



Software Engineering and Testing. BSC Year 2, 2024/2025

**Assessment 4: Final Tested Product / Test
Plan / Test Suite / Demo**

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Submission date: 27/04/25

Declaration

I hereby certify that this material, which I now submit for assessment on the programme of study leading to the award of Ordinary Degree in Computing in the Institute of Technology Blanchardstown, is entirely my own work except where otherwise stated.

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Title: Pawsible

(A) User Interface Testing

User Guidance

Feedback when error occurs – adoption application and discount code

On the cart page, in the event of an error such as an invalid voucher code being submitted, text will pop up below the discount text field informing the user that their code was invalid.

After entering voucher code “randomcode”

Your Cart

Type	Name	Breed	Age	Location	Price	Image	Empty Cart
Dog	Chico	Pug	1	Cabra	2000		<button>Remove</button>
Cat	Bonkle	Shorthaired	2	Jobstown	165		<button>Remove</button>

Enter discount code Apply Discount

Invalid discount code.

Total: 2165
[Continue Shopping](#)

After inputting PAWSIBLE20

Your Cart

Type	Name	Breed	Age	Location	Price	Image	Empty Cart
Dog	Chico	Pug	1	Cabra	2000		<button>Remove</button>
Cat	Bonkle Shorthaired	2	Jobstown	165			<button>Remove</button>

Enter discount code

Apply Discount

Discount applied: 20% off!

Total: 1732

[Continue Shopping](#)

Consistency

Across the Pawsible website we use the same css files on all pages to keep a consistent look, with other pages having their own css files for elements specific to that page. To demonstrate, below are screenshots of the Pawsible home, browse and pet care guide pages. Please observe the colour scheme and font choices stay consistent across the website, along with php templates for the header and footer to keep them consistent across pages with DRY code.

[Home](#)



About View Available Pets Pet Care Guide Sponsor Contact 

Welcome, you are logged in as: sean

[Log out](#)

Take a look at our most adopted pets!

- Corgi
- Pug
- Labrador
- Husky
- Shih Tzu



Want to see more? Browse our pets available for adoption near you [here!](#)

Interested in adopting one of our furry friends? [Fill out our adoption application!](#)

About Pawsible

Pawsible is dedicated to finding loving homes for cats and dogs in need. Our mission is to ensure that every pet has a chance to find their forever home.

We work remontably with a network of shelters and

How We Facilitate Rehoming

At Pawsible, we follow a thorough process to ensure that each pet is matched with the right home:

- Initial Assessment: Through a thorough interview process, we assess each pet's health, behavior, and needs.

Browse

The screenshot shows the homepage of the Pawsible website. At the top, there's a brown header bar with the Pawsible logo (a blue paw print icon inside a heart shape) and the word "Pawsible". Below the header, a banner reads: "Choosing to adopt a pet from Pawsible gives rescue animals a second chance of happiness. Find your perfect pet companion!" Below the banner, there are two main sections: "View Dogs" and "View Cats". Each section contains a brief description and a photo of a dog or cat. Under "View Dogs", there are four cards for dogs named Chico, Nala, Bonkie, and Theo, each with a photo and some descriptive text. At the bottom left, a small URL "localhost/public/index.php" is visible.

Choosing to adopt a pet from Pawsible gives rescue animals a second chance of happiness. Find your perfect pet companion!

[View Dogs](#) [View Cats](#)

Thank you for choosing to adopt a dog from Pawsible. To adopt a dog/puppy you must be 18+ years old, provide photo ID and photos of your home for the dog. If you have another dog, a dog meet must be arranged.

Chico

Nala

Bonkie

Shorthaired | Age: 2

Theo

localhost/public/index.php

Pet Care Guide

The screenshot shows the "Pet Care Guide" section of the Pawsible website. It features a brown header bar with the Pawsible logo and navigation links for About, View Available Pets, Pet Care Guide, Sponsor, and Contact. Below the header, a banner says "Welcome to the Pet Care Guide". The page is divided into five cards: "How to Train Your Dog", "Best Diet for Dogs", "Dog Grooming", "Common Dog Health Issues", and "Understanding Your Dog's Behavior". Each card contains text and small images related to its topic. At the bottom center, there's a small blue paw print icon.

Welcome to the Pet Care Guide

[How to Train Your Dog](#) [Best Diet for Dogs](#)

[Dog Grooming](#) [Common Dog Health Issues](#)

[Understanding Your Dog's Behavior](#)

Feedback

Upon successfully filling out an application form, and donating; the system will provide the user with feedback confirming their form submission, printing the values the user inputted so they can review their submission and be assured the submission was successful.

Adoption application page

A redacted screenshot of an adoption application form. The form includes fields for Name, Age, Gender (with a dropdown menu showing 'Male'), Address, Pet Type (radio buttons for Dog and Cat), Breed (text input field), and a Submit button.

Pet Application Submitted Successfully!

Name: Banjo

Age: 3

Gender: Male

Address: 12 Downing Street

Pet Type: Cat

Breed: Siamese



pawsible

Donations page

All donation proceeds go towards the upkeep of our furry friends, ensuring they have a comfortable and happy life.

We are currently accepting donations in the form of:

- Paypal
- Revolut
- Bank Transfer

Name:

Email:

Donation Amount:

Thank you, Sean, for your generous donation of \$5!

Recoverability

In the event that a user adds a pet to their cart that they did not intend to (or they just changed their mind), there is a remove button next to the cart items to undo the mistake.

Minimal Clicks

The UI is designed to be as simple as possible, so users can easily navigate the site and perform their desired actions. For example, if a user intended to purchase Chico the dog, it would only take two clicks until they reach the checkout page from the home page. Home -> View Available Pets -> Add to cart (clicking this redirects the user to cart).

(B) Requirements Testing

Use Case 1: User Registration

Requirements Checklist:

	Completed
• User enters personal details (name, email, password)	<input checked="" type="checkbox"/>
• System validates input (checks email format, password strength)	<input checked="" type="checkbox"/>
• If valid, system creates an account and stores data	<input checked="" type="checkbox"/>
• If invalid or already registered, system shows error or recovery options	<input checked="" type="checkbox"/>

Use Case 2: Submit Request

Requirements Checklist:

	Completed
• User fills out personal details and message	<input checked="" type="checkbox"/>
• System validates input (checks if fields are not empty, email valid)	<input checked="" type="checkbox"/>
• System submits the request	<input checked="" type="checkbox"/>
• Confirmation message displayed after submitting	<input checked="" type="checkbox"/>

Use Case 3: Submit Adoption Application

Requirements Checklist:

	Completed
• User selects a pet and clicks "Adopt"	<input checked="" type="checkbox"/>

- User fills out the adoption form 
- System validates input and stores the application 
- Admin reviews the application 

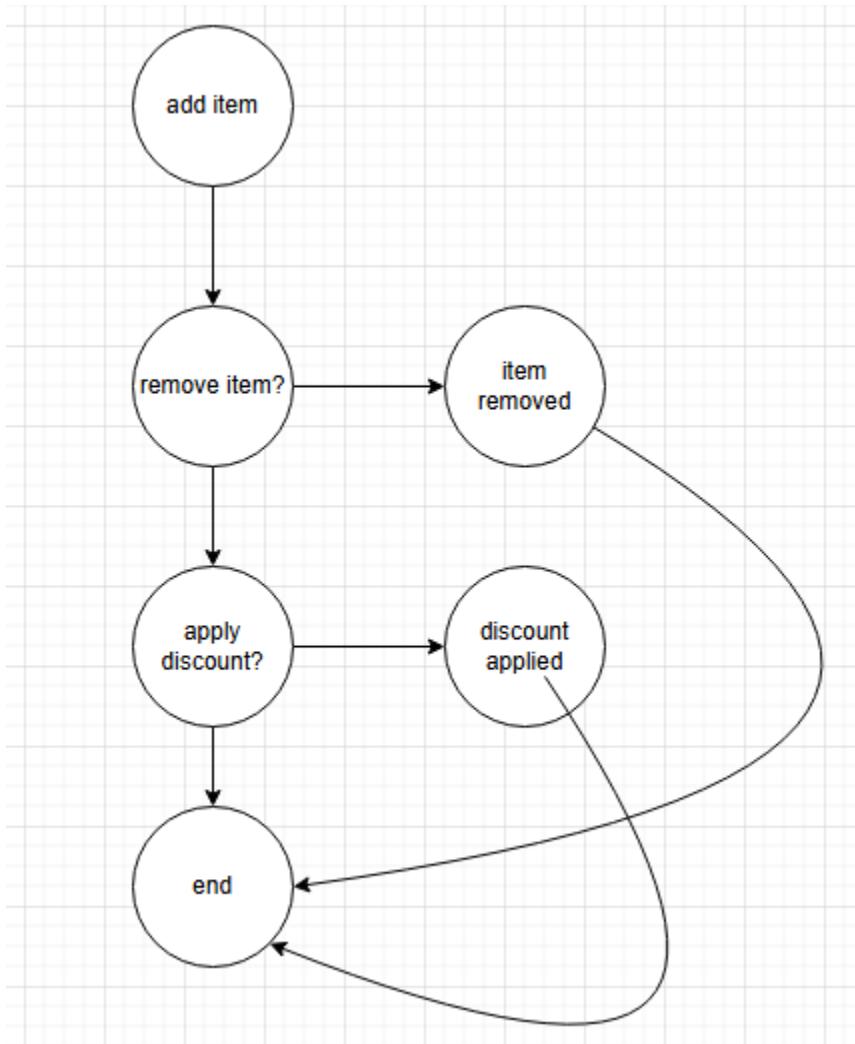
(C) Equivalence Partition Testing

Equivalence Partition	Test Input	Result
Valid username, email and password	username, email@gmail.com, password	User is sent to the login page to
Invalid email format	email	Please include @ in email
Empty email	Username, ", password	Please fill out this field
Empty username	", email, password	Please fill out this field
Empty password	Username, email, "	Please fill out this field

(D) Basis Path Testing

Test Cases	Steps	Result
TC1	Add pet to cart, end	Shows pet in cart at full price
TC2	Add pet to cart, remove item from cart, end	Cart will contain added pet and then become empty
TC3	Add pet to cart, apply voucher, end	Shows pet in cart with discounted price

Flow Chart Diagram



Cyclomatic Complexity Calculation

Edges – Nodes + 2

$$7 - 6 + 2 = 3$$