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# Use Cases

For

# PawfectMatch

Version 1.0 approved

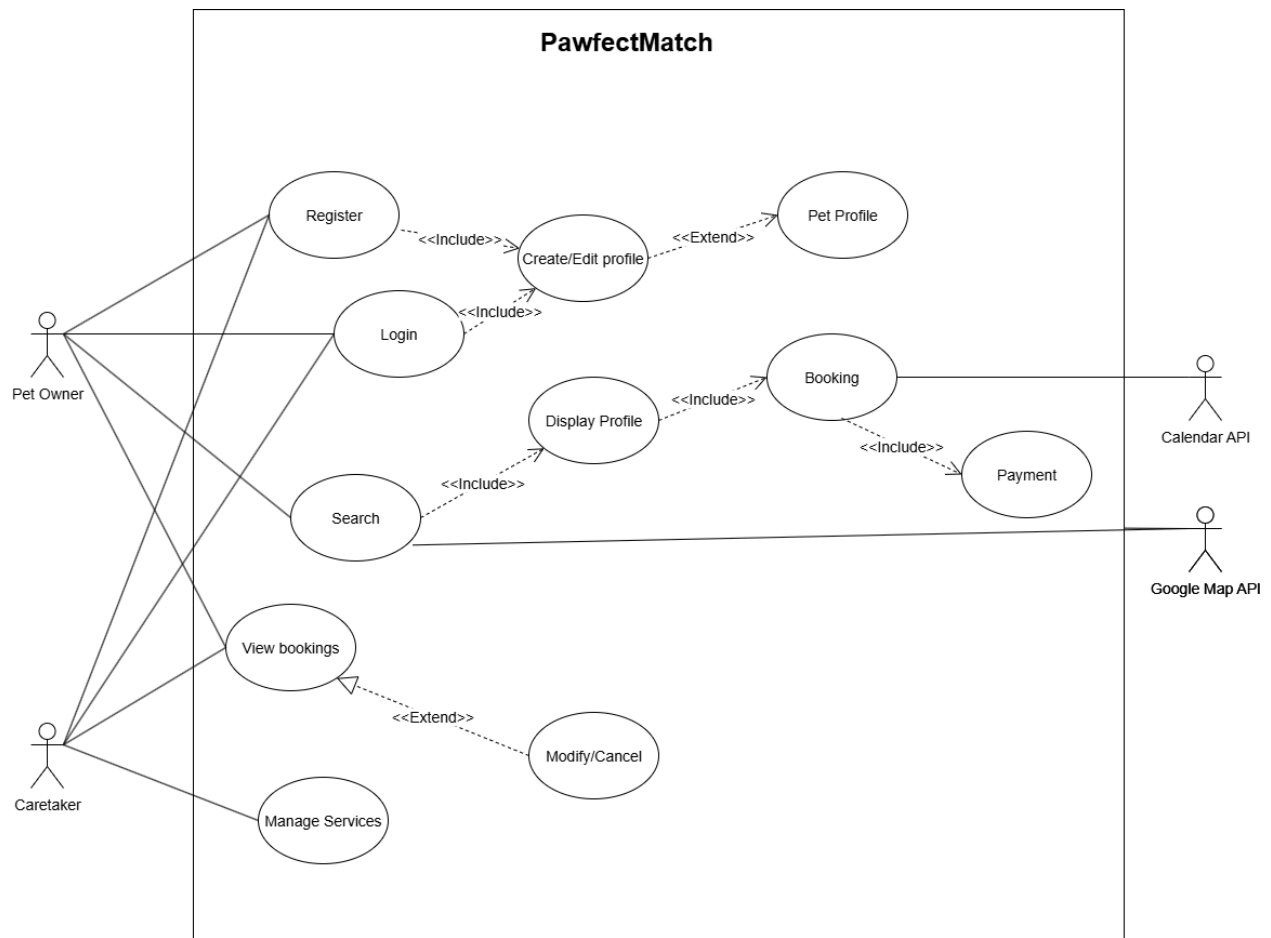
Prepared by Team Pawfection

3/9/25

## Revision History

Name	Date	Reason For Changes	Version
Chan Zi Jian	5/9/25	Preliminary version	1.0

## Use Case Diagram



## Use Cases Description

### 1. Register

Use Case ID:	001		
Use Case Name:	Register		
Created By:	Anthony	Last Updated By:	
Date Created:	5/09/25	Date Last Updated:	

Actor:	Pet Owner, caretaker
Description:	Enables the user to register for an account with the system by inputting an email address, account name and password. With a registered account, users would be able to login and access the system's functions.
Preconditions:	1. The user does not have an account registered in the system.
Postconditions:	1. The user's account information is stored in the system's database.
Priority:	High
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user clicks the "Register Account" button.</li> <li>2. The system prompts the user to enter their email address, account name and password into three separate fields.</li> <li>3. The user enters the email address, account name and password into the respective fields.</li> <li>4. When all three input fields are non-empty, the "Create Account" button becomes clickable.</li> <li>5. The user clicks the "Create Account" button.</li> <li>6. The system verifies if the entered email address is already registered in the system's database.</li> <li>7. If the entered email address is not registered in the system's database, the system verifies if the entered account name is already registered in the system's database.</li> <li>8. If the entered account name is not registered in the system's database, the system checks if the account name is within 6-20 characters.</li> <li>9. If the account name is within 6-20 characters, the system verifies if the entered password meets the password complexity requirements.</li> <li>10. If the entered password meets the password complexity requirements, the system stores the user's verified email address, account name and password in the system's database.</li> <li>11. The system displays the Account Created Message.</li> </ol>

Alternative Flows:	<p>AF-S7: If the entered email address already exists in the system's database</p> <ol style="list-style-type: none"> <li>1. The system displays the error message "Email already exists!".</li> <li>2. The system clears the email address input field.</li> <li>3. The system returns to step 2.</li> </ol> <p>AF-S8: If the entered account name is already registered in the system's database</p> <ol style="list-style-type: none"> <li>1. The system displays the error message "User already exists!".</li> <li>2. The system clears the account name input field.</li> <li>3. The system returns to step 2.</li> </ol> <p>AF-S9: If the entered account name is not within 6-20 characters</p> <ol style="list-style-type: none"> <li>1. The system displays the error message "Your account name should be 6-20 characters long!".</li> <li>2. The system clears the account name input field.</li> <li>3. The system returns to step 2.</li> </ol> <p>AF-S10: If the entered password does not meet the password complexity requirements</p> <ol style="list-style-type: none"> <li>1. The system displays the error message "Invalid Password! Your password should be within 6-512 characters and contain at least 1 uppercase letter, at least 1 special character and at least 1 digit".</li> <li>2. The system clears the password input field.</li> <li>3. The system returns to step 2.</li> </ol>
Exceptions:	
Includes:	
Special Requirements:	
Assumptions:	
Notes and Issues:	
Relevant Functions:	002: Login

## 2. Login

Use Case ID:	002		
Use Case Name:	Login		
Created By:	Anthony	Last Updated By:	
Date Created:	5/09/25	Date Last Updated:	

Actor:	Pet Owner, Caretaker
Description:	All users must login into the system with their login credentials before they can access the system's functions
Preconditions:	<ol style="list-style-type: none"> <li>1. The user has an account registered with the system.</li> </ol>

Postconditions:	<ol style="list-style-type: none"> <li>1. The user logs into the system and accesses the home page.</li> <li>2. The user obtains a reason for why they were unable to login into the system.</li> </ol>
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The system prompts the user to enter an account name and password into the two respective text fields.</li> <li>2. The user enters their account name and password into the text fields.</li> <li>3. When both the text fields are non-empty, the “Login” button becomes clickable.</li> <li>4. The user clicks the “Login” button.</li> <li>5. The system verifies if the account name is registered in the system’s database.</li> <li>6. If the account name is registered in the system’s database, the system verifies if the entered password matches the password associated with the entered account name with the system’s database.</li> <li>7. If the entered password matches the password associated with the entered account name, the system displays the home page.</li> <li>8. The system checks if the user has logged in for the first time.</li> </ol>
Alternative Flows:	<p>AF-S6: If the entered account name is not registered in the system’s database</p> <ol style="list-style-type: none"> <li>1. The system displays the error message “User not found!”.</li> <li>2. The system clears the account name input field.</li> <li>3. The system returns to step 1.</li> </ol> <p>AF-S7: If the entered password does not match the password associated with the entered account name</p> <ol style="list-style-type: none"> <li>1. The system displays the error message “Incorrect Password!”.</li> <li>2. The system clears the password input field.</li> <li>3. The system returns to step 1.</li> </ol>
Exceptions:	
Includes:	
Special Requirements:	
Assumptions:	
Notes and Issues:	

### 3. Create/Edit User Profile

Use Case ID:	003		
Use Case Name:	Create/Edit User Profile		
Created By:	Chan Zi Jian	Last Updated By:	Chan Zi Jian
Date Created:	05/09/25	Date Last Updated:	05/09/25

Actor:	Pet Owner, Caretaker
Description:	Pet Owners can create or update their personal user profile, including details like name, date of birth and gender. Caretakers can create or update their personal user profile including details like work experience, types of services and service rates. This profile enables them to book pet caretakers and manage their interactions on PawfectMatch.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user must be logged into PawfectMatch</li> <li>2. The user must have an internet connection to save pet profile changes</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The user profile is created or updated with the entered details.</li> <li>2. The user's information is saved and able to make bookings and app interactions.</li> </ol>
Priority:	Medium
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user choose if they are creating a Pet Owner or Caretaker profile</li> </ol> <p>If user is a Pet Owner:</p> <ol style="list-style-type: none"> <li>a. The pet owner navigates to the "Profile" section</li> <li>b. The pet owner selects the option to create/edit their user profile</li> <li>c. The pet owner inputs the following details: name, date of birth and gender</li> <li>d. The pet owner submits the profile information</li> <li>e. The app validates the input and save it into the system</li> <li>f. Once successfully updated, a confirmation message will be displayed</li> </ol> <p>If user is a Caretaker:</p> <ol style="list-style-type: none"> <li>a. The caretaker navigates to the "Profile" section</li> <li>b. The caretaker selects the option to create/edit their user profile</li> <li>c. The caretaker inputs the following details: work experience, location</li> <li>d. The caretaker submits the profile information</li> <li>e. The app validates the input and save it into the system</li> <li>f. Once successfully updated, a confirmation message will be displayed</li> </ol>
Alternative Flows:	None
Exceptions:	If the user enters an invalid data (i.e. incorrect format for date or missing required fields), the system displays an error message that prompts the pet owner to correct it before submitting.

Includes:	CreateEditPetProfile
Special Requirements:	None
Assumptions:	The user will update their user profile regularly
Notes and Issues:	None

#### 4. (Create/Edit) Pet Profile

Use Case ID:	004		
Use Case Name:	PetProfile		
Created By:	Chan Zi Jian	Last Updated By:	Chan Zi Jian
Date Created:	5/09/25	Date Last Updated:	5/09/25

Actor:	Pet Owner
Description:	Pet owners create profiles for their pets, including details like species, breed, and care requirements.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user must be logged into PawfectMatch</li> <li>2. The user must have an internet connection to save pet profile changes</li> </ol>
Postconditions:	A pet profile is created or updated with the entered details
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> <li>1. The pet owner navigates to the "Profile" section</li> <li>2. The pet owner selects an option to create or edit a pet profile</li> <li>3. The pet owner inputs the pet details including: name, species, breed, age and health conditions</li> <li>4. The pet owner submits the profile information</li> <li>5. The app validates the information and save into the system</li> <li>6. Once successfully updated, a confirmation message will be displayed</li> </ol>
Alternative Flows:	None
Exceptions:	If the pet owner enters an invalid data (i.e. incorrect format for date or missing required fields), the system displays an error message that prompts the pet owner to correct it before submitting.
Includes:	None
Special Requirements:	None
Assumptions:	Pet Owners will update their pet profile regularly
Notes and Issues:	None

## 5. Search

Use Case ID:	005		
Use Case Name:	Search		
Created By:	Chan Zi Jian	Last Updated By:	Chan Zi Jian
Date Created:	05/09/25	Date Last Updated:	05/09/25

Actor:	Pet Owner
Description:	Pet Owners can search for caretakers based on preferences such as experience, availability, rating, location and type of service.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user must be logged in</li> <li>2. The user must input their search criteria</li> <li>3. Caretaker profiles must exist within the system with required information</li> </ol>
Postconditions:	A list of caretakers is displayed, based on the user's search criteria.
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user navigates to the "Caretakers" section</li> <li>2. The pet owner select their search preferences</li> <li>3. The app check the database for caretakers that matches the criteria</li> <li>4. The app displays a list of caretakers that matches the criteria</li> <li>5. The user can select a caretaker to view their full profile and make a booking</li> </ol>
Alternative Flows:	None
Exceptions:	If no caretakers match the search criteria, the system displays a message and prompt the user to adjust the filter
Includes:	DisplayProfile
Special Requirements:	None
Assumptions:	Caretakers have created profiles with sufficient information to enable search filters.
Notes and Issues:	The user must give PawfectMatch permission to retrieve their location if they want to filter Caretakers based on location

## 6. Display Profile

Use Case ID:	006		
Use Case Name:	DisplayProfile		
Created By:	Chan Zi Jian	Last Updated By:	Chan Zi Jian

Date Created:	05/09/25	Date Last Updated:	05/09/25
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Actor:	Pet Owner, Caretaker
Description:	Displays relevant pet owner/caretaker profiles
Preconditions:	<ol style="list-style-type: none"> <li>1. Pet owners select a caretaker profile after performing a search.</li> <li>2. Caretakers select the pet profile after they are booked by the pet owners.</li> </ol>
Postconditions:	The user is able to view the profile details of either a pet owner and his pet(s) or a caretaker.
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user selects a profile.</li> <li>2. Caretakers can view the profile of the pet owner and his/her pet, which includes their name, the pet's species, breed, age, health conditions and preferences.</li> <li>3. Pet owners can view the profile of the selected caretaker, which includes their introduction, service details and rating and reviews.</li> </ol>
Alternative Flows:	None
Exceptions:	None
Includes:	Booking
Special Requirements:	None
Assumptions:	Users have successfully registered and logged into their accounts.
Notes and Issues:	None

## 7. Booking

Use Case ID:	007		
Use Case Name:	Booking		
Created By:	Chan Zi Jian	Last Updated By:	Chan Zi Jian
Date Created:	05/09/25	Date Last Updated:	05/09/25

Actor:	Pet Owner, Caretaker, Calendar API, Payment System
Description:	The pet owner books an appointment with the caretaker based on their availability.

Preconditions:	<ol style="list-style-type: none"> <li>1. The users have logged in to their accounts and have completed their profile setup.</li> <li>2. The user has viewed the other party's profile and determined them as a suitable match.</li> <li>3. Availability of the caretaker has been checked.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The pet owner confirms the booking, and both parties receive notifications.</li> <li>2. The booking details are updated in the Calendar API.</li> </ol>
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The pet owner selects the caretaker and service they want from the list of available caretakers.</li> <li>2. The pet owner selects a pet that they want to get the service for, if they have more than one pet.</li> <li>3. The system shows the time slots in which the caretaker is still available.</li> <li>4. The pet owner selects a date from the caretaker's availability.</li> <li>5. The pet owner confirms the booking.</li> <li>6. The pet owner pays for the service fee.</li> <li>7. Both the pet owner and caretaker receive notifications once the booking is confirmed.</li> </ol>
Alternative Flows:	None
Exceptions:	App will display an error message because the selected time slot is unavailable due to a system error.
Includes:	Payment
Special Requirements:	None
Assumptions:	None
Notes and Issues:	None

## 8. Payment

Use Case ID:	008		
Use Case Name:	Payment		
Created By:	Chan Zi Jian	Last Updated By:	Chan Zi Jian
Date Created:	05/09/25	Date Last Updated:	05/09/25

Actor:	Pet Owner, Caretaker, Payment System
Description:	Allows Pet Owner to pay the Caretaker for the service the Pet Owner booked

Preconditions:	<ol style="list-style-type: none"> <li>1. The user is logged in</li> <li>2. Pet Owner has booked an appointment for a particular service provided by the Caretaker and thus has an active transaction ready for payment</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The payment is processed successfully</li> <li>2. Payment confirmation is shown to user with payment summary</li> <li>3. Payment history is updated</li> </ol>
Priority:	High
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> <li>1. Pet owner goes to payment page after confirming booking details for a particular service provided by the Caretaker</li> <li>2. Once payment is verified and a successful transaction is made, system displays confirmation message with transaction ID and summary of payment</li> <li>3. App updates both Pet Owner and Caretaker's payment history</li> </ol>
Alternative Flows:	None
Exceptions:	None
Includes:	SendNotifications
Special Requirements:	None
Assumptions:	<ol style="list-style-type: none"> <li>1. The payment method is functional in user's region</li> <li>2. There will be no error during the transaction process</li> </ol>
Notes and Issues:	None

## 9. View Bookings

Use Case ID:	009		
Use Case Name:	ViewBookings		
Created By:	Chan Zi Jian	Last Updated By:	Chan Zi Jian
Date Created:	05/09/25	Date Last Updated:	05/09/25

Actor:	Pet Owner, Caretaker
Description:	Allows users to view their upcoming and past bookings with corresponding user accounts, including relevant details like service selected, date, location and time

Preconditions:	<ol style="list-style-type: none"> <li>1. The user is logged in</li> <li>2. The user has at least one booking made</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The user views a list of their upcoming and past bookings with all relevant details</li> <li>2. The users can view past bookings in “Booking History” section at their profile page under the “General” Section</li> <li>3. The users can view only upcoming bookings in the “Upcoming Bookings” Section found in the Home page of the app</li> </ol>
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user choose to view either upcoming or past bookings: <ol style="list-style-type: none"> <li>1. User goes to Home page in the app and navigates to the “Upcoming Bookings” section</li> <li>2. User goes to the Profile page and navigates to the “Booking History” section</li> </ol> </li> <li>2. App displays a list of the user’s bookings with the details <ol style="list-style-type: none"> <li>1. Service booked</li> <li>2. Date and time of service</li> <li>3. Caretaker’s name and profile (if user is a Pet Owner)</li> <li>4. Pet Owner’s name and Pet profile (if user is a Caretaker)</li> <li>5. Location of service</li> <li>6. Time of service</li> </ol> </li> <li>3. User can select a specific booking from the list for more information of the booking, to view the other party’s profile or to contact the other party via the in-app chat</li> <li>4. User can return to the list or exit the sections</li> </ol>

## 10. Modify/Cancel Bookings

Use Case ID:	010		
Use Case Name:	ModifyCancelBookings		
Created By:	Chan Zi Jian	Last Updated By:	Chan Zi Jian
Date Created:	05/09/25	Date Last Updated:	05/09/25

Actor:	Pet Owner
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Description:	1. Pet owners can modify or cancel an appointment if they change their mind
Preconditions:	An appointment with the pet owner must be booked first
Postconditions:	The appointment will be changed based on the user's choices
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The pet owner navigates to an existing booking to modify or cancel it</li> <li>2. If the pet owner confirms to cancel the booking, it will get deleted from both parties' accounts and notification will be sent to the caretaker</li> <li>3. Otherwise, a screen similar to the create booking screen will appear and the pet owner will make modifications to date or service type</li> <li>4. Once the changes are confirmed, the new date and time will be checked against the caretaker's schedule</li> <li>5. If the caretaker is available, both parties' booking will be updated and the caretaker will receive notification</li> </ol>
Alternative Flows:	AF-1: If user closes the app while editing midway, the details will temporarily be saved
Exceptions:	None
Includes:	None
Special Requirements:	None
Assumptions:	Caretaker will not cancel/modify booking after payment is made by the Pet Owner
Notes and Issues:	None

## 11. Manage services

Use Case ID:	011		
Use Case Name:	Manage Services		
Created By:	Chan Zi Jian	Last Updated By:	Chan Zi Jian
Date Created:	05/09/25	Date Last Updated:	05/09/25

Actor:	Caretaker
Description:	Caretakers manage the services they offer, including setting rates, availability, and descriptions.
Preconditions:	The caretaker is logged in
Postconditions:	Services are updated and available for booking.

Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"><li>1. When a caretaker edits his/her profile, he/she also can also edit his/her services, rates and availability.</li><li>2. When the inputs are updated, the caretaker will be filtered based on the new service types when pet owners look for available events</li></ol>
Alternative Flows:	AF-1: If the caretaker removes a service type while appointments have already been booked based on that service type, a pop-up will warn the caretaker on whether to confirm it, if the caretaker confirms, a notification will be sent to the other party as well to let them know the caretaker is ending such services after this appointment
Exceptions:	None
Includes:	None
Special Requirements:	None
Assumptions:	None
Notes and Issues:	None