



Use case description:

Use case 1	Add/register pet
Summary	Add pet to the Pet Shop or kennel
Actor	Employee
Precondition	
Postcondition	A Pet has been added to pet shop
Base sequence	<p>Enter which business Pet shop or kennel, pet name, different kinds of pets, age, gender and colour and if pet is preowned "recycled" or not. further information based on species of the pet.</p> <p>For dogs and cats, their breed and breeder information</p> <p>For rodents, behavior (if they bite)</p> <p>For fish, whether they live in salt water or fresh water. Whether they are predators or prey.</p> <p>For birds, special dietary needs.</p> <p>For all, comment like "under observation" (for health issues or behavior), so all staff are aware of which animals need special attention.</p> <p>Price if it is pets shop and no price for kennel. ALT1, ALT2,ALT3</p> <p>Check if information is valid based on pet information if not repeat base sequence 1 ALT4</p> <p>When everything is checked out add pets to the shop if they have a price and to the kennel if they don't. ALT 5 ALT8</p> <p>Check for duplication in information [alt6]</p> <p>System approves the action if everything is valid and send a notification [alt9] [alt 7]</p>
Alternate sequence	<p>[ALT0] In step 1, the process can be cancelled ending the use case.</p> <p>[ALT1] Enter which business is the pet belongs to (pet shop or business), name, age, colour, recycled or not.</p> <p>[ALT2] enter species of the pet, and more information based on species.</p> <p>[ALT3] enter comment of the pet.</p> <p>[ALT4] check if all information is correctly set and if not send message "Something is wrong with pet try from beginning" start from [ALT0]</p> <p>[ALT5] check if it's pet shop or kennel and separate based on value of which business and price (if price is 0 add to kennel).</p> <p>[ALT6] if pet has the exact same information as in pet shop list then System shows a message that pet already exist in pet shop. Go to step 1.</p>

	<p>[ALT7] Add pet based on value of which value Business and price.</p> <p>[ALT8] double check if system is separated based on business and price value and if not System shows a message that data is not in right path. Go back to step 1.</p> <p>ALT 9 if everything is correct send a message the pet is registered successfully.</p>
Note	This cover requirements 1,2,3,4,6,14

Use case 2	Managing/Modifying Pet Data		
Summary	Describe how employee at VIAPets can change details of a pet in the pet shop or remove the pet from pet shop when it is sold or if pet is no longer available(dead)		
Actor	Employee		
Precondition	The pet is already in the petshop		
Postcondition	The information about a pet is modified or deleted after a sale or if went to the other side(dead)		
Base sequence	Employee can login to system and find the pet information that needs to change or remove. (ALT1) Employee selects action type: IF MODIFY Pet then go to Scenario A IF remove pet Sells pet then go to Scenario B IF remove the pet except sale then go to Scenario C		
	Scenario A	The changes of the pet, the employee selects the pet info, changes the fields (e.g., change the price, change age, or if it still in the pet shop), and saves the changes. (ALT2) System validates the new information and updates the pet's record. (ALT3) Send a message for confirmation of the action.	
	Scenario B	Pet get removed from pet shop if the pet is sold, employee marks the pet as sold, then he enters sales information like (sale date, customer info). (ALT4) System validates the new information and updates the pet's record. (ALT3) System removes the pet from the available inventory list and logs the sale record. System validates the new information and updates the pet's record. (ALT3) Send a message for confirmation of the action.	
	Scenario C	Removes the pet System validates the new information and updates the pet's record. (ALT3)	

	<table border="1"> <tr> <td></td><td>Send a message for confirmation of the action.</td></tr> </table> <p>System validates the new information and updates the pet's record. (ALT3)</p> <p>Send a message for confirmation of the action.</p>		Send a message for confirmation of the action.
	Send a message for confirmation of the action.		
Alternate sequence (ALT)	<p>If system couldn't find the pet because for upper or lower case letter force all pet first name letter to be upper case letter. and then try again</p> <p>If system couldn't modify because the information isn't same type as required send message that I numbers can't stored as letters. Please try again</p> <p>If there is an error let the employ try again</p> <p>If removing pet is not count as sold then ignore sale date, customer information and final price and send a message the pet is not sold (probably dead)</p>		
Note	This cover requirement 5,7,15,16,		

Use case 3	Making a reservation
Summary	Create a new kennel reservation for a customer's pet
Actor	Employee
Precondition	<ul style="list-style-type: none"> • System is operational • Space is available in the kennel (max 10 pets) • Customer and pet data exists in system
Postcondition	<ul style="list-style-type: none"> • New reservation is created and stored in system files • Kennel availability is updated • Website availability information is automatically updated • All validation rules are satisfied
Base sequence	<ol style="list-style-type: none"> 1. System shows current kennel availability. 2. Employee enters desired reservation period [ALT1] 3. System displays availability for specified period [ALT2] 4. Employee searches for customer [ALT3] 5. System displays customer's registered pets [ALT4] 6. Employee selects pet for boarding [ALT5] 7. System validates the booking: <ul style="list-style-type: none"> • Pet registration status • Existing reservations 8. Employee confirms booking details 9. System creates reservation and stores in files [ALT6]

	<p>10. System generates confirmation and updates availability display</p> <table border="1" data-bbox="435 268 1385 1008"> <tr> <td data-bbox="435 268 646 651"> Scenario A. NEW CUSTOMER </td><td data-bbox="646 268 1385 651"> A.1. Employee selects "Register New Customer" A.2. Employee enters customer details: Name, Email, Phone number A.3. System validates contact information A.4. System saves customer data A.5. Return to base sequence step 5 </td></tr> <tr> <td data-bbox="435 651 646 1008"> Scenario B. NEW PET </td><td data-bbox="646 651 1385 1008"> B.1. Employee selects "Register New Pet" B.2. Employee enters pet details following registration requirements B.3. System validates pet data B.4. System links pet to customer B.5. Return to base sequence step 6 </td></tr> </table>	Scenario A. NEW CUSTOMER	A.1. Employee selects "Register New Customer" A.2. Employee enters customer details: Name, Email, Phone number A.3. System validates contact information A.4. System saves customer data A.5. Return to base sequence step 5	Scenario B. NEW PET	B.1. Employee selects "Register New Pet" B.2. Employee enters pet details following registration requirements B.3. System validates pet data B.4. System links pet to customer B.5. Return to base sequence step 6
Scenario A. NEW CUSTOMER	A.1. Employee selects "Register New Customer" A.2. Employee enters customer details: Name, Email, Phone number A.3. System validates contact information A.4. System saves customer data A.5. Return to base sequence step 5				
Scenario B. NEW PET	B.1. Employee selects "Register New Pet" B.2. Employee enters pet details following registration requirements B.3. System validates pet data B.4. System links pet to customer B.5. Return to base sequence step 6				
Alternative sequence (branch for exception)	<p>- [*ALT0]: Process can be cancelled at any step. Use case ends.</p> <p>[ALT1]: If dates invalid:</p> <ol style="list-style-type: none"> 1. System shows error message 2. System highlights valid date range 3. Return to step <p>[ALT2]: If no space available:</p> <ol style="list-style-type: none"> 1. System shows next available dates 2. Employee can choose alternate dates or end use case <p>[ALT3]: Customer search options:</p> <ol style="list-style-type: none"> 1. Search by name 2. Search by phone 3. Search by email 4. If not found, go to Scenario A <p>[ALT4]: If customer has no registered pets:</p> <ol style="list-style-type: none"> 1. System shows warning 2. Option to go to Scenario B 				

	[ALT5]: System validates pet status: <ol style="list-style-type: none"> 1. Checks if pet is already booked 2. Checks for health flags/special needs [ALT6]: File storage validation: <ol style="list-style-type: none"> 1. Verify write success 2. Create backup 3. Update website data
Note	Covers requirements 7, 8, 9, 10, 15, 18

Use case 4	Managing an existing reservation
Summary	Modify, cancel, or update an existing kennel reservation
Actor	Employee
Precondition	Reservation exists in system Reservation data stored in files Customer and pet data available
Postcondition	Reservation updated in system files Kennel availability reflects changes Website automatically updated All modification rules satisfied
Base sequence	<ol style="list-style-type: none"> 1. System displays reservation list with filtering options: <ul style="list-style-type: none"> By date range By customer name By status [ALT1] 2. Employee selects reservation [ALT2] 3. System shows detailed reservation information: <ul style="list-style-type: none"> Booking dates Customer details Pet information Special requirements Current status 4. Employee selects action type:

	IF MODIFY DATES then go to Scenario A IF MODIFY DETAILS then go to Scenario B IF CANCEL then go to Scenario C IF ADD NOTES then go to Scenario D	
	Scenario A. MODIFY DATES	A.1. Employee enters new desired dates A.2. System checks availability [ALT3] A.3. System validates against booking limits A.4. System updates reservation dates A.5. System updates information
	Scenario B. MODIFY DETAILS	B.1. Employee selects information to modify: Customer contact details Pet information Special requirements B.2. Employee enters new information B.3. System validates changes B.4. System updates reservation B.5. System updates information
	Scenario C. CANCEL	C.1. Employee confirms cancellation [ALT4] C.2. System checks cancellation policy C.3. System updates reservation status C.4. System frees up kennel space C.5. System updates information and website
	Scenario D. ADD NOTES	D.1. Employee enters new note/observation D.2. System adds comments to the pet D.3. System updates the information
Alternative sequence	[*ALT0]: Process can be cancelled at any step [ALT1]: Filtering options:	

	<ol style="list-style-type: none"> 1. By date range 2. By customer name/phone 3. By pet name 4. By status <p>[ALT2]: If reservation not found:</p> <ol style="list-style-type: none"> 1. System offers additional search options 2. Option to view cancelled reservations 3. Option to end use case <p>[ALT3]: If new dates are unavailable:</p> <ol style="list-style-type: none"> 1. System shows next available dates 2. Option to waitlist 3. Option to keep current dates <p>[ALT4]: Cancellation validation:</p> <ol style="list-style-type: none"> 1. Check notice period 2. Verify employee authorization 3. Option to add cancellation reason <p>[ALT5]: File system operations:</p> <ol style="list-style-type: none"> 1. Verify write success 2. Update information.
Note	Covers requirements 5, 6, 11, 16 and non-functional requirements 1, 2

Use case 5	Add customer
Summary	Add a new customer record
Actor	Employee
Precondition	
Postcondition	A new customer has been added to the system (and file)
Base sequence	<p>Enter values of the customer's name, email address (in this format: user@host.domain) and unique phone number</p> <p>System validates data. [ALT3, ALT4]</p> <p>System adds a new customer with the given data to the list and a file.</p> <p>System shows a success message.</p>
Alternate sequence (branch or exception)	<p>[*ALT0]: The process can be canceled at all steps, ending the use case.</p> <p>[ALT3]: If name is not a string with at least 2 characters representing first name, a space and at least 2 characters representing last name or if the Phone number is not a number, or birthday doesn't represent a legal day, month and year, then System shows a message that data is invalid. Go to step 1.</p> <p>[ALT4]: If Phone number is identical to the Phone number for another customer in the customer list, then System show a message that phone already exist. Go to step 1.</p>
Note	<p>A Customer record can be created only with Name and Phone number, but optionally also with Email and Address.</p> <p>This use case covers requirements:</p> <p>Functional(15)</p> <p>Non-Functional(3)</p>

Use case 6	Manage an existing Customer's data				
Summary	Show, Edit or remove a customer record.				
Actor	Employee				
Precondition	System cannot manage data if data is not registered in the system.				
Postcondition	Data for an existing customer has been shown or updated or an existing customer has been removed from the list. Updates are both in system and file.				
Base sequence	<p>System show a list of all Customers, each element with at least Name, Phone number and Email. [ALT1]</p> <p>Select a customer</p> <p>System show customer data</p> <p> Name</p> <p> Phone number</p> <p> Email</p> <p> Address {Town, Street, Number, Letter, Floor, Door}</p> <p> Birthday {Day, Month, Year}</p> <p>IF SHOW then end the use case</p> <p>IF EDIT then go to Scenario A. EDIT (step A.1),</p> <p>IF REMOVE then go to Scenario B. REMOVE (step B.1)</p> <table border="1"> <tr> <td>Scenario A. Edit</td><td>A.1. Enter/edit values for one or more of the data shown in step 3 A.2 Approve the updated data A.3 System validates data [ALT2, ALT3, ALT4, ALT5, ALT6, ALT7, ALT8] A.3. System show the customer data (as in step 3) and update system and file</td></tr> <tr> <td>Scenario B. Remove</td><td>B.1. Verify removing B.2. The system removes the customer from the list [ALT9] B.3. System shows that the customer has been removed and updates system and file</td></tr> </table>	Scenario A. Edit	A.1. Enter/edit values for one or more of the data shown in step 3 A.2 Approve the updated data A.3 System validates data [ALT2, ALT3, ALT4, ALT5, ALT6, ALT7, ALT8] A.3. System show the customer data (as in step 3) and update system and file	Scenario B. Remove	B.1. Verify removing B.2. The system removes the customer from the list [ALT9] B.3. System shows that the customer has been removed and updates system and file
Scenario A. Edit	A.1. Enter/edit values for one or more of the data shown in step 3 A.2 Approve the updated data A.3 System validates data [ALT2, ALT3, ALT4, ALT5, ALT6, ALT7, ALT8] A.3. System show the customer data (as in step 3) and update system and file				
Scenario B. Remove	B.1. Verify removing B.2. The system removes the customer from the list [ALT9] B.3. System shows that the customer has been removed and updates system and file				

	Use case ends.
Alternate sequence (branch or exception)	<p>[*ALT0]: The process can be canceled at all steps, ending the use case.</p> <p>[ALT1] Enter part of the customer's name or phone number and System show a list of the customers with the input as part of their name or phone number.</p> <p>[ALT2] If name is not a string with at least 2 characters representing first name, a space and at least 2 characters representing last name or if the Phone number is not a number, then System show a message that data is invalid. Go to step A.1.</p> <p>[ALT3] If Phone number is identical to the Phone number for another customer in the customer list, then System show a message that phone already exist. Go to step A.1.</p> <p>[ALT4] IF customer's Email is not empty or in the format "user@host.domain", then system show a message about wrong email format. Go to step A.1</p> <p>[ALT5] IF customer's Address is not empty or in the format {Town, Street, Number, Letter, Floor, Door}, with Number being a number, Letter being empty or a character, and the remaining being strings, then system show a message about wrong format in address. Go to step A.1</p> <p>[ALT6] IF Birthday do not represent a legal day with day, month and year, then system show a message about wrong date format. Go to step A.1</p> <p>[ALT9] IF the customer attempted to remove has any reservations(if any reservations for this customer has status "Waiting" or Started"), then system show a message stating that a customer with reservations cannot be removed, and End the use case.</p>

Note	<p>A customer cannot be removed if he/she is part of one or more reservations in the reservation list. Instead, these reservations have to be ended or removed first.</p> <p>This use case covers requirements: Functional(16, 17) Non-Functional(3)</p>
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Use case 7	Make a sale
Summary	The employee makes a sale and determines the final price
Actor	Employee
Precondition	There should be a pet (to be sold) and a customer (the future owner)
Postcondition	the pet is sold to the customer, and the sale is registered in the sales log
Base sequence	<p>The employee chooses the pet (to be sold)</p> <p>The employee makes a discount (if necessary) [ALT1]</p> <p>The sale is validated by the system and registered in the log</p>
Alternate sequence (branch or exception)	[ALT0*]: the use case can be canceled at any point and the system returns to the main page.
Note	

Use case 8	Display a sales log
Summary	A sales log contains all sales
Actor	Employee
Precondition	
Postcondition	The employee must be a able to display a list of all registered sales
Base sequence	<ul style="list-style-type: none"> -The employee displays the log of sales - Details of each sale: <ul style="list-style-type: none"> the pet. the customer that bought the pet. the final price.
Alternate sequence (branch or exception)	
Note	The employee can only display the log of sales, and cannot change anything about any of the sales

Use case 9	View a website to display information	
Summary	A website that displays static data in addition to check the availability of the kennel	
Actor	Customer	
Precondition		
Postcondition	The customer can see: <ul style="list-style-type: none"> - The available pets for sale - The available spots in the kennel - The employees working in VIAPets - History of the shop, and the concept of Pet Recycling 	
Base sequence	Scenario A	<ul style="list-style-type: none"> - Open Pet shop - Display all the available pets for sale
	Scenario B	<ul style="list-style-type: none"> - Open Kennel - Insert a start date - Insert an end date - Click on check availability to display how many available spots in the Kennel
Alternate sequence (branch or exception)		
Note	The files that are updated using the application, will be read and updated automatically by the website.	

Link table between requirements and use cases

Requirements	Use cases
1, 2, 3, 4, 19	Adding a pet
12, 14, 18	Managing a pet data
5, 7, 8, 9, 10,	Make a Reservation
5, 6, 7, 11	Managing an existing reservation
15	Add a Customer
16, 17	Managing an existing customer's information
3, 13	Make a Sales Log
12	Display a Sales Log
20, 21, 22	View a website to display information