific profile in a new window.
- In a profile, clicking the edit button sets the text fields to be editable, and clicking the save button reverts them back to not editable.

6 - Fostering and Adopting Statistics

Process:

1. Run the database and click the Statistics button from the main menu.
2. Verify that the data in the window is accurate in relation to the pets and families in the database.
3. Foster a new pet by a new family, and check that the number for fostered pets and fostering families goes up by 1.

Success:

- The Statistics window opens with no errors from the main menu.
- After fostering a new pet, the values for fostered pets and fostering families increases by 1.
- After adopting a new pet, the values for adopted pets and adopting families increases by 1.