

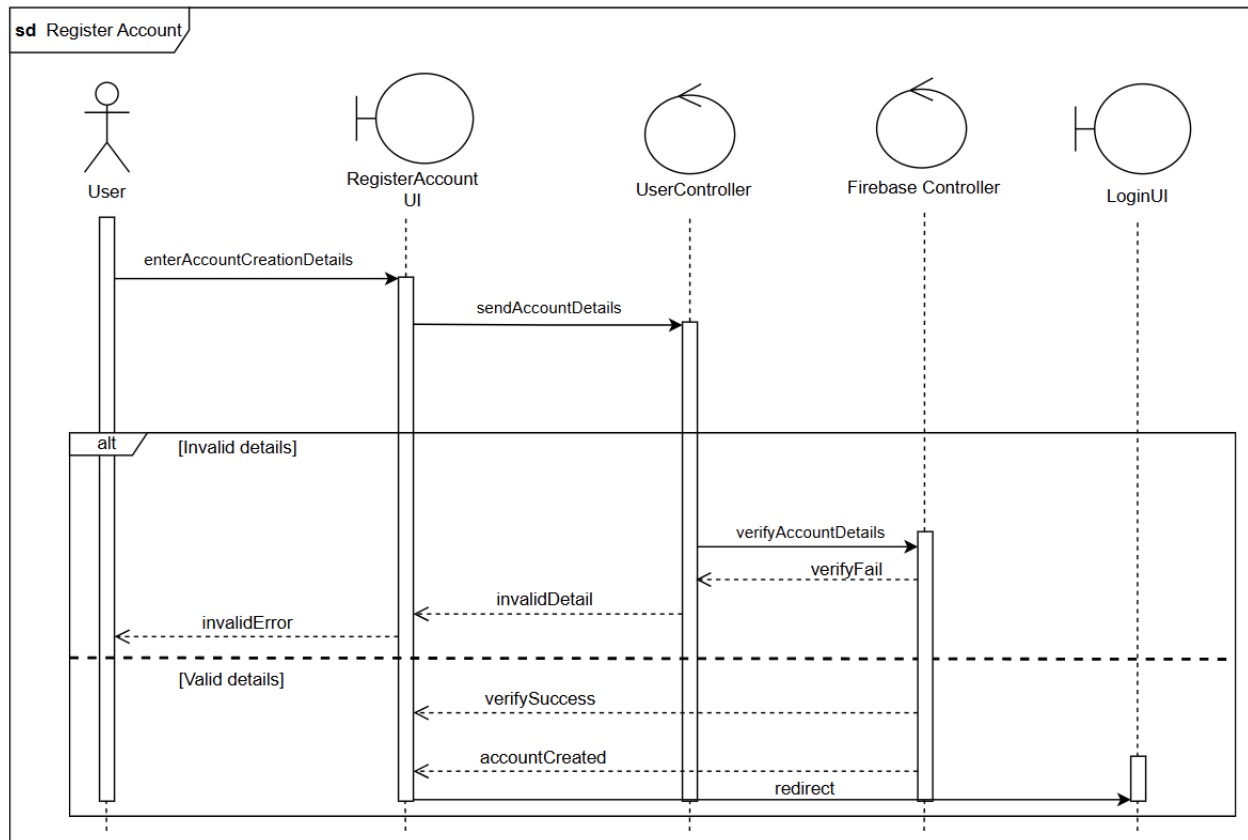
## Use Case Descriptions

### Register

Use Case ID:	1		
Use Case Name:	Register Account		
Created By:	Keng Jia Chi	Last Updated By:	Keng Jia Chi
Date Created:	25th August 2024	Date Last Updated:	25th August 2024

Actor:	User
Description:	Allows first time users to create an account in PetCare application.
Preconditions:	<ol style="list-style-type: none"><li>1. The email address given is not registered in the system.</li><li>2. The user must have access to a functional email account.</li></ol>
Postconditions:	An account is successfully created for the user.
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"><li>1. The system allows the user to register with Email and password.</li><li>2. The user chooses to register with email and password.</li><li>3. The system requests the user to input the following information fields:<ol style="list-style-type: none"><li>a. Name</li><li>b. Email address</li><li>c. Password</li><li>d. Confirm Password</li></ol></li><li>4. The user selects the "Register" button.</li><li>5. The system validates the required fields.</li><li>6. If the user's details are valid, a PetCare account will be successfully created.</li><li>7. The system redirects the user to the PetCare application login page.</li></ol>
Alternative Flows:	<p>AF-S6: If username is taken by another user</p> <ol style="list-style-type: none"><li>1. The system will display "Username already exists."</li><li>2. System returns to Step 3.</li></ol> <p>AF-S6: If email address is already in database</p> <ol style="list-style-type: none"><li>1. The system will display "Email address is already in use."</li><li>2. System returns to Step 3.</li></ol> <p>AF-S6: If the password does not meet the complexity requirements.</p> <ol style="list-style-type: none"><li>1. The system will display "Invalid password" with password guidelines to the user.</li><li>2. System returns to Step 3.</li></ol> <p>AF-S6: If password is not the same as confirm password.</p> <ol style="list-style-type: none"><li>1. The system will display "Password and confirm password is different".</li><li>2. System returns to Step 3.</li></ol>
Exceptions:	None

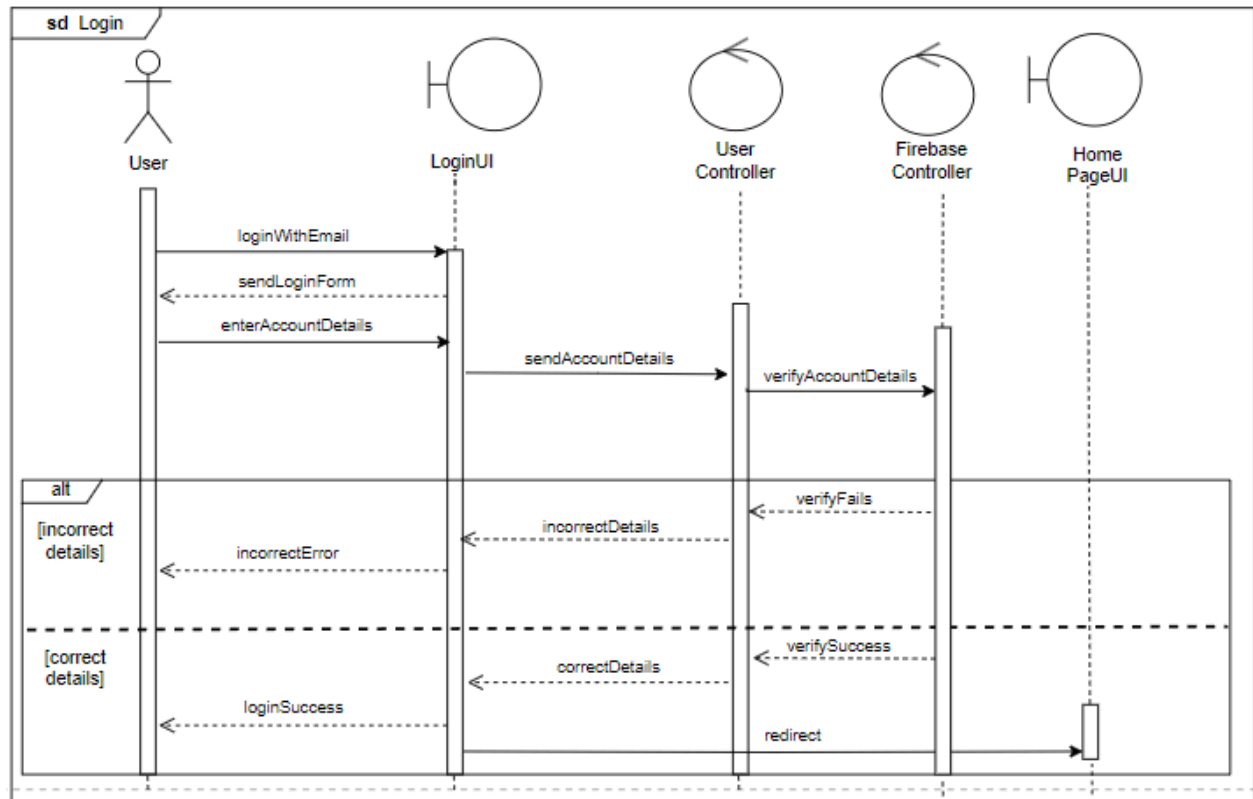
Includes:	None
Special Requirements:	The system needs to validate user input data.
Assumptions:	None
Notes and Issues:	None



## Login

Use Case ID:	2		
Use Case Name:	Login		
Created By:	Keng Jia Chi	Last Updated By:	Keng Jia Chi
Date Created:	25th August 2024	Date Last Updated:	25th August 2024

Actor:	User
Description:	Allows users to login into their PetCare account using their email and password.
Preconditions:	User has registered for an account.
Postconditions:	User is logged into the PetCare application and is navigated to the home screen of the application.
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The system allows the user to login with Email and password.</li> <li>2. The user inputs his/her email and password.</li> <li>3. The user selects the "Login" button.</li> <li>4. If the user's login credentials are valid, the system will direct the user to PetCare's home page.</li> </ol>
Alternative Flows:	AF-S3: If the user's login credentials are invalid <ol style="list-style-type: none"> <li>1. The system shall display "Incorrect email or password" to the user.</li> <li>2. The system returns to Step 1.</li> </ol>
Exceptions:	None
Includes:	None
Special Requirements:	None
Assumptions:	The user has an existing PetCare account
Notes and Issues:	None

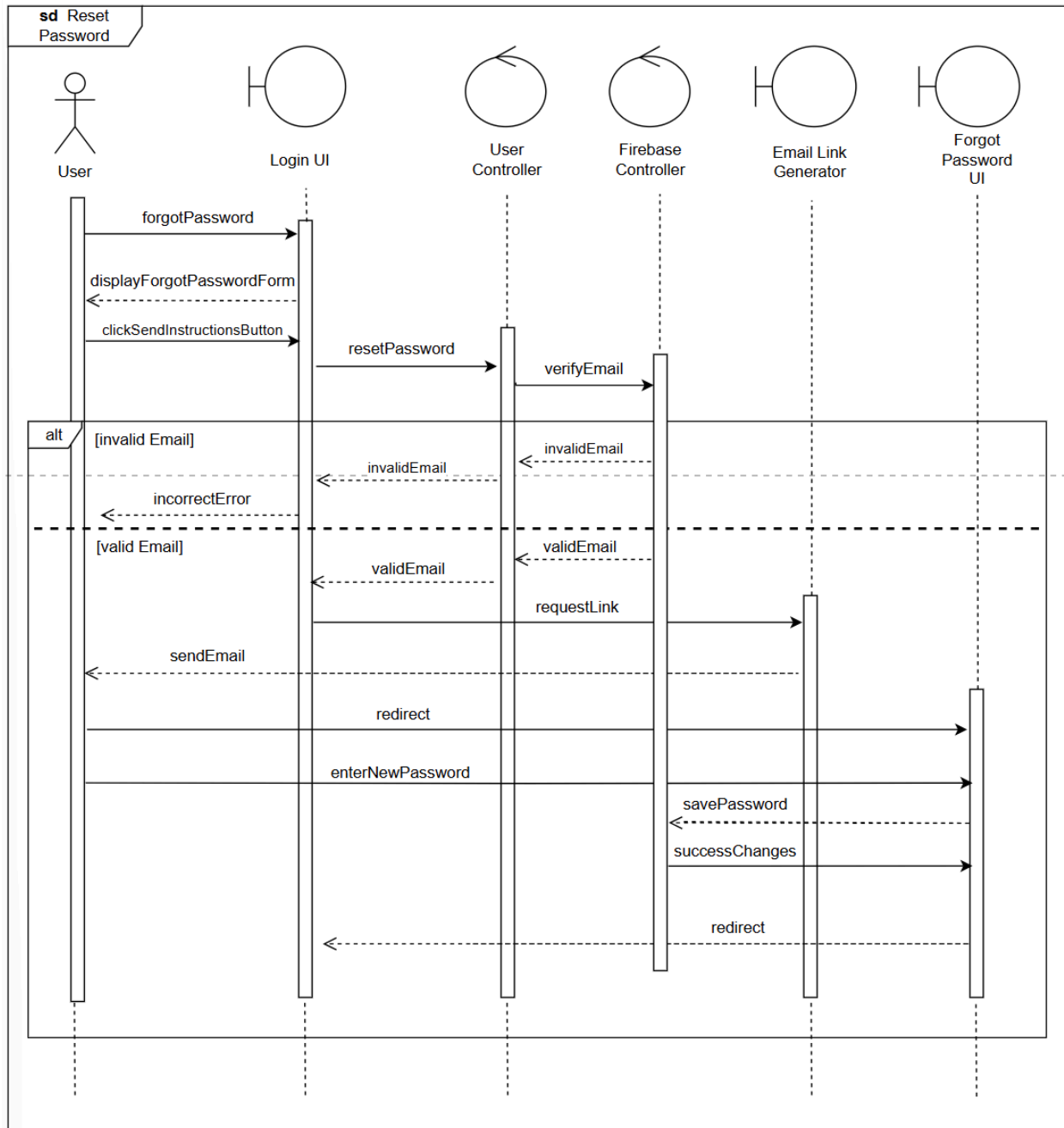


## Reset Password

Use Case ID:	3		
Use Case Name:	Reset Password		
Created By:	Keng Jia Chi	Last Updated By:	Keng Jia Chi
Date Created:	25th August 2024	Date Last Updated:	25th August 2024

Actor:	User
Description:	Allows users to reset their password when they have forgotten it or need to change it for security reasons.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user has an existing PetCare account.</li> <li>2. The user must have access to the email address associated with their PetCare account.</li> <li>3. The user must have access to their email account.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The user password is successfully reset.</li> <li>2. The user can log in with the new password</li> </ol>
Priority:	High
Frequency of Use:	Moderate
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user clicks on the "Forgot Password" button.</li> <li>2. The system displays the password reset page.</li> <li>3. The user enters their registered email address.</li> <li>4. If the email address is valid, the system sends a password reset link to the user's email.</li> <li>5. The user clicks on the reset link in their email.</li> <li>6. The system displays a new password creation page.</li> <li>7. The user enters a new password and confirms it.</li> <li>8. If the password meets the complexity requirements, the system updates the user's password in the database.</li> <li>9. The system shall display "Password reset successfully" to the user.</li> <li>10. The user is redirected to the login page.</li> </ol>
Alternative Flows:	<p>AF-S4: The user's email address is invalid</p> <ol style="list-style-type: none"> <li>1. The system will display "Invalid email address" to the user.</li> <li>2. The system will prompt the users to re-enter their email address.</li> <li>3. The system returns to Step 3.</li> </ol> <p>AF-S8: The user's password does not meet the complexity requirements</p> <ol style="list-style-type: none"> <li>1. The system will display "Invalid password" with password guidelines to the user.</li> <li>2. The system will prompt the users to enter a new password.</li> <li>3. The system returns to Step 7.</li> </ol>
Exceptions:	<ol style="list-style-type: none"> <li>1. The password reset link expires before the user clicks on it.</li> </ol>
Includes:	None
Special Requirements:	<ol style="list-style-type: none"> <li>1. The password reset link should expire after 24 hours.</li> <li>2. The new password must meet the system's complexity</li> </ol>

	requirements.
Assumptions:	1. The user has access to their registered email account.
Notes and Issues:	None

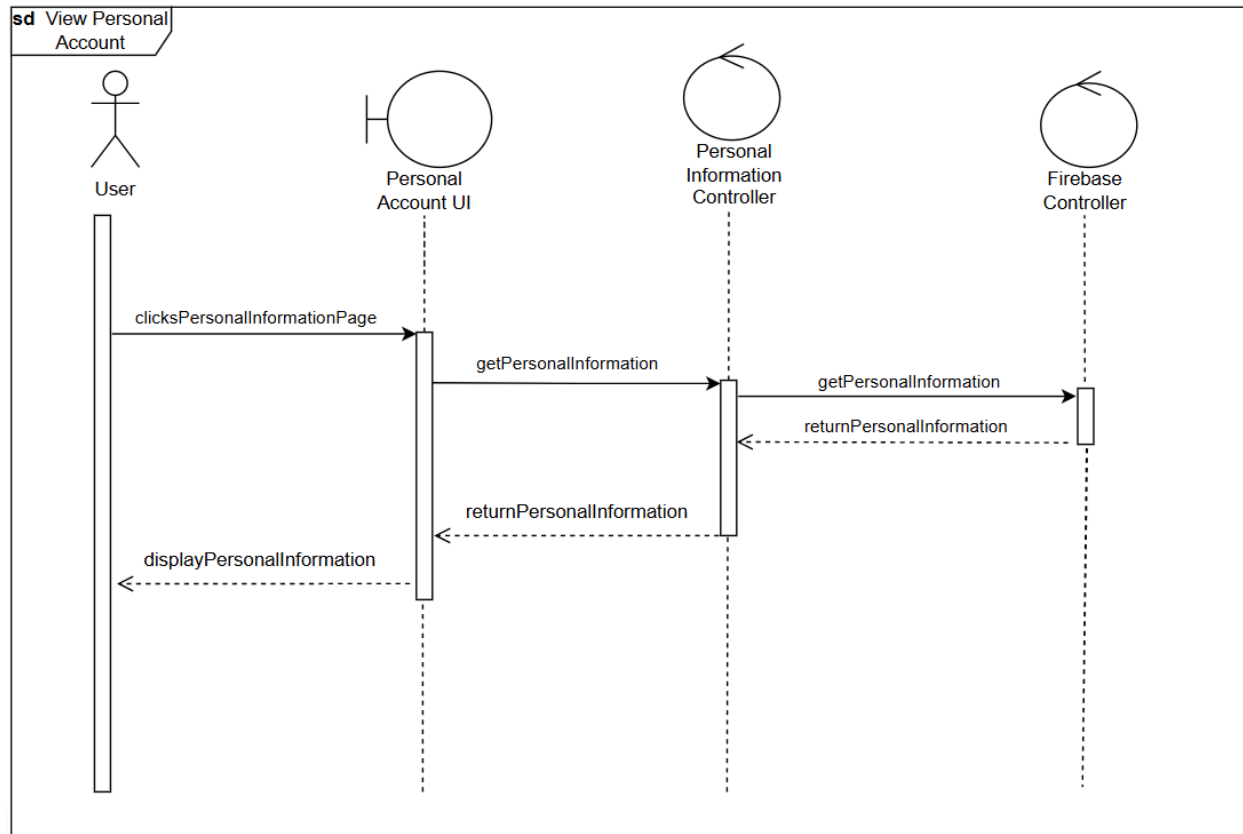


## View Personal Account

Use Case ID:	4		
Use Case Name:	View Personal Account		
Created By:	Keng Jia Chi	Last Updated By:	Keng Jia Chi
Date Created:	25th August 2024	Date Last Updated:	25th August 2024

Actor:	User
Description:	Allow users to view their personal account information.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user is logged into their account.</li> <li>2. The user has navigated to the Account Information page.</li> </ol>
Postconditions:	The user's account information is displayed.
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user selects the "Personal Account" page.</li> <li>2. The system retrieves the user's information from the database.</li> <li>3. The system displays the following information: <ol style="list-style-type: none"> <li>a. Name</li> <li>b. Email address</li> <li>c. Phone number</li> <li>d. Address</li> </ol> </li> <li>4. The user can edit their information using the included use case Edit Information.</li> <li>5. The user logs out from their existing account using the included use case Log Out.</li> </ol>
Alternative Flows:	None
Exceptions:	None
Includes:	<ol style="list-style-type: none"> <li>1. Edit Information</li> <li>2. Log Out</li> </ol>
Special Requirements:	None
Assumptions:	None
Notes and Issues:	None

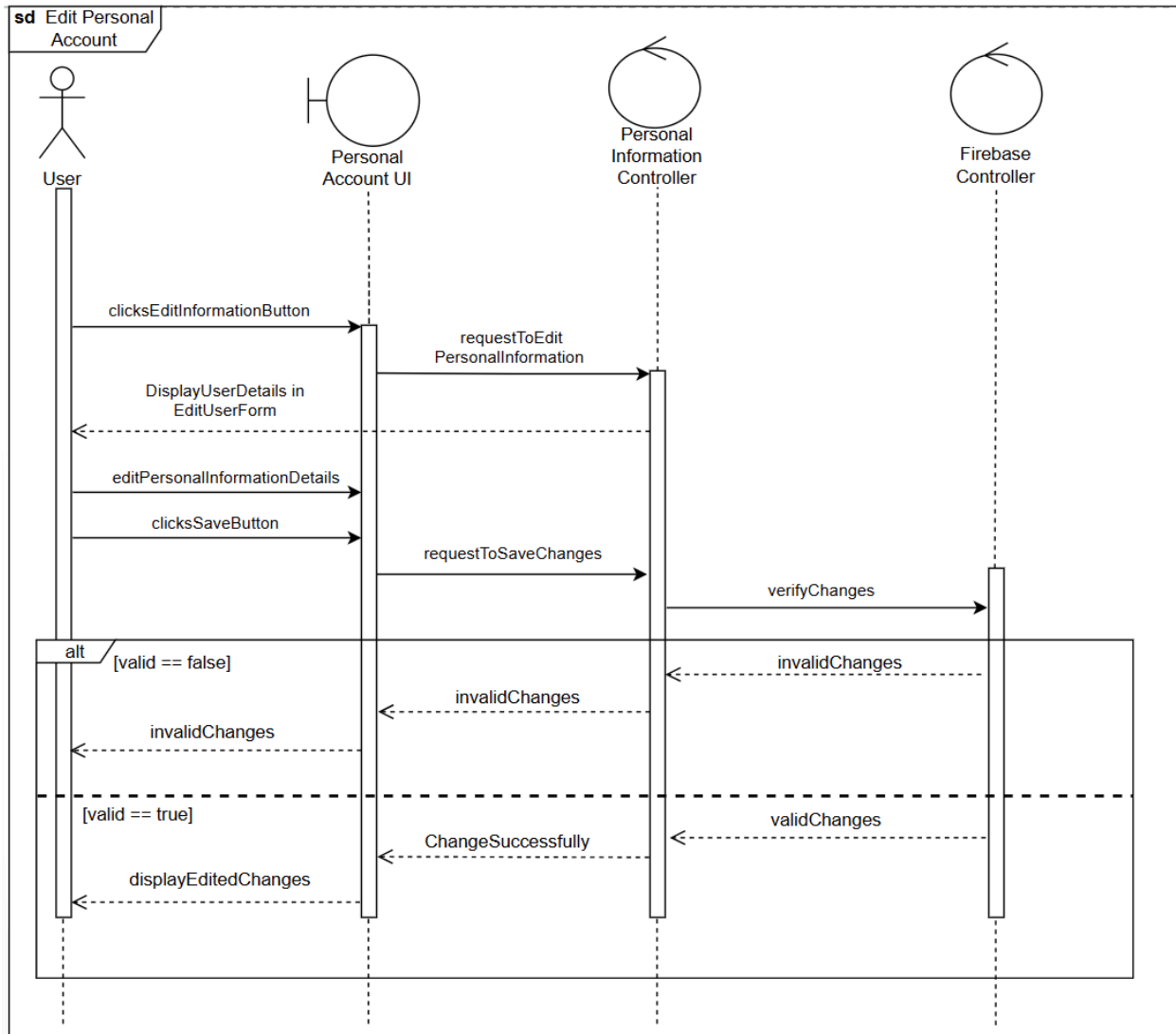




## Edit Personal Information

Use Case ID:	5		
Use Case Name:	Edit Personal Account		
Created By:	Keng Jia Chi	Last Updated By:	Keng Jia Chi
Date Created:	25th August 2024	Date Last Updated:	25th August 2024

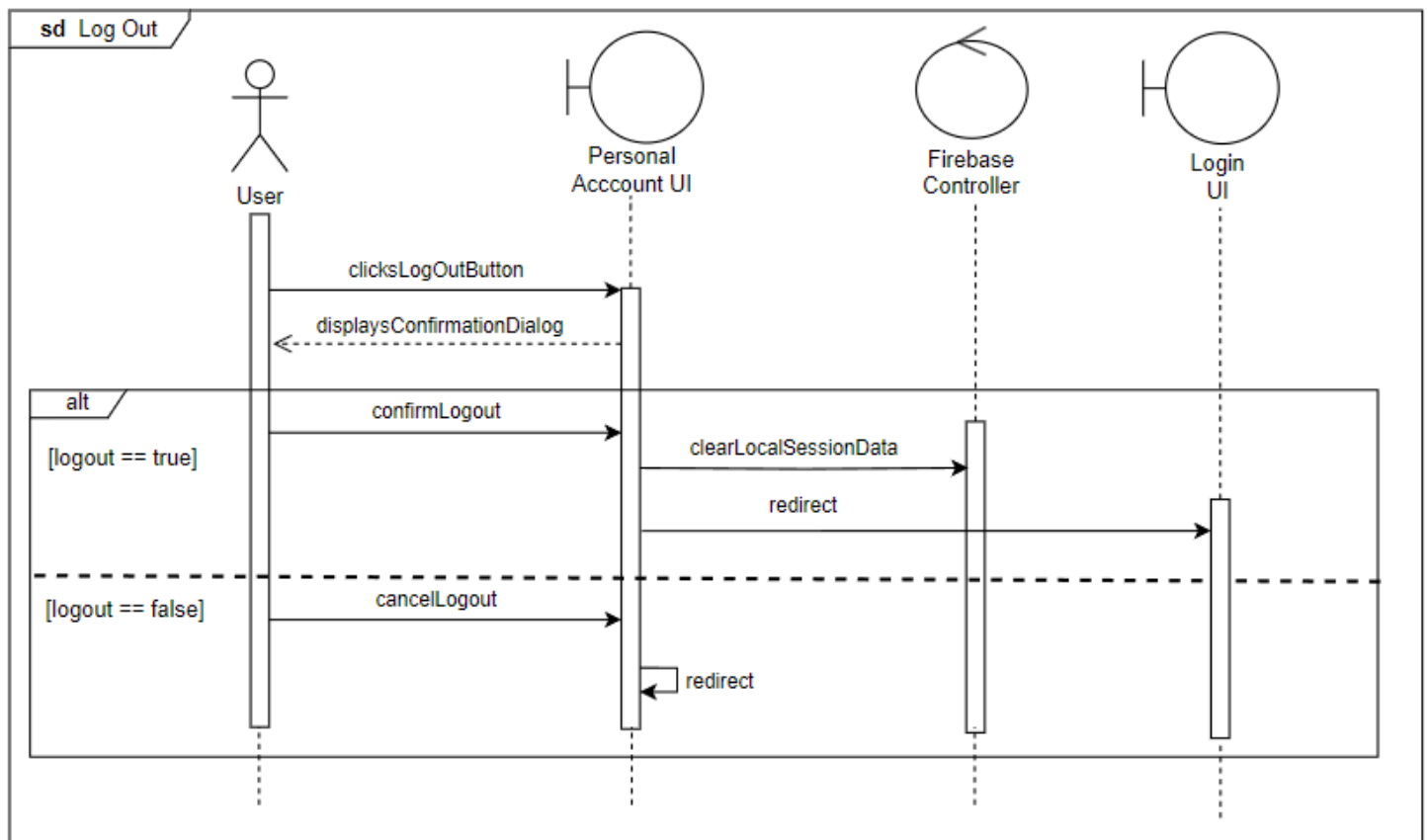
Actor:	User
Description:	Allow users to edit their personal account information.
Preconditions:	1. The user has navigated to the Account Information page.
Postconditions:	The user's account information is updated with the new details.
Priority:	Medium
Frequency of Use:	Medium
Flow of events:	<ol style="list-style-type: none"> <li>1. The user clicks the "Edit Information" button.</li> <li>2. The system makes the field editable.</li> <li>3. The user enters the new information.</li> <li>4. The user clicks the "Save" button.</li> <li>5. The system validates the new information.</li> <li>6. If valid, the system updates the database with the new information.</li> <li>7. The system displays an "Information update successfully" message to the user and shows the updated information.</li> </ol>
Alternative Flows:	AF-S6: Information is invalid <ol style="list-style-type: none"> <li>1. The system displays an error message.</li> <li>2. The user is prompted to correct the information.</li> <li>3. Return to step 3.</li> </ol>
Exceptions:	None
Includes:	None
Special Requirements:	None
Assumptions:	None
Notes and Issues:	None



## Log Out

Use Case ID:	6		
Use Case Name:	Log Out		
Created By:	Keng Jia Chi	Last Updated By:	Keng Jia Chi
Date Created:	25th August 2024	Date Last Updated:	25th August 2024

Actor:	User
Description:	Allows users to securely log out of their account.
Preconditions:	1. The user has navigated to the Personal Account Information page.
Postconditions:	The user is logged out of their account
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user clicks the "Log Out" button.</li> <li>2. The system displays a confirmation dialog.</li> <li>3. The user confirms the logout action.</li> <li>4. The system terminates the user's session.</li> <li>5. The system clears any local session data.</li> <li>6. The system redirects the user to the login page..</li> </ol>
Alternative Flows:	AF-S3: The user cancels log out <ol style="list-style-type: none"> <li>1. The user clicks "Cancel" on the confirmation dialog.</li> <li>2. The system closes the dialog.</li> </ol>
Exceptions:	None
Includes:	None
Special Requirements:	None
Assumptions:	None
Notes and Issues:	None



## View Home Page

Use Case ID:	7		
Use Case Name:	View Home Page		
Created By:	Jasmine Tye	Last Updated By:	Jasmine Tye
Date Created:	25th August 2024	Date Last Updated:	25th August 2024

Actor:	User
Description:	The Home page provides a comprehensive view of relevant information to the user. It displays details about the user's pets, shows new pets available for adoption in shelters, provides information about nearby amenities related to pet care, and includes a news article carousel featuring top pet-related articles.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user must have PetCare installed</li> <li>2. The user must be logged in and authenticated.</li> <li>3. The user has granted location permissions to the app.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The Home page displays a personalised view including: <ol style="list-style-type: none"> <li>a. The user's pets with details like name and photos.</li> <li>b. Pet's related article</li> </ol> </li> </ol>
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user opens PetCare and navigates to the Home page.</li> <li>2. PetCare retrieves and displays the user's registered pets, showing each pet's name and image under the "My Pets" section.</li> <li>3. PetCare displays a "+" icon to allow the user to add a new pet profile: <ul style="list-style-type: none"> <li>- If there are registered pets, PetCare displays each pet's image with a "+" icon.</li> <li>- If there are no registered pets, PetCare displays only the "+" icon.</li> </ul> </li> <li>4. The user can tap on a pet's image or name to view, edit, or delete the pet's details.</li> <li>5. PetCare retrieves and displays a news article carousel to showcase top pet-related articles.</li> <li>6. Petcare automatically rotates the carousel every 5 seconds.</li> <li>7. The user can manually swipe through the articles or tap on an article to view its full content.</li> <li>8. PetCare provides a "See All" button above the news carousel, allowing the user to navigate to the "Browse Articles" page to view all articles.</li> <li>9. PetCare displays a bottom navigation bar with icons that redirect the user to different sections on tap: <ol style="list-style-type: none"> <li>a. Missing Pets: Redirects to the "Missing Pets" page.</li> <li>b. Secondhand Items: Redirects to the "Secondhand Items" page.</li> <li>c. Explore Pet-Care Amenities: Redirects to the "Explore Pet-Care Amenities" page.</li> <li>d. Personal Account: Redirects to the "Personal Account" page.</li> <li>e. Adoption Center: Redirects to the "Adoption Center" page.</li> </ol> </li> </ol>

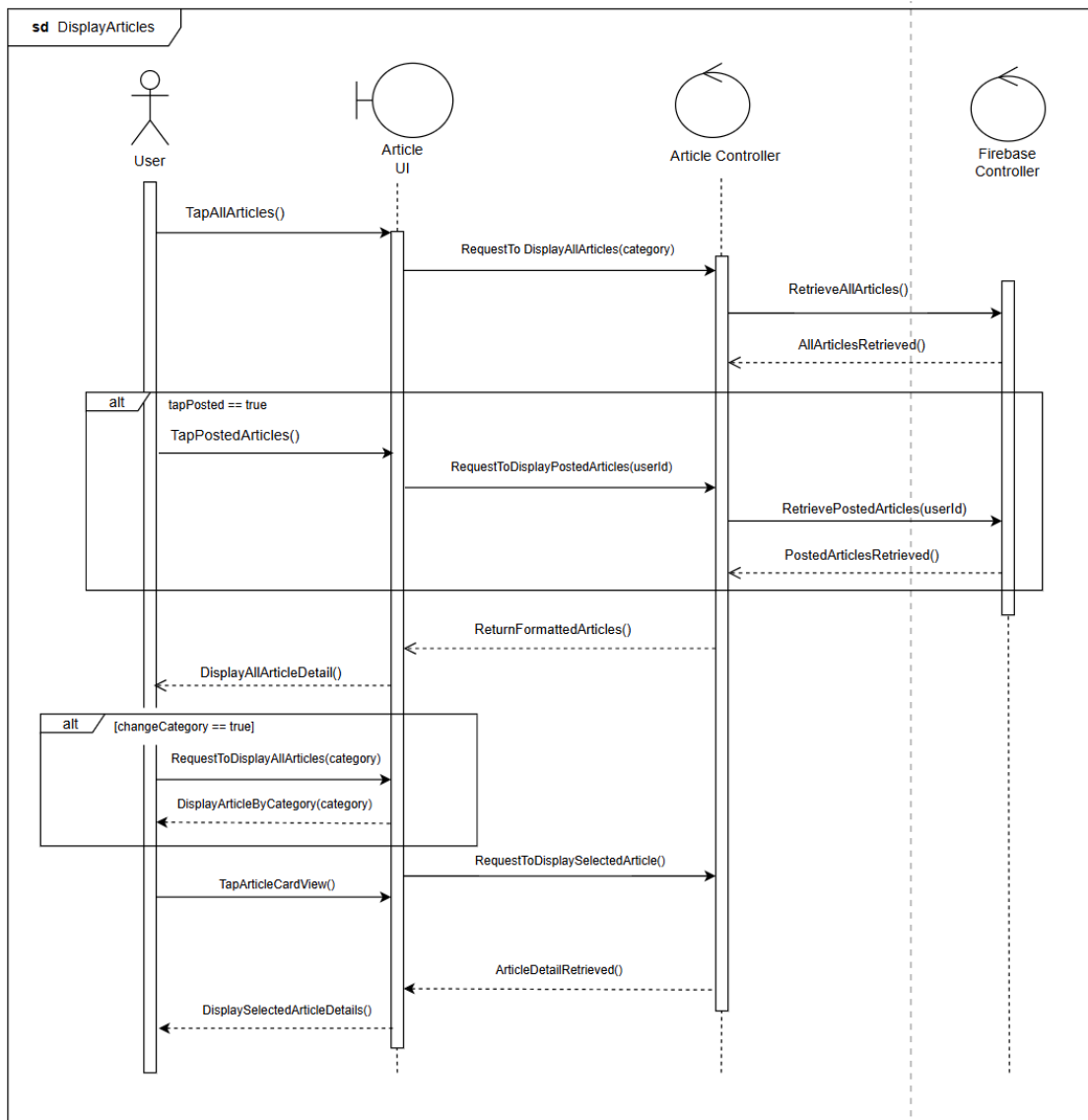
	10. PetCare displays a fixed chatbot icon at the bottom right corner, above the navigation bar, which the user can tap to access the 'Chatbot' page.
	AF-S2: No pets registered under user 1. System displays a message stating "You have no registered pets" AF-S3: No article added by user 1. System displays a message stating "There are currently no article"
Exceptions:	EX-1 Data Retrieval Failure 1. If any data retrieval fails, the system displays an error message prompting the user to try again later.
Includes:	XXX - View Pet Information XXX - View All Articles
Special Requirements:	None
Assumptions:	1. Users have Internet access
Notes and Issues:	None

## View All Articles

Use Case ID:	8		
Use Case Name:	Browse All Articles		
Created By:	Jasmine Tye	Last Updated By:	Jasmine Tye
Date Created:	31st August 2024	Date Last Updated:	31st August 2024

Actor:	User
Description:	Allows a user to browse and view all pet-related articles.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user has tapped on the "See All" button in the Home page.</li> <li>2. The user is logged in and authenticated.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The user can view all available articles categorized by type.</li> <li>2. The articles are displayed with specific details, including a thumbnail image, title, poster's name, profile picture, and the relative time since the article was published.</li> <li>3. The user can tap on any article to view its full content.</li> </ol>
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user opens the Home page and navigates to the Browse Articles section.</li> <li>2. The user taps on the "See All" button.</li> <li>3. The system redirects the user to the "Browse Articles" page.</li> <li>4. The system displays a bottom navigation bar that has a "All" and "Posted" section.</li> <li>5. The system highlights the "All" section in the bottom navigation bar of the "Browse Articles" page.</li> <li>6. The system categorizes and displays articles into the following sections: Lifestyle, Grooming, Community, Health and Wellness and Others.</li> <li>7. For each article, the system displays: <ol style="list-style-type: none"> <li>a. A thumbnail image of the article</li> <li>b. Title of the article</li> <li>c. The name of the poster who posted the article</li> <li>d. The profile picture of the poster</li> <li>e. The relative time since the article was published.</li> </ol> </li> <li>8. The user scrolls through the list of articles.</li> <li>9. The user taps on an article to view its full content.</li> </ol>
Alternative Flows:	AF-S3: No Articles Available <ol style="list-style-type: none"> <li>1. If no articles are available in a selected category, PetCare displays a message saying "No articles available"</li> </ol>
Exceptions:	None
Includes:	XXX - Home Page XXX - View Article Details
Special Requirements:	None
Assumptions:	None





## View Article Details

Use Case ID:	9		
Use Case Name:	View Article Details		
Created By:	Jasmine Tye	Last Updated By:	Jasmine Tye
Date Created:	31st August 2024	Date Last Updated:	31st August 2024

Actor:	User
Description:	Allows the user to view the full details of the selected pet article.
Preconditions:	<ol style="list-style-type: none"> <li>The user has selected an article either from the article carousel in Home page, browse all articles page or posted articles page.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>The user can view the full details of the selected article, including the article's content and all related information.</li> </ol>
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>The user opens the "Browse All" articles page and taps on an article.</li> <li>The system opens a new page displaying the full article details: <ol style="list-style-type: none"> <li>The thumbnail image of the article</li> <li>The title of the article</li> <li>The full text of the article</li> <li>The name of the poster</li> <li>The profile picture of the poster</li> <li>The relative time since the article was published</li> </ol> </li> <li>The user scrolls through the article content.</li> </ol>
Alternative Flows:	<p>AF-S6: Accessing an Article from Home page</p> <ol style="list-style-type: none"> <li>The user taps on an article from the article carousel in the Home page.</li> <li>The user continues with Step 2.</li> </ol> <p>AF-S6: Accessing an Article from Posted article page</p> <ol style="list-style-type: none"> <li>The user taps on an article from the "Posted Article" page.</li> <li>The user continues with Step 2.</li> </ol> <p>AF-S3: Back button</p> <ol style="list-style-type: none"> <li>The user taps on the 'Back' button.</li> <li>The system redirects the user back to the previous page.</li> </ol>
Exceptions:	<p>EX3: Article Not Found</p> <ol style="list-style-type: none"> <li>If the selected article has been deleted or is unavailable, PetCare displays a popup message saying "Article not found"</li> <li>The system redirects the user back to the page they were previously at.</li> </ol>
Includes:	<p>XXX - Home Page</p> <p>XXX - View All Articles</p>

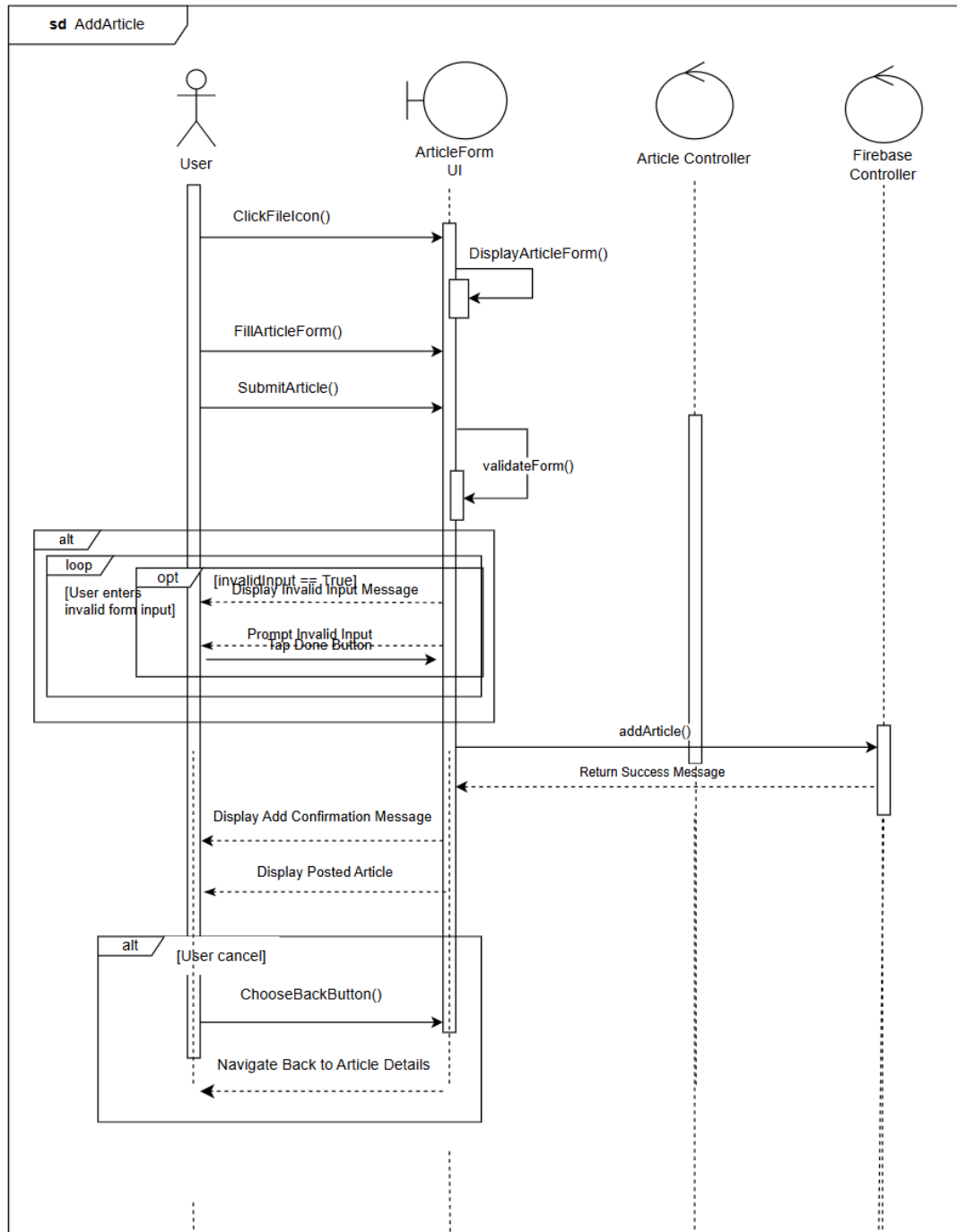
Special Requirements:	None
Assumptions:	None
Notes and Issues:	None

## Add New Article

Use Case ID:	10		
Use Case Name:	Add New Article		
Created By:	Jasmine Tye	Last Updated By:	Jasmine Tye
Date Created:	31st August 2024	Date Last Updated:	31st August 2024

Actor:	User
Description:	Allows a user to create and submit a new pet-related article to the PetCare application.
Preconditions:	1. The user is on the "Posted Articles" page of the application.
Postconditions:	<ol style="list-style-type: none"> <li>1. A new article is created and stored in the system.</li> <li>2. The system assigns the article to the poster in the database.</li> <li>3. The new article appears in the "All Articles" section</li> <li>4. The new article appears in the "Posted Articles" section only to the original poster.</li> </ol>
Priority:	High
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user taps on the file icon located at the bottom right of the bottom navigation bar in the "Posted Articles" page.</li> <li>2. The system displays the article creation form.</li> <li>3. The user fills in the following information: <ol style="list-style-type: none"> <li>a. Title of the article</li> <li>b. Body text of the article</li> <li>c. Category of the article from the given options (Lifestyle, Grooming, Community, Health and Wellness, Others)</li> <li>d. Thumbnail image for the article (optional)</li> </ol> </li> <li>4. The user taps on the "Submit" button.</li> <li>5. The system saves the new article to the database.</li> <li>6. The system displays a success popup message.</li> <li>7. The system redirects the user to the "Posted" section where the new article is now visible and posted.</li> </ol>
Alternative Flows:	<p>AF-S3: User Cancels Article Creation</p> <ol style="list-style-type: none"> <li>1. During step 3, the user can tap on the "Back" button to stop the article creation.</li> <li>2. The system displays a popup message to confirm the action.</li> <li>3. If the user taps on the "Ok" button, the system closes the form and returns the user back to the "Posted Articles" page without creating a new article.</li> <li>4. If the user taps on the "No" button, the system closes the popup message and the user returns to the article creation form.</li> </ol> <p>AF-S4: No thumbnail image</p> <ol style="list-style-type: none"> <li>1. During Step 3, if the user does not select a thumbnail image for the article, a default image provided by the system will be used.</li> </ol>
Exceptions:	<p>EX3: Image Upload Failure</p> <ol style="list-style-type: none"> <li>1. If there is an issue with uploading the image, PetCare displays an error message and asks the user to re-upload the image.</li> </ol>

Includes:	XXX - View Posted Articles XXX - View All Articles
Special Requirements:	None
Assumptions:	<ul style="list-style-type: none"> <li>- The user publishes articles that are related to pets.</li> <li>- The user selects the correct category for the article.</li> </ul>
Notes and Issues:	None



## View Posted Articles

Use Case ID:	11		
Use Case Name:	View Posted Articles		
Created By:	Jasmine Tye	Last Updated By:	Jasmine Tye
Date Created:	31st August 2024	Date Last Updated:	31st August 2024

Actor:	User
Description:	Allows users to view the articles that each user has posted onto the PetCare app.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user has navigated to the "Browse Articles" page and has tapped on the "Posted" section in the bottom navigation bar.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The user can see a list of all the articles that they have posted under the "Posted" section.</li> <li>2. The user is able to interact with their posted articles.</li> </ol>
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user navigates to the "Browse Articles" page.</li> <li>2. The user taps on the "Posted" section on the bottom navigation bar.</li> <li>3. The system displays the "Posted Article" page.</li> <li>4. The system retrieves and displays all articles posted by the user.</li> <li>5. The user can scroll through the list of their posted articles.</li> <li>6. The user can tap on article(s) to view the full details of the article.</li> </ol>
Alternative Flows:	AF-S3: No articles posted <ol style="list-style-type: none"> <li>1. If the user has not posted any articles, the system displays a message stating "No articles posted. Share your articles."</li> </ol>
Exceptions:	EX1: Network Error <ol style="list-style-type: none"> <li>1. If there is a network or database issue while fetching the articles, PetCare displays an error message indicating that articles could not be loaded and suggests the user to try again later.</li> </ol>
Includes:	XXX - Add New Article XXX - View Article Details
Special Requirements:	None
Assumptions:	None
Notes and Issues:	None

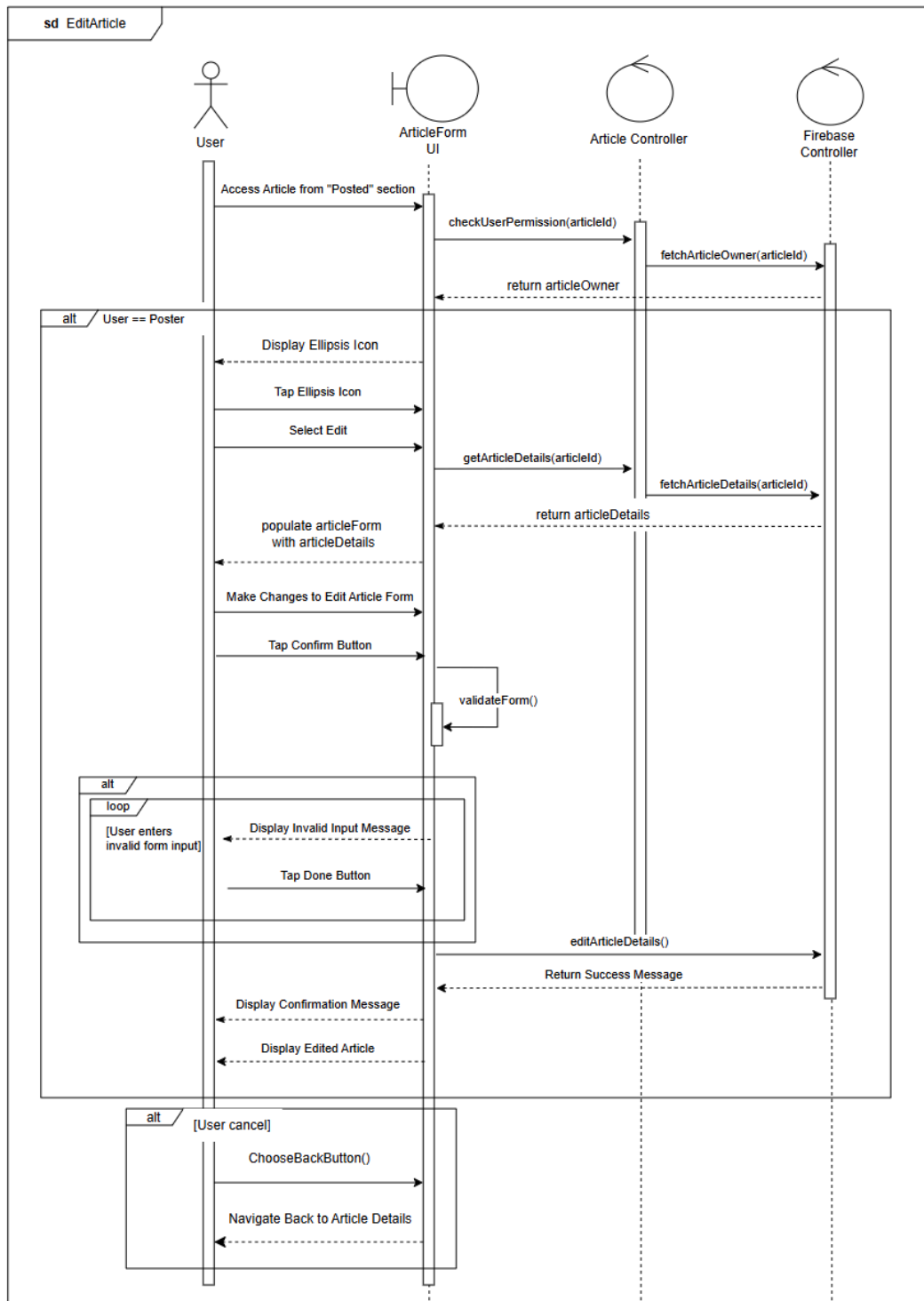
## Edit Article

Use Case ID:	12		
Use Case Name:	Edit Article		
Created By:	Jasmine Tye	Last Updated By:	Jasmine Tye
Date Created:	31st August 2024	Date Last Updated:	31st August 2024

Actor:	User
Description:	Allows a user to edit an article that they have previously posted on the PetCare app.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user has posted at least one article.</li> <li>2. The user has selected an article from the "Posted Article" page.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The user's changes to the article are saved and updated in the PetCare database.</li> <li>2. The edited article is updated in both the "Posted Article" and "All Article" sections.</li> </ol>
Priority:	Medium
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user navigates to the "Posted" section from the bottom navigation bar in the Browse Articles page.</li> <li>2. The user selects an article that they previously posted.</li> <li>3. The user taps on the vertical ellipsis icon on the top right corner of the article detail page which is only visible to the original poster of the article.</li> <li>4. PetCare displays the "Edit" and "Delete" options.</li> <li>5. The user taps on the "Edit" options.</li> <li>6. PetCare redirects the user to the Edit Article form, pre-filled with the existing details of the article: <ol style="list-style-type: none"> <li>a. Title of the article.</li> <li>b. Body text of the article.</li> <li>c. Selected category of the article.</li> <li>d. Existing thumbnail image of the article.</li> </ol> </li> <li>7. The user can modify any of the article details: <ol style="list-style-type: none"> <li>a. Changing the title</li> <li>b. Updating the body text</li> <li>c. Selecting a different category</li> <li>d. Uploads a new thumbnail image</li> </ol> </li> <li>8. The user taps on the "Save" button to submit the changes.</li> <li>9. The system displays a success message.</li> <li>10. The system updates the edited article details in both the "Posted" and "All" sections.</li> <li>11. The system redirects the user back to the article view to show the updated content.</li> </ol>
Alternative Flows:	<p>AF-S3: User Cancels Editing</p> <ol style="list-style-type: none"> <li>1. During steps 6-7, the user can tap on the "Back" button to stop the editing process.</li> <li>2. The system displays a popup message to confirm the action.</li> <li>3. If the user taps on the "Ok" button, the system closes the form and returns the user back to the article details without making any changes.</li> </ol>

	4. If the user taps on the “No” button, the system closes the popup message and the user returns to the edit process.
Exceptions:	EX1: Network Error 1. If there is a network or database issue while updating the article details, PetCare displays an error message indicating that articles could not be updated and suggests the user to try again later.
Includes:	XXX - View Article Details
Special Requirements:	None
Assumptions:	None
Notes and Issues:	None



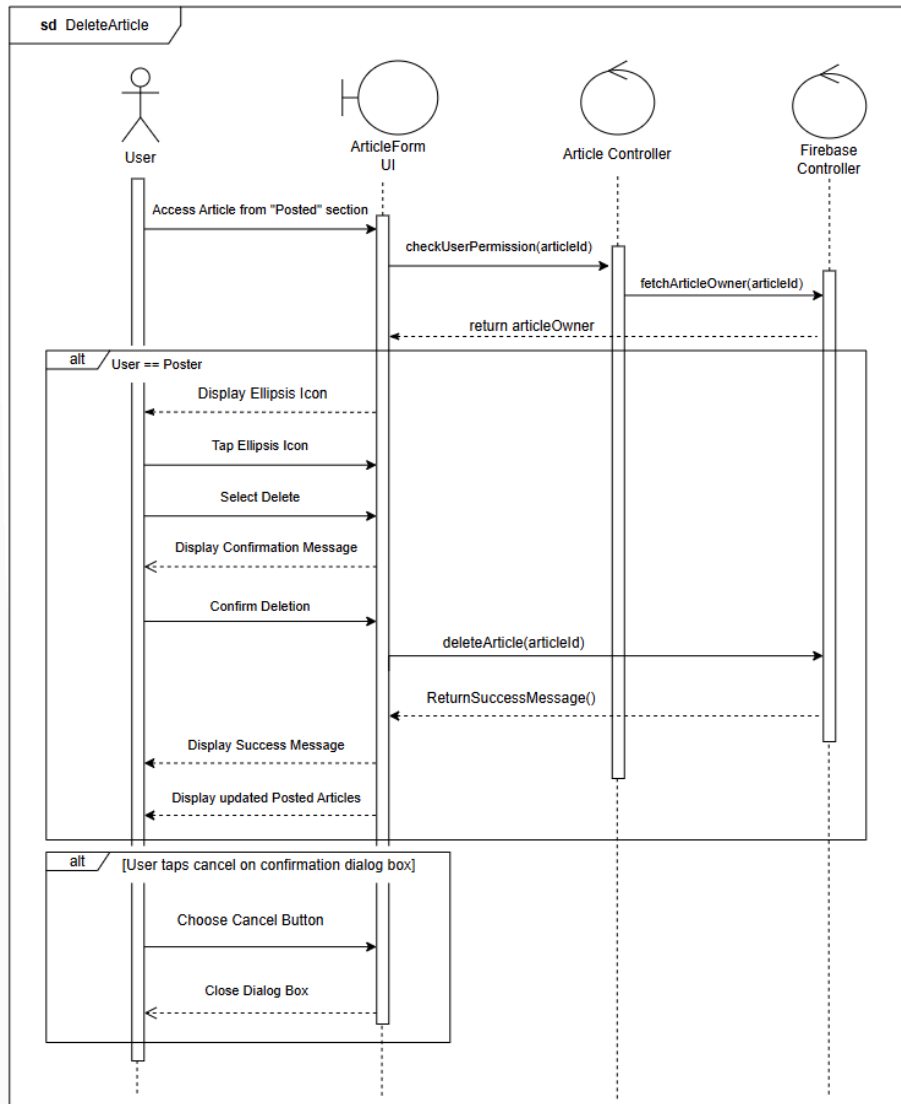


## Delete Article

Use Case ID:	13		
Use Case Name:	Delete Article		
Created By:	Jasmine Tye	Last Updated By:	Jasmine Tye
Date Created:	31st August 2024	Date Last Updated:	31st August 2024

Actor:	User
Description:	Allows the user to delete an article that they have previously posted on the PetCare app.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user has posted at least one article.</li> <li>2. The user has selected an article from the "Posted Article" page.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The selected article is permanently removed from the PetCare database.</li> <li>2. The deleted article is no longer visible in both the "Posted" and "All" sections in the "Browse Articles" page.</li> </ol>
Priority:	Medium
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user navigates to the "Posted" section from the bottom navigation bar in the Browse Articles page.</li> <li>2. The user selects an article that they previously posted.</li> <li>3. The user taps on the vertical ellipsis icon on the top right corner of the article detail page which is only visible to the original poster of the article.</li> <li>4. PetCare displays the "Edit" and "Delete" options.</li> <li>5. The user taps on the "Delete" option.</li> <li>6. PetCare displays a popup box asking the user to confirm the deletion, "Are you sure you want to delete this article? This action cannot be undone."</li> <li>7. The user taps on the "Yes" button to confirm the deletion.</li> <li>8. PetCare permanently deletes the article from the database.</li> <li>9. PetCare updates the "Posted" and "All" sections to remove the deleted article from view.</li> <li>10. PetCare displays a confirmation message indicating that the article has been deleted successfully.</li> <li>11. The system redirects the user back to the article view to show the updated content.</li> </ol>
Alternative Flows:	<p>AF-S3: User Cancels Deletion</p> <ol style="list-style-type: none"> <li>1. In Step 7, if the user taps on the "No" button in the confirmation popup, PetCare closes the pop-up box without deleting the article.</li> <li>2. PetCare redirects the user back to the article details without making any changes.</li> </ol>
Exceptions:	<p>EX1: Network Error</p> <ol style="list-style-type: none"> <li>1. If there is a network or database issue while updating the article details, PetCare displays an error message indicating that articles could not be deleted and suggests the user to try again later.</li> </ol>

Includes:	XXX - View Article Details
Special Requirements:	None
Assumptions:	None
Notes and Issues:	None

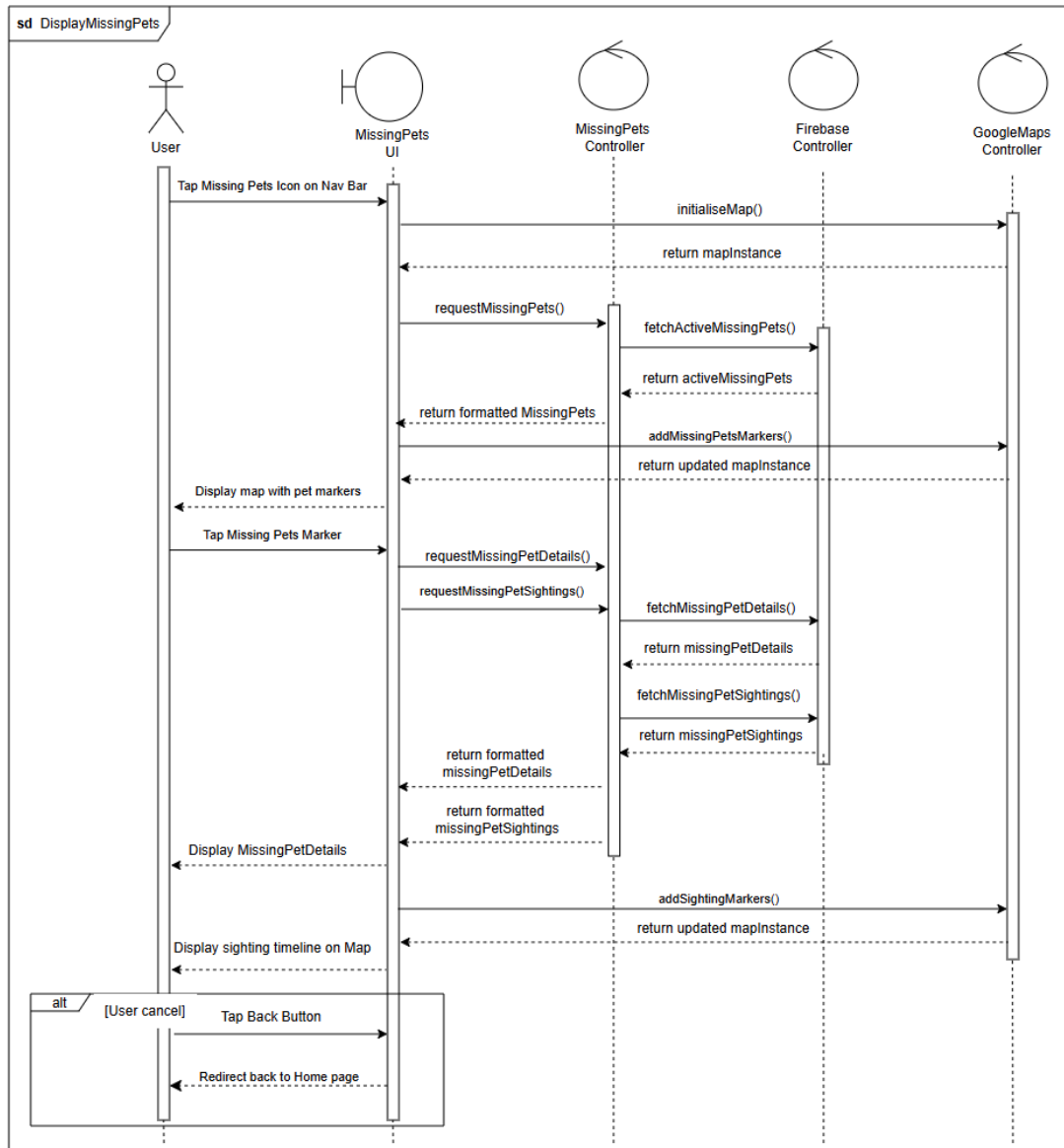


## Display Active Missing Pets

Use Case ID:	14		
Use Case Name:	Display Active Missing Pet		
Created By:	Jasmine Tye	Last Updated By:	Jasmine Tye
Date Created:	25th August 2024	Date Last Updated:	25th August 2024

Actor:	User
Description:	Allows a user to view a list of active missing pets reported by other users.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user is logged in and authenticated to PetCare</li> <li>2. The user has a GPS-enabled device.</li> <li>3. The application has access to the user's current location.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The system displays a map with markers showing the last seen location of missing pets.</li> <li>2. The user can tap on a marker to view detailed information about the missing pet.</li> </ol>
Priority:	High
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user navigates to the "Missing Pets" section in the app.</li> <li>2. The app retrieves the user's current location using GPS.</li> <li>3. The system sends queries to the database for active missing pet reports nearby to the user.</li> <li>4. The system displays the missing pets' images as markers on the map at their last known locations.</li> <li>5. The user taps on a marker to view more information about the specific missing pet: <ol style="list-style-type: none"> <li>a. Name</li> <li>b. Breed</li> <li>c. Age</li> <li>d. Gender</li> <li>e. Photo</li> <li>f. Contact details of the owner</li> <li>g. Description posted by the owner</li> </ol> </li> <li>6. The system displays a new map interface displaying the record of multiple last seen details for the selected missing pet.</li> <li>7. The new map interface includes: <ol style="list-style-type: none"> <li>a. A timeline of sightings as markers on the map</li> <li>b. Date and time of each reported sighting</li> <li>c. Image posted by reporter (if available)</li> <li>d. Sighting description by reporter (if available)</li> </ol> </li> </ol>
Alternative Flows:	<p>AF-S4: Incomplete Information</p> <ol style="list-style-type: none"> <li>1. If some missing pets have incomplete information: <ol style="list-style-type: none"> <li>a. Missing sighting image(s), system displays a default image</li> <li>b. Missing sighting description, system omits this information from the report.</li> </ol> </li> </ol>
Exceptions:	<p>EX1: Location services unavailable</p> <ol style="list-style-type: none"> <li>1. If GPS is disabled or the device is unable to determine the</li> </ol>

	user's location, the system notifies the user and provides an option to manually input a location by postal code or keyword.
Includes:	None
Special Requirements:	Device permission for location access is enabled.
Assumptions:	The missing pet database is up-to-date and returns accurate information.
Notes and Issues:	None

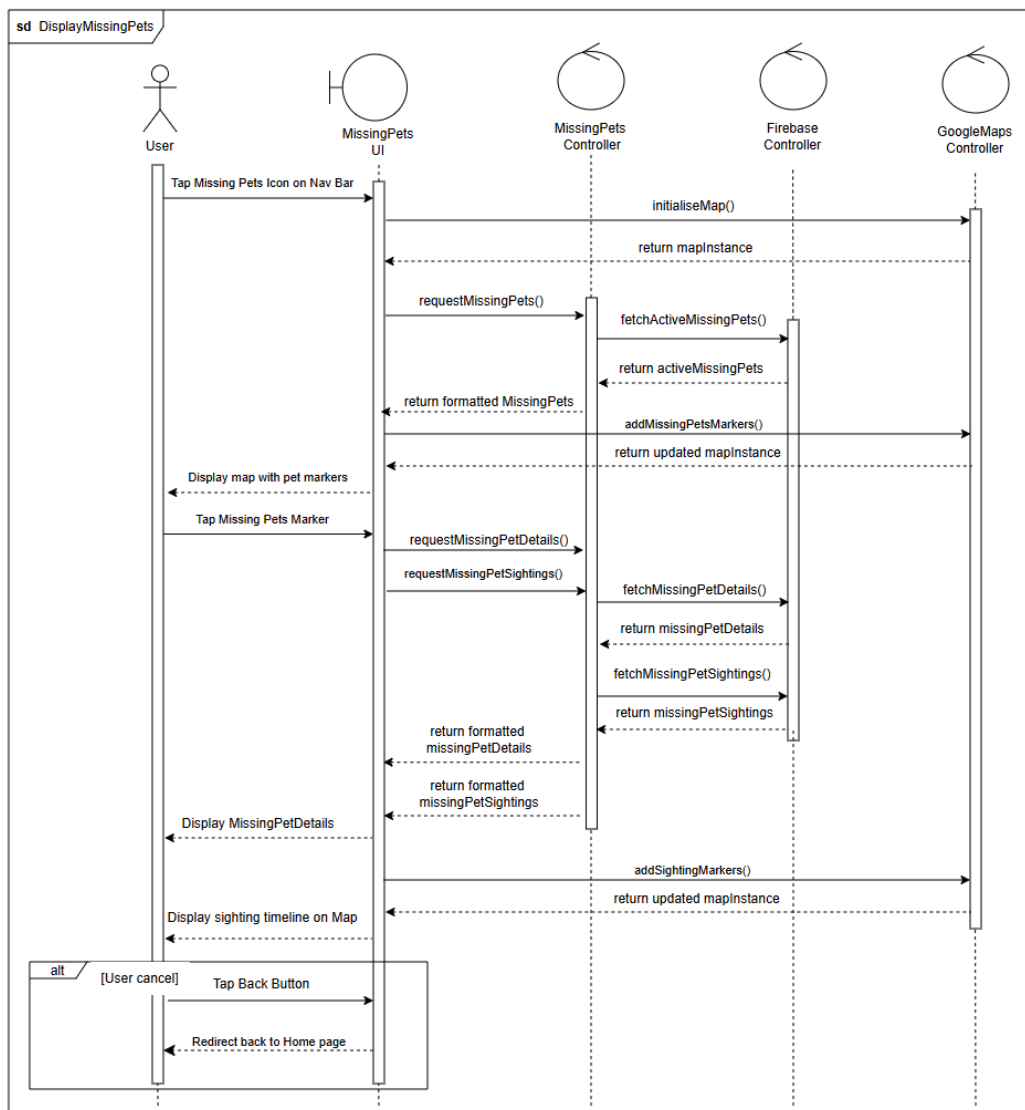


## Report Pet as Missing

Use Case ID:	15		
Use Case Name:	Report Pet as Missing		
Created By:	Jasmine Tye	Last Updated By:	Jasmine Tye
Date Created:	25th August 2024	Date Last Updated:	25th August 2024

Actor:	Pet Owner
Description:	Allows the pet owner to report their missing pet by providing details about the pet and the circumstances under which it went missing.
Preconditions:	<ol style="list-style-type: none"> <li>1. The pet owner is logged in and authenticated.</li> <li>2. The pet owner has saved the profile of the pet that went missing.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The system successfully saves and publishes the missing pet report made by the pet owner to the app.</li> <li>2. Other users are able to view the missing pet report.</li> </ol>
Priority:	High
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> <li>1. The pet owner taps on the "Report Missing Pet" option on the "Home" page.</li> <li>2. The system displays a list of the pet owner's registered pets from the "My Pets" section.</li> <li>3. The pet owner selects the profile of the pet that went missing.</li> <li>4. The system automatically fills in the report form with the selected pet's details: <ol style="list-style-type: none"> <li>a. Name</li> <li>b. Breed</li> <li>c. Age</li> <li>d. Gender</li> <li>e. Photo</li> </ol> </li> <li>5. The pet owner inputs additional information in the form: <ol style="list-style-type: none"> <li>a. Last seen location - postal codes only</li> <li>b. Last seen time</li> <li>c. Last seen date</li> <li>d. Owner's contact details</li> <li>e. Additional descriptions</li> </ol> </li> <li>6. The pet owner submits the report.</li> <li>7. The system confirms the submission and displays the reported pet in the "Missing Pets" section.</li> </ol>
Alternative Flows:	<p>AF-S2: No pets registered under "My Pets"</p> <ol style="list-style-type: none"> <li>1. The system displays a prompt to add a pet profile before reporting it as missing so that the pet owner can get updates.</li> <li>2. Once the user adds the missing pet's profile, the pet owner can continue with step 2.</li> </ol>
Exceptions:	<p>EX3: Form submission error</p> <p>Form submission fails due to network issues or server errors, the system displays an error popup message asking the pet owner to try again at a later time.</p>

	<b>EX3: Invalid Last Seen Location</b> 1. When the pet owner inputs an invalid postal code in last seen location, the system prompts the user to re-input a different valid postal code
Includes:	XXX - My Pets
Special Requirements:	None
Assumptions:	1. The pet owner's registered pet information is accurate. 2. The pet owner consents to share the missing pet's information with other users.
Notes and Issues:	None



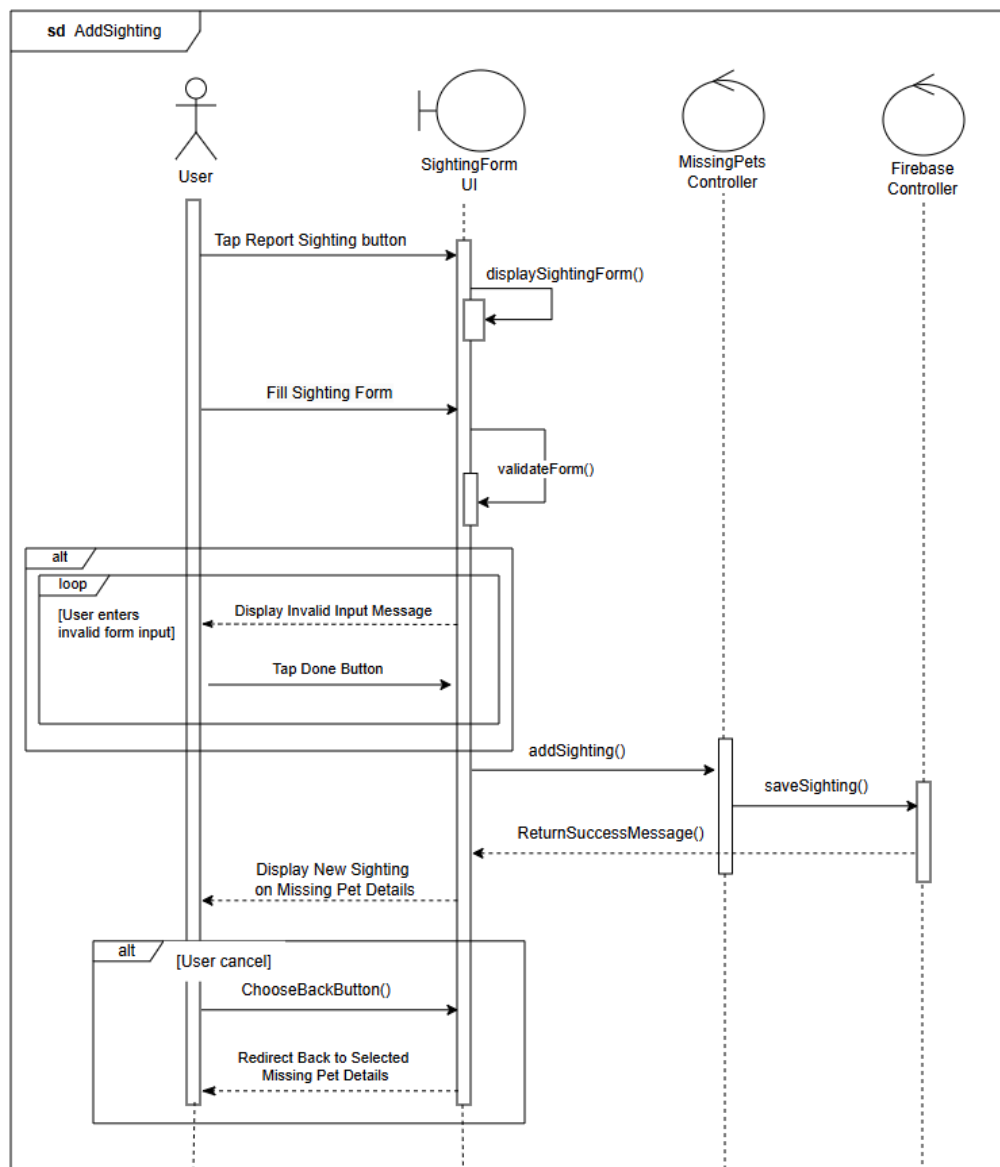
## Update Last Seen Location

Use Case ID:	16		
Use Case Name:	Update Last Seen Location		
Created By:	Jasmine Tye	Last Updated By:	Jasmine Tye
Date Created:	25th August 2024	Date Last Updated:	25th August 2024

Actor:	User (other than the pet owner/ reporting user)
Description:	Allows other users to update the last seen location, time and date of a missing pet.
Preconditions:	<ol style="list-style-type: none"> <li>1. The original pet owner has made a missing report.</li> <li>2. The selected missing pet marker is an active case in the system.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The system updates the map with the new last seen location, time, and date for the missing pet.</li> <li>2. All users of the app can see the updated information on the map.</li> <li>3. The original reporting user receives a notification about the updated details.</li> </ol>
Priority:	High
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user navigates to the "Display Missing Pets" page in the app.</li> <li>2. The system retrieves and displays the map with active missing pet markers.</li> <li>3. The user selects an active missing pet marker on the map.</li> <li>4. The system displays a pop-up of the details of the missing pet.</li> <li>5. The user taps on the "Add Report" icon.</li> <li>6. The user enters the new time, date and location when the user last saw the pet.</li> <li>7. The user can optionally add image(s) and sighting descriptions.</li> <li>8. The system validates the entered data.</li> <li>9. The system updates the map with the new last seen location, time and date for the missing pet.</li> <li>10. The system notifies the original reporting user of the updated information.</li> </ol>
Alternative Flows:	<p>AF-S2: User inputs incorrect data</p> <ol style="list-style-type: none"> <li>1. If the user inputs an incorrect or incomplete address, time or date, the system displays an error message and prompts the user to change the input.</li> </ol> <p>AF-S7: User cancels form submission</p> <ol style="list-style-type: none"> <li>1. The user can cancel the form submission by tapping on the "Back" button and return back to the "Display Active Missing Pets" page.</li> </ol> <p>AF-S4: Image upload error</p> <ol style="list-style-type: none"> <li>1. If there is an error with the upload process of the image, the system displays an error message and prompts the user to re-upload a different image.</li> </ol>



	2. The selected image is not uploaded to the system.
Exceptions:	EX3: Form submission error 1. Form submission fails due to network issues or server errors, the system displays an error popup message asking the user to try again at a later time.
Includes:	XXX - Display Active Missing Pets
Special Requirements:	None
Assumptions:	Users provide accurate and honest updates about the missing pet.
Notes and Issues:	None

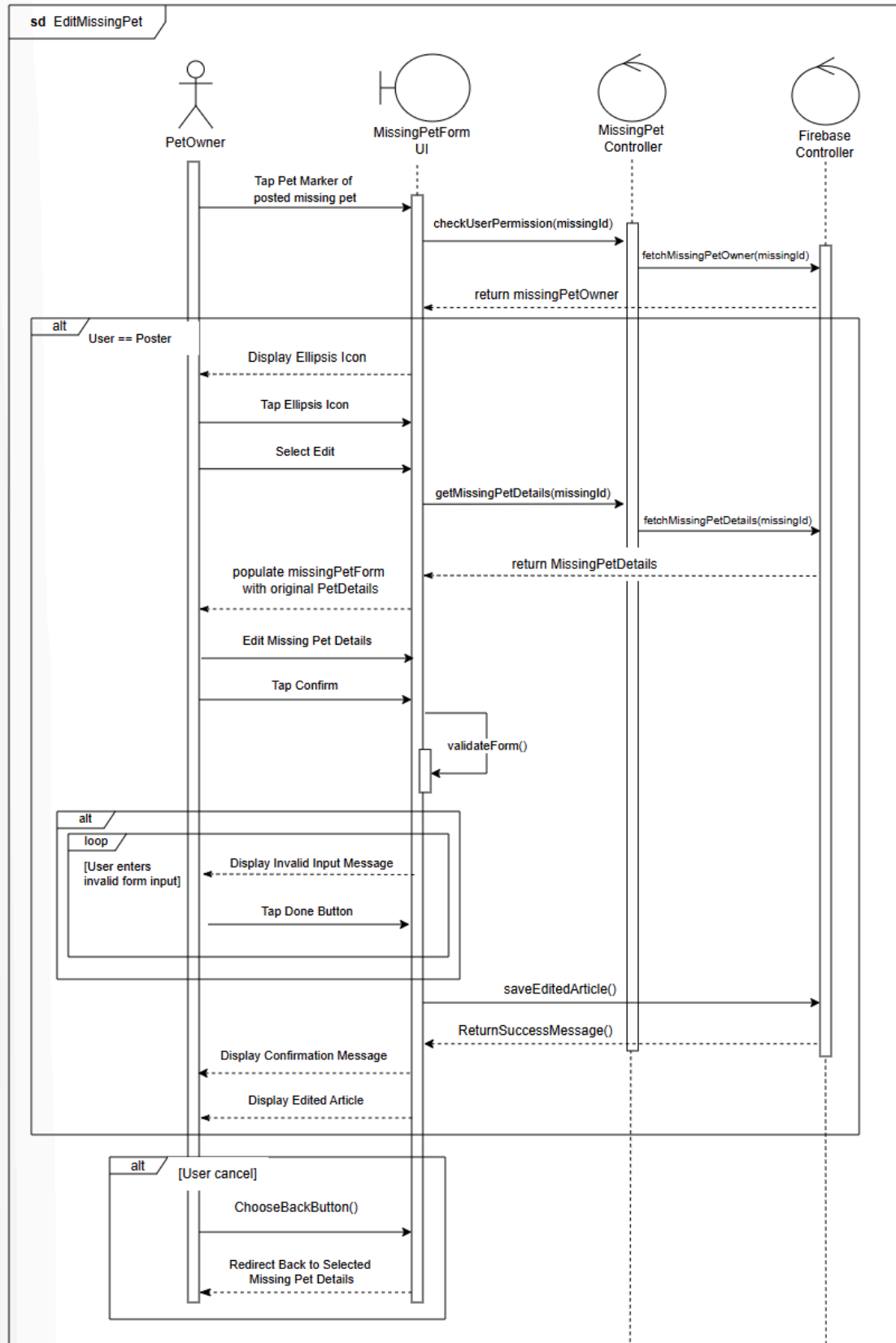


## Edit Missing Pet Report

Use Case ID:	17		
Use Case Name:	Edit Missing Pet Report		
Created By:	Jasmine Tye	Last Updated By:	Jasmine Tye
Date Created:	28th August 2024	Date Last Updated:	28th August 2024

Actor:	Pet Owner
Description:	Allows a pet owner to make changes to details of their posted missing pet report.
Preconditions:	<ol style="list-style-type: none"> <li>1. The pet owner has previously created a missing pet report of their registered pet.</li> <li>2. The missing pet report is currently active in the database.</li> <li>3. The user is logged in and authenticated as the owner of the selected missing pet report.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The system reflects the changes made by the pet owner.</li> <li>2. The updated information is displayed in the "Display Active Missing Pets" page.</li> </ol>
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> <li>1. The pet owner navigates to the "Display Missing Pets" page.</li> <li>2. The pet owner selects the marker of their missing pet on the map.</li> <li>3. The system displays the details of the selected missing pet report.</li> <li>4. The pet owner taps on the "Edit" button.</li> <li>5. The pet owner makes updates to one or more of the input below: <ol style="list-style-type: none"> <li>a. Last seen location - postal codes only</li> <li>b. Last seen time</li> <li>c. Last seen date</li> <li>d. Owner's contact details</li> <li>e. Additional descriptions</li> </ol> </li> <li>6. The pet owner taps on the 'Save' button.</li> <li>7. The system updates the details of the missing pet report.</li> <li>8. The system displays a pop-up to confirm the change.</li> <li>9. The pet owner is redirected back to the "Display Active Missing Pets" where the updated details of their report is updated.</li> </ol>
Alternative Flows:	<p>AF-S3: The pet owner cancels the Edit process</p> <ol style="list-style-type: none"> <li>1. The user taps on the back button.</li> <li>2. The system displays a pop-up to inform the pet owner that no changes will be made to the missing pet report.</li> <li>3. The user taps on the 'Ok' button.</li> <li>4. The missing pet details remain unchanged.</li> </ol> <p>AF-S3: Missing or Incomplete form</p> <ol style="list-style-type: none"> <li>1. The system displays a prompt to inform users that there are missing fields/ wrong data types that require attention.</li> <li>2. Once all inputs are validated, the system returns back to step 7.</li> </ol>

Exceptions:	EX2: Data update failure <ul style="list-style-type: none"> <li>1. If the system is unable to update the pet's status due to network issues or server issues.</li> <li>2. The system displays an error message and prompts the user to try again later.</li> <li>3. The pet status has not changed.</li> </ul>
Includes:	XXX - Report Pet as Missing XXX - Mark Pet as Found
Special Requirements:	None
Assumptions:	The pet owner provides accurate and most up-to-date information during editing.
Notes and Issues:	None

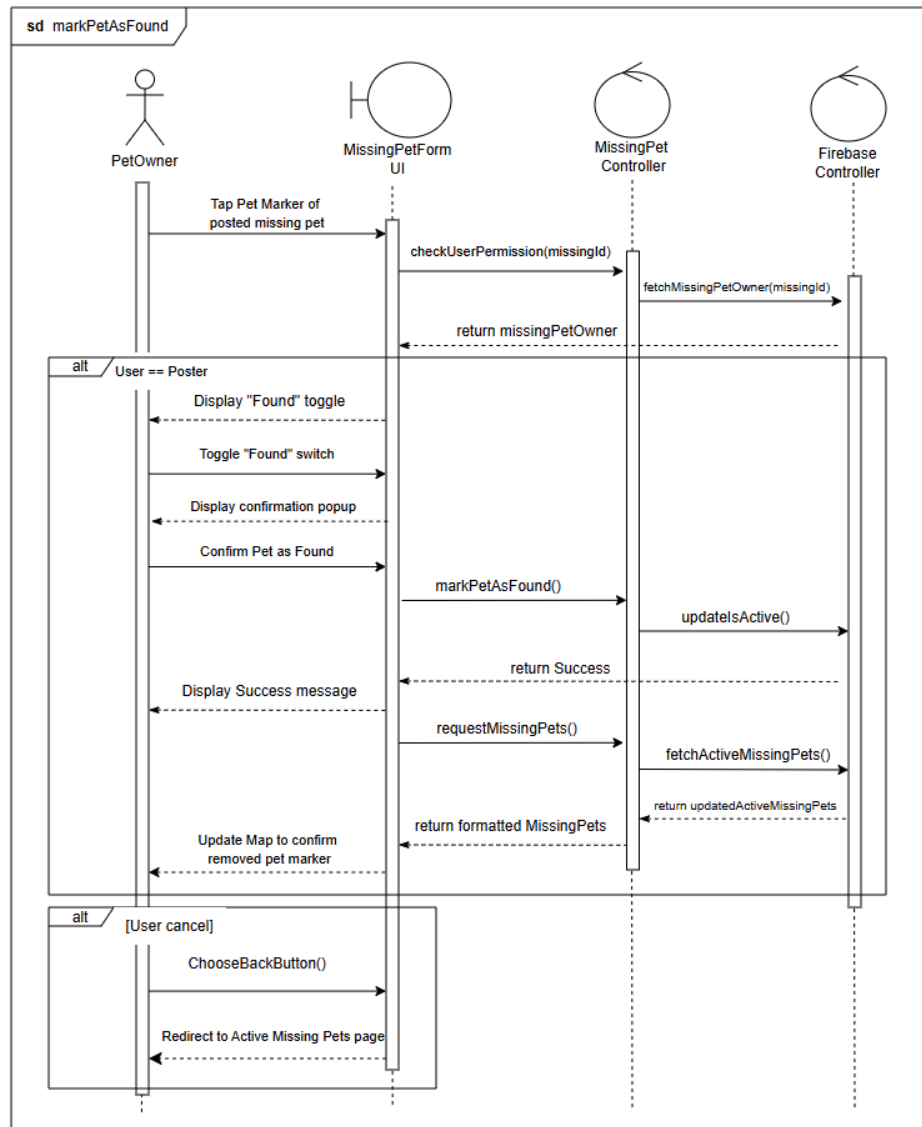


## Mark Missing Pet as Found

Use Case ID:	18		
Use Case Name:	Mark Missing Pet as Found		
Created By:	Jasmine Tye	Last Updated By:	Jasmine Tye
Date Created:	26th August 2024	Date Last Updated:	26th August 2024

Actor:	Pet Owner
Description:	Allows the pet owner to mark their missing pet report.
Preconditions:	<ol style="list-style-type: none"> <li>1. The pet is currently in the missing pets database.</li> <li>2. The pet owner has reported a pet as missing and it is currently active in the "Display Missing Pets" page.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The system updates the pet's status to inactive in the database.</li> <li>2. The missing pet report is no longer being displayed on the "Display Missing Pets" page.</li> </ol>
Priority:	High
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> <li>1. The pet owner navigates to the "Display Missing Pets" page in the app.</li> <li>2. The pet owner selects the marker of their missing pet on the map.</li> <li>3. The details of the selected missing report is shown.</li> <li>4. The pet owner taps on the "Found" toggle switch which is only accessible to the pet owner.</li> <li>5. The toggle switch changes to "ON" to indicate the pet has been marked as found.</li> <li>6. A pop-up message displays to confirm that the pet has been found.</li> <li>7. The pet owner taps on the "OK" button.</li> <li>8. The system updates the pet's status to inactive in the database.</li> <li>9. The pet listing is hidden from the "Display Missing Pets" map interface.</li> <li>10. The system shows a popup message to confirm that the report has been closed.</li> </ol>
Alternative Flows:	AF-S3: Canceling the toggling of "Found" switch <ol style="list-style-type: none"> <li>1. The user taps on the "Cancel" button.</li> <li>2. The pop-up messages closes without making any changes to the pet's status.</li> <li>3. The missing pet continues to be displayed in the "Display Missing Pets" map interface.</li> </ol>
Exceptions:	EX2: Data update failure <ol style="list-style-type: none"> <li>1. If the system is unable to update the pet's status due to network issues or server issues.</li> <li>2. The system displays an error message and prompts the user to try again later.</li> <li>3. The pet status has not changed.</li> </ol>
Includes:	XXX - Display Active Missing Pets

Special Requirements:	None
Assumptions:	The pet owner is authorized to update the status of the missing pet.
Notes and Issues:	None.



## Explore Petcare Amenities

Use Case ID:	19		
Use Case Name:	Explore Petcare Amenities		
Created By:	Sih Jia Qi	Last Updated By:	Sih Jia Qi
Date Created:	25th August 2024	Date Last Updated:	15th September 2024

Actor:	User
Description:	Allows a user to search for nearby petcare amenities including veterinarian clinics, groomers and pet adoption centers based on their current location using a GPS-enabled mobile device. The system will display the search results as landmarks on a map interface. It will also display a list of nearby amenities on the Explore Petcare Amenities page, providing options to sort, filter and search for a specific amenity by keywords.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user has a device with PetCare installed.</li> <li>2. The user is logged in and authenticated.</li> <li>3. The user has a device with GPS capabilities.</li> <li>4. The application has access to the user's current location.</li> <li>5. The user's device has Internet access.</li> <li>6. The GoogleMaps API is fully functional and returns the latest pet amenities information.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The system displays a map with nearby pet amenities marked.</li> <li>2. The user can interact with the map to view the detailed information about a selected vet.</li> <li>3. The user can search, filter and sort the list of nearby pet amenities.</li> </ol>
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user clicks on the Explore Petcare Amenities icon on the navigation bar.</li> <li>2. The system prompts the user to grant location permissions.</li> <li>3. The system retrieves the user's current location using GPS.</li> <li>4. The system queries the <b>GoogleMaps API</b> to search for nearby pet amenities.</li> <li>5. The system receives a list of nearby pet amenities.</li> <li>6. The system displays the returned locations as markers on the map.</li> <li>7. The system also displays them as listings with their information on the Explore Petcare Amenities page.</li> <li>8. The user can sort the amenities by rating in descending order or by distance in ascending order and the app will display the results in the order that user selects.</li> <li>9. The user can filter the pet amenities by ratings and/ or whether the amenity is open now.</li> <li>10. The system will display the results according to the filter applied.</li> <li>11. The user can search for a specific pet amenity by name or a keyword using the search bar.</li> <li>12. The user can tap on a marker in the map to view more detailed information about the amenity, including its storefront image, distance, rating, name, address, contact information, website,</li> </ol>

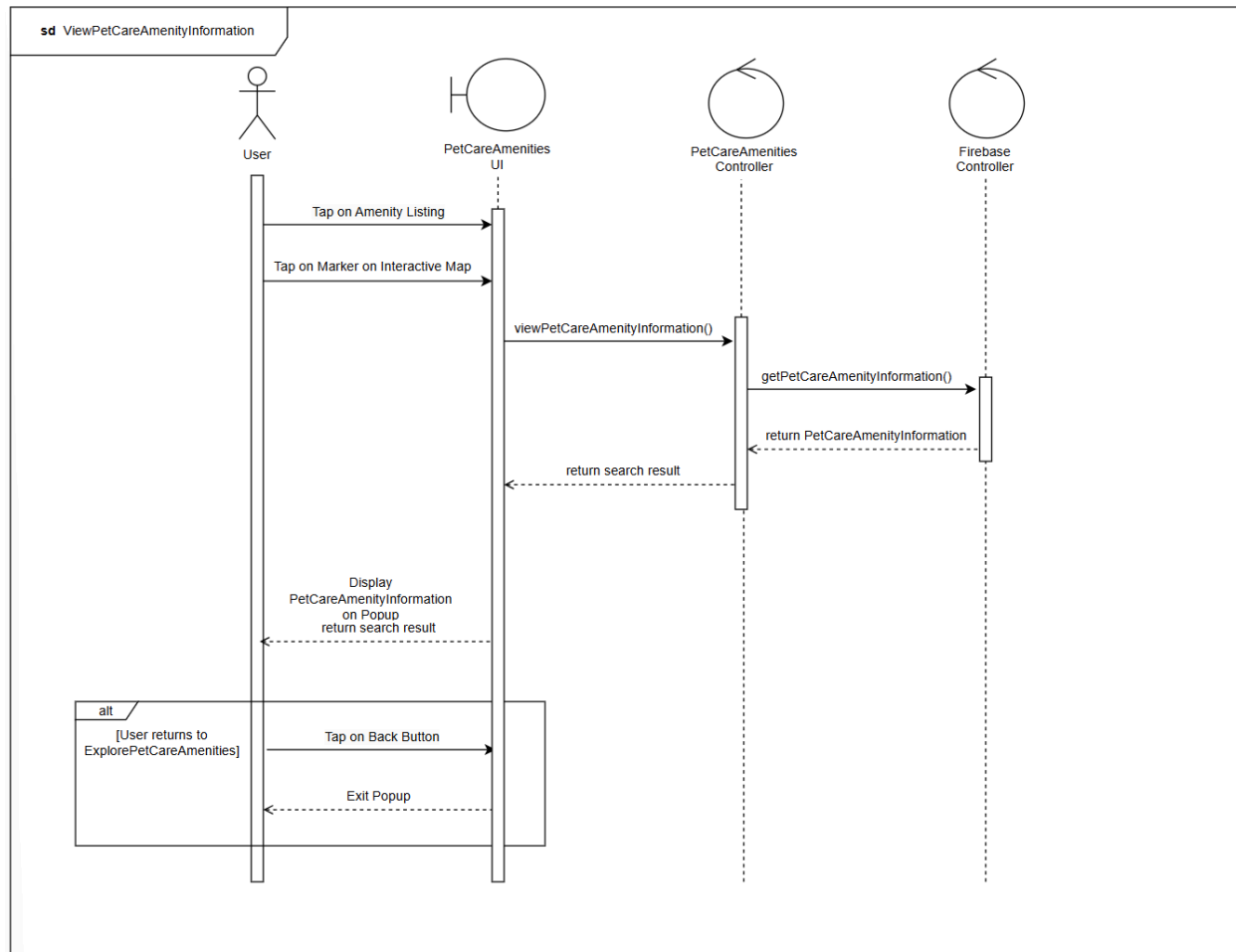
	open now and operating hours.
Alternative Flows:	<p>AF-S2: User declines location access</p> <ol style="list-style-type: none"> <li>1. The system prompts the user to manually enter their location or search a specific area.</li> <li>2. The system displays the nearby pet amenities based on the user input location.</li> </ol> <p>AF-S5: No nearby pet amenities found</p> <ol style="list-style-type: none"> <li>1. The system displays a message indicating that no results were found.</li> <li>2. The system prompts the user to manually input a location or keyword and display it as a marker on the map and show its information in a listing below the map.</li> </ol> <p>AF-S7: Specific Information unavailable</p> <ol style="list-style-type: none"> <li>1. Certain information of the selected amenity is unavailable: <ol style="list-style-type: none"> <li>a. Storefront image - Display a default image provided by system</li> <li>b. Other info: Display “-”</li> </ol> </li> </ol> <p>AF-S7: User wants to sort the amenities by rating</p> <ol style="list-style-type: none"> <li>1. The system allows the user to sort the ratings of the petcare amenities in descending order or distance in ascending order.</li> <li>2. The system reorders the list of petcare amenities based on the selected sorting options by the user.</li> </ol>
Exceptions:	<p>EX-S1: Location services unavailable</p> <ol style="list-style-type: none"> <li>1. If the GPS is disabled or the system is unable to determine the user's location, the system notifies the user and provides an option to manually input a location.</li> </ol> <p>EX-S2: Google Maps API Error</p> <ol style="list-style-type: none"> <li>1. If the Google Maps API fails or returns an error, the system displays an error message that suggests the user to try again later.</li> </ol>
Includes:	<p>UC19 - View Petcare Amenity Information</p> <p>UC20 - Filter Petcare Amenities</p> <p>UC21 - Search for Petcare Amenities</p>
Special Requirements:	Location service is enabled on the user's device.
Assumptions:	Google Maps API provides accurate and up-to-date data for the pet amenities.
Notes and Issues:	None



## View Petcare Amenity Information

Use Case ID:	20		
Use Case Name:	View Petcare Amenity Information		
Created By:	Sih Jia Qi	Last Updated By:	Sih Jia Qi
Date Created:	25th August 2024	Date Last Updated:	26th August 2024

Actor:	User
Description:	Allows a user to view the detailed information of a nearby pet-care amenity including storefront image, distance, rating, name, address, contact information, website, opennow and operating hours.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user has a device with PetCare installed.</li> <li>2. The user is logged in and authenticated.</li> <li>3. The application has access to the user's current location.</li> <li>4. The user's device has Internet access.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>4. The system displays the selected petcare amenities details on a popup.</li> </ol>
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user clicks on one of the petcare amenities listings.</li> <li>2. The system displays a popup with all the detailed information about the selected amenity.</li> <li>3. The user can tap on the close button to exit the popup.</li> </ol>
Alternative Flows:	AF-S2: Specific Information unavailable <ol style="list-style-type: none"> <li>2. Certain information of the selected amenity is unavailable:               <ol style="list-style-type: none"> <li>a. Storefront image - Display a default image provided by system</li> <li>b. Other info: Display "-"</li> </ol> </li> </ol>
Exceptions:	EX1: Fail to retrieve data from Google Maps API
Includes:	None
Special Requirements:	None
Assumptions:	Google Maps API provides accurate and up-to-date data for the pet amenities.
Notes and Issues:	None

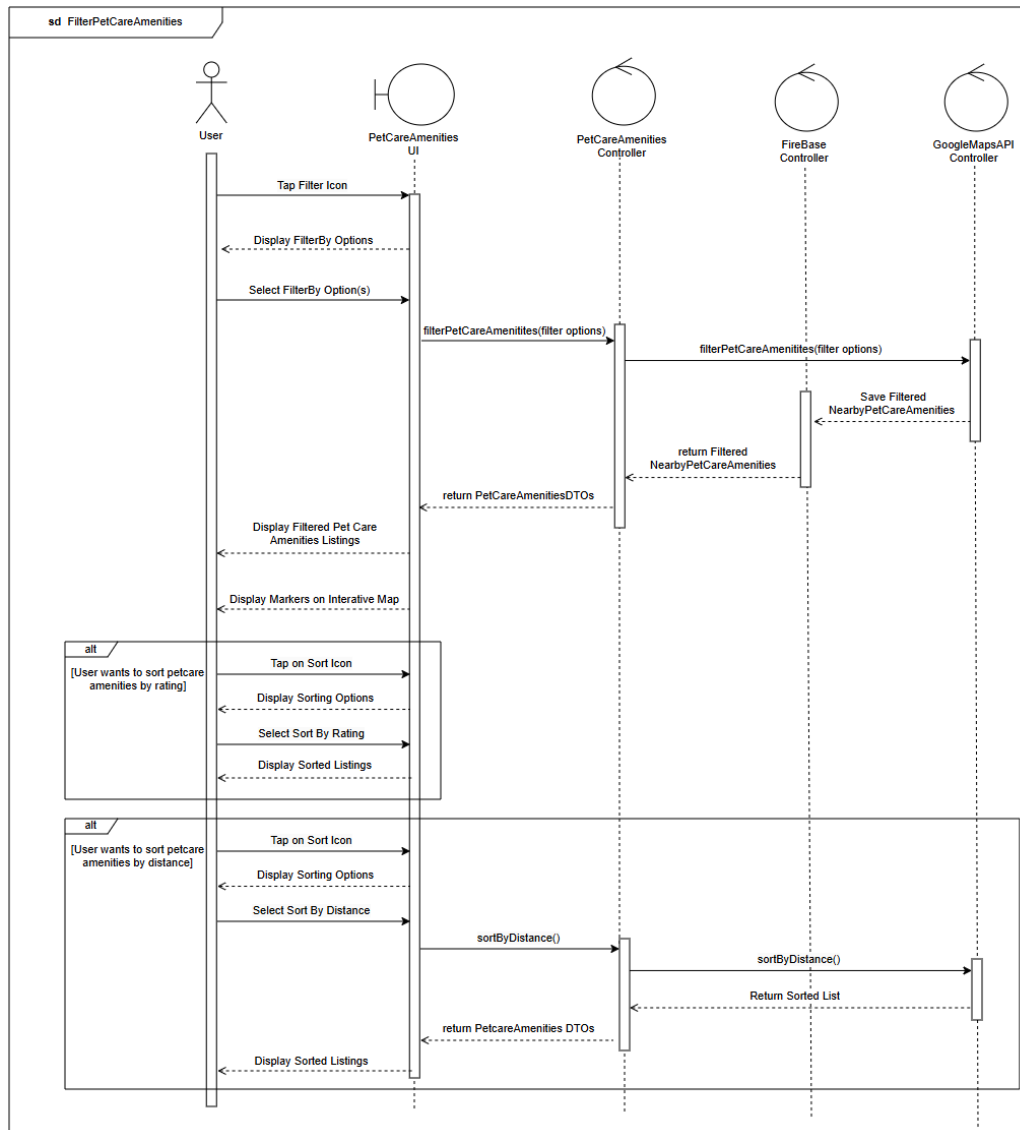


## Filter Petcare Amenities

Use Case ID:	21		
Use Case Name:	Filter Petcare Amenities		
Created By:	Sih Jia Qi	Last Updated By:	Sih Jia Qi
Date Created:	26th August 2024	Date Last Updated:	15th September 2024

Actor:	User
Description:	Allows a user to sort the list of petcare amenities by rating in descending order or by distance in ascending order.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user has a device with PetCare installed.</li> <li>2. The user is logged in and authenticated.</li> <li>3. The user has a device with GPS capabilities.</li> <li>4. The application has access to the user's current location.</li> <li>5. The user's device has Internet access.</li> <li>6. The GoogleMap API is fully functional and returns the latest pet amenities information.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The system displays the list of nearby petcare amenities sorted and/or filtered according to the options selected by the user.</li> <li>2. The user is able to view the updated locations on the map and from the listings.</li> </ol>
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user browses the Explore Petcare Amenities page.</li> <li>2. The user taps on the "Filter" icon on the screen.</li> <li>3. The system allows the following filtering conditions:) <ol style="list-style-type: none"> <li>a. Rating (eg. All ratings, 2 stars and above, 3 stars and above, 4 stars and above, 5 stars)</li> <li>b. Open now (eg. Any time, Open now, Open 24 hours)</li> </ol> </li> <li>4. The user selects one or more filtering options.</li> <li>5. The system applies the filters and only displays amenities that fit the filtering conditions.</li> <li>6. The user can interact and tap on any of the displayed amenities on the map to view its details.</li> </ol>
Alternative Flows:	<p>AF-S5: No results returned after filtering</p> <ol style="list-style-type: none"> <li>1. If selected filtering criteria results in no amenities being displayed on the map, the system displays a popup message indicating that no results match the filters.</li> <li>2. The system prompts the user to reapply different filters or reset the filters to view all nearby amenities.</li> </ol> <p>AF-S7: User wants to sort the amenities by rating</p> <ol style="list-style-type: none"> <li>1. The system allows the user to sort the petcare amenity ratings in descending order or distance in ascending order.</li> <li>2. The system reorders the list of petcare amenities based on the selected sorting options by the user.</li> </ol>
Exceptions:	<p>EX-S1: Location services unavailable</p> <ol style="list-style-type: none"> <li>1. If the GPS is disabled or the system is unable to determine the user's location, the system notifies the user and provides an</li> </ol>

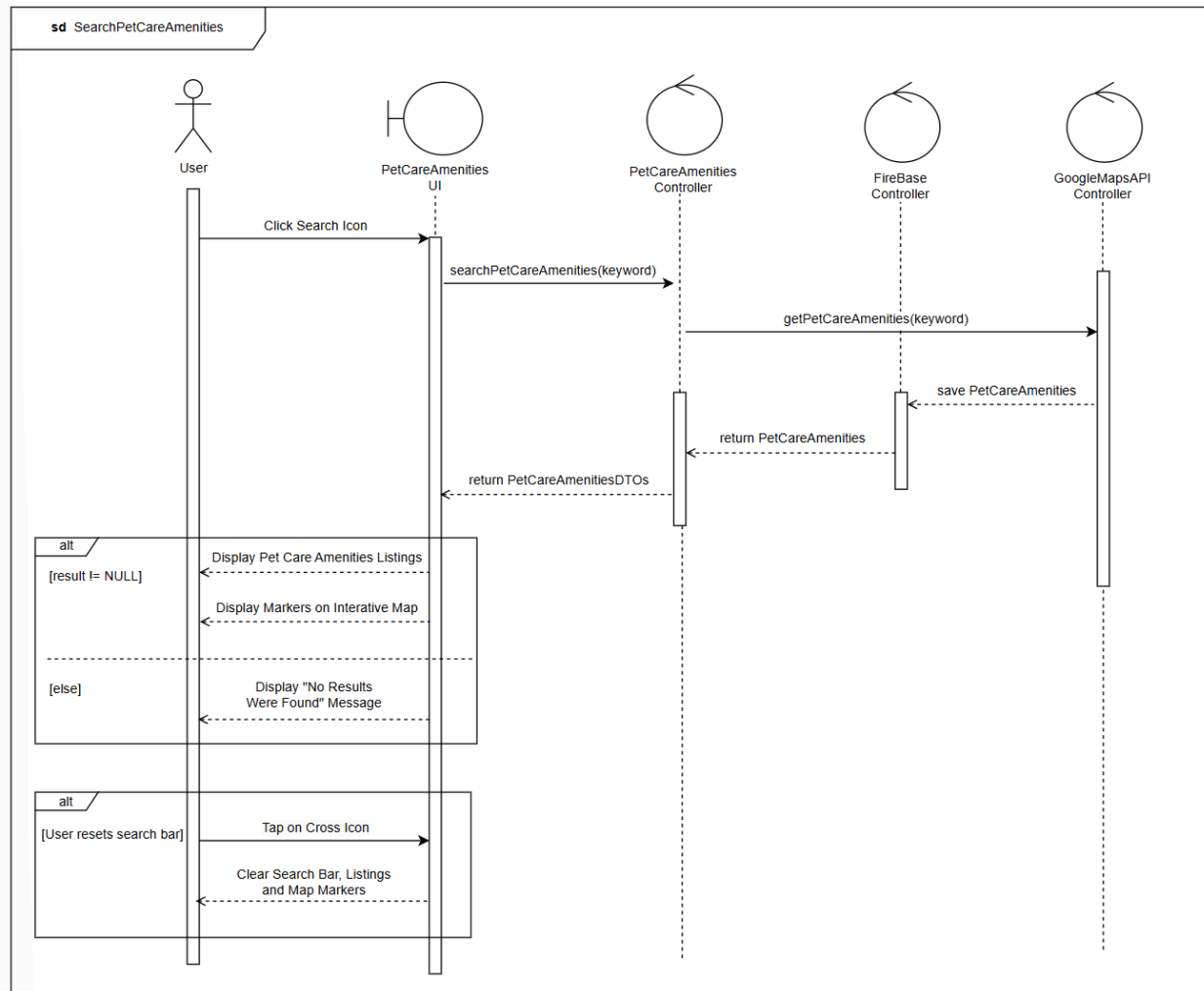
	option to manually input a location
Includes:	None
Special Requirements:	The system must sort and filter the results without refreshing or reloading the page.
Assumptions:	The Explore Petcare Amenities page must be fully functionable and display accurate results.
Notes and Issues:	None



## Search Petcare Amenities

Use Case ID:	22		
Use Case Name:	Search Petcare Amenities		
Created By:	Sih Jia Qi	Last Updated By:	Sih Jia Qi
Date Created:	26th August 2024	Date Last Updated:	15th September 2024

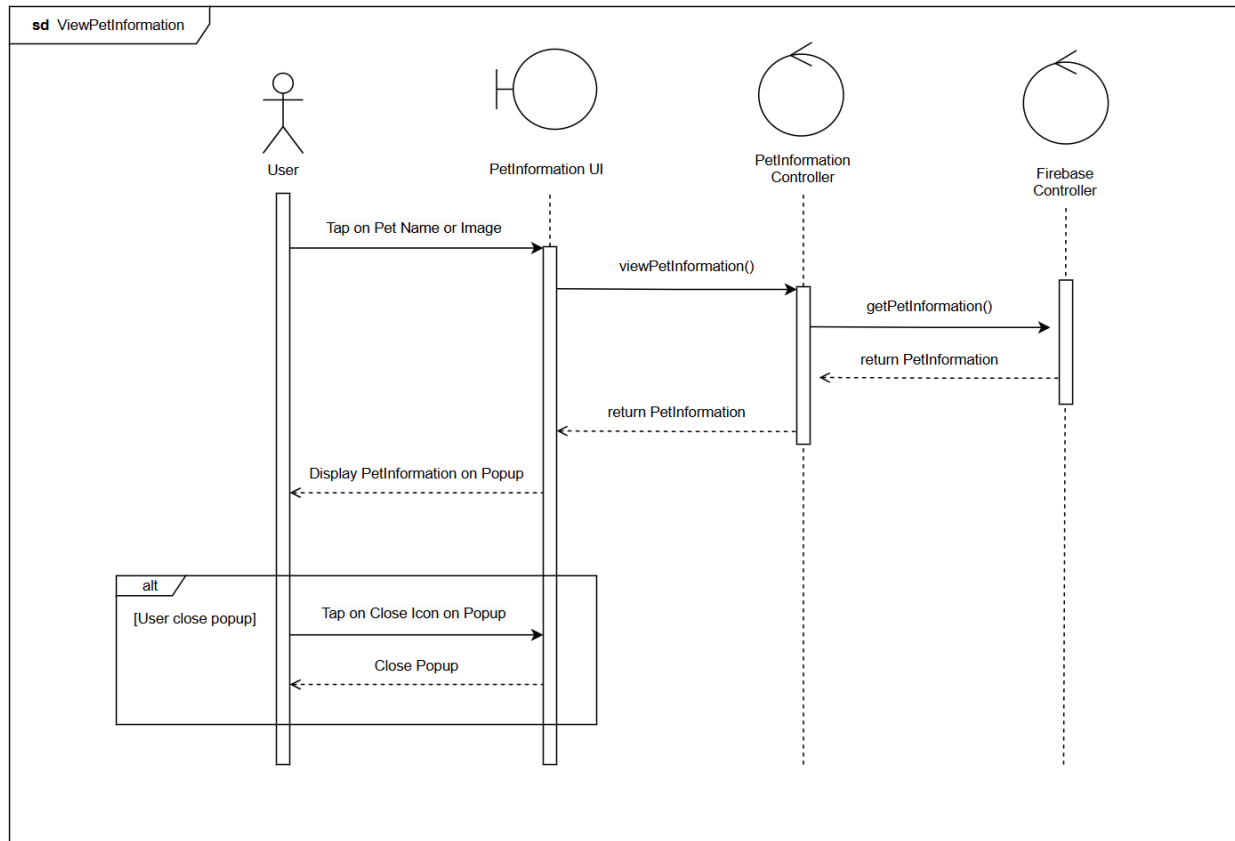
Actor:	User
Description:	Allows a user to search for a specific pet amenity by its name or a keyword.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user has a device with PetCare installed.</li> <li>2. The user is logged in and authenticated.</li> <li>3. The user has a device with GPS capabilities.</li> <li>4. The application has access to the user's current location.</li> <li>5. The user's device has Internet access.</li> <li>6. The GoogleMaps API is fully functional and returns the latest pet amenities information.</li> </ol>
Postconditions:	The system displays the petcare amenities that match the user's search query.
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user browses the Explore Petcare Amenities page.</li> <li>2. The user inputs a location or keyword in the search bar and taps the "Search" icon.</li> <li>3. The system uses <b>Google Maps API</b> to query for petcare amenities that match the user input.</li> <li>4. The map updates to only display the petcare amenities that match the user input.</li> <li>5. The user can interact and tap on any of the displayed petcare amenities to view its details.</li> </ol>
Alternative Flows:	<p>AF-S4: Clear search bar</p> <ol style="list-style-type: none"> <li>1. The user clears the input in the search bar.</li> <li>2. The system displays all the nearby petcare amenities on the map and shows the listings below.</li> </ol> <p>AF-S4: No results were found</p> <ol style="list-style-type: none"> <li>1. If no petcare amenity matches the search query (Google Map API does not return any result), the system displays a message indicating that no results were found.</li> </ol>
Exceptions:	<p>EX1: Location services unavailable</p> <ol style="list-style-type: none"> <li>1. If the GPS is disabled or the system is unable to determine the user's location, the system notifies the user and provides an option to manually input a location</li> </ol>
Includes:	None
Special Requirements:	None
Assumptions:	Google Maps API can query based on user input and return results based on the search query.



## View Pet Information

Use Case ID:	23		
Use Case Name:	View Pet Information		
Created By:	Sih Jia Qi	Last Updated By:	Sih Jia Qi
Date Created:	26th August 2024	Date Last Updated:	26th August 2024

Actor:	User
Description:	Allow users to view their pet information such as name, date of birth, breed, sex, weight, coat color, special markings and medic conditions.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user has a device with Petcare installed.</li> <li>2. The user is logged in and authenticated.</li> <li>3. The user has added at least a pet.</li> </ol>
Postconditions:	Display the pet(s) information on the Pet Information pop-up.
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user clicks on the picture or the name of the pet in the My Pets section located on the Home page to view the details of their registered pet.</li> <li>2. The system displays the following details on the Pet Information popup: <ul style="list-style-type: none"> <li>- Pet name</li> <li>- Date of birth</li> <li>- Breed</li> <li>- Sex</li> <li>- Weight</li> <li>- Coat color</li> <li>- Special markings</li> <li>- Medic conditions</li> </ul> </li> <li>3. On the Pet Information popup, the user can click on the "Edit" icon to edit the pet's details.</li> <li>4. On the Pet Information popup page, the user can click on the "Delete" icon to delete the pet and its details.</li> </ol>
Alternative Flows:	AF-S2: If the database returns an empty result (no pets were found), the system displays a message showing that the user has not registered any pets.
Exceptions:	EX1: Data retrieval error <ol style="list-style-type: none"> <li>1. If the system is unable to connect to the database, the system returns a message prompting the user to try again later.</li> </ol>
Includes:	UC23- Edit Pet Information UC24 - Delete Pet
Special Requirements:	None
Assumptions:	Database is connected successfully.
Notes and Issues:	None

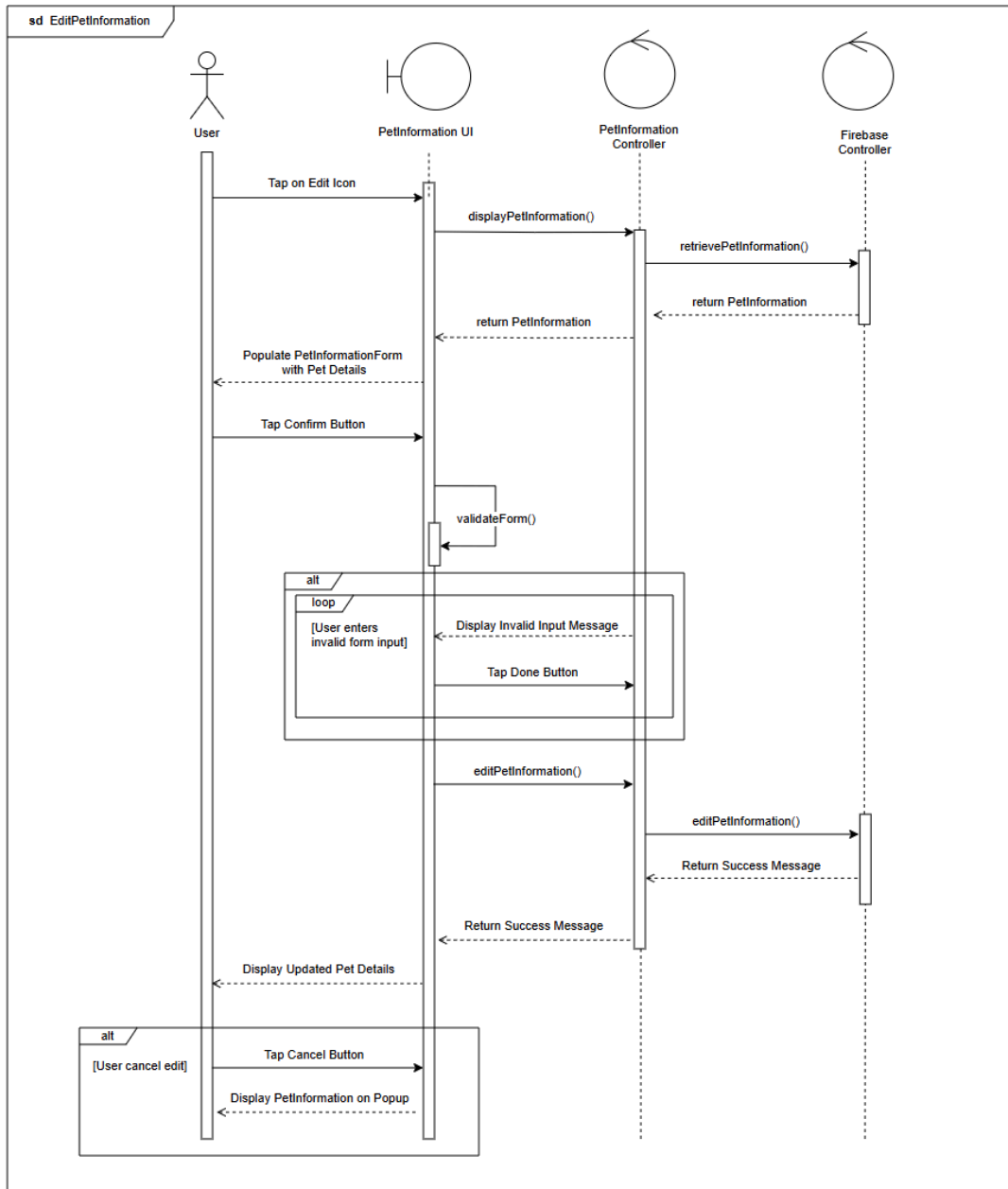




## Edit Pet Information

Use Case ID:	24		
Use Case Name:	Edit Pet Information		
Created By:	Sih Jia Qi	Last Updated By:	Sih Jia Qi
Date Created:	26th August 2024	Date Last Updated:	26th August 2024

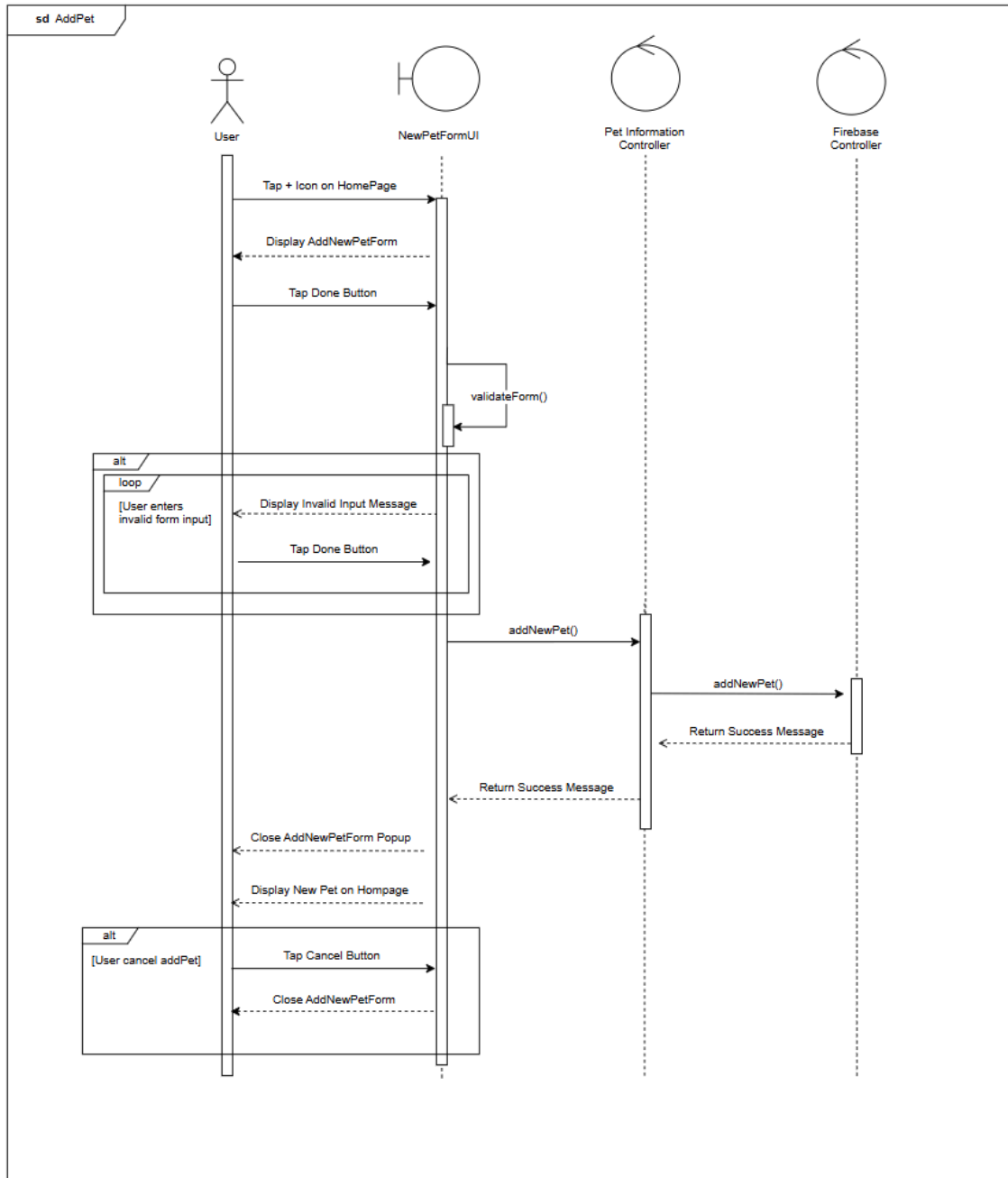
Actor:	User
Description:	Allow users to update their pet information such as name, date of birth, breed, sex, weight, coat color, special markings and medic conditions.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user has a device with PetCare installed.</li> <li>2. The user is logged in and authenticated.</li> <li>3. The user has registered at least a pet.</li> </ol>
Postconditions:	Save and display the user's updated pet information.
Priority:	Medium
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user taps on the image or name of one of their pets on the My Pets section.</li> <li>2. The user taps on the "Edit" icon on the Pet Information popup.</li> <li>3. The user can update the details of their pet including: <ul style="list-style-type: none"> <li>- Pet name</li> <li>- Date of birth</li> <li>- Breed</li> <li>- Sex</li> <li>- Weight</li> <li>- Coat color</li> <li>- Special markings</li> <li>- Medic conditions</li> </ul> </li> <li>4. The user taps on the "Done" button after editing the details.</li> <li>5. The system redirects the user to the Pet Information popup with the updated pet information displayed.</li> </ol>
Alternative Flows:	AF-S4: The user does not save the changes <ol style="list-style-type: none"> <li>1. If the user clicks on the "Cancel" button on the editing page, all the edits will not be saved to the database.</li> <li>2. The user will be redirected to the Pet Information popup with no pet information updated.</li> </ol>
Exceptions:	EX4: Data update failure <ol style="list-style-type: none"> <li>1. If the system is unable to update the pet due to network issues or server issues, the system displays an error message and prompts the user to try again later.</li> <li>2. The pet information will not change.</li> </ol>
Includes:	None
Special Requirements:	None
Assumptions:	Database is connected.
Notes and Issues:	None



## Add Pet

Use Case ID:	25		
Use Case Name:	Add Pet		
Created By:	Sih Jia Qi	Last Updated By:	Sih Jia Qi
Date Created:	26th August 2024	Date Last Updated:	26th August 2024

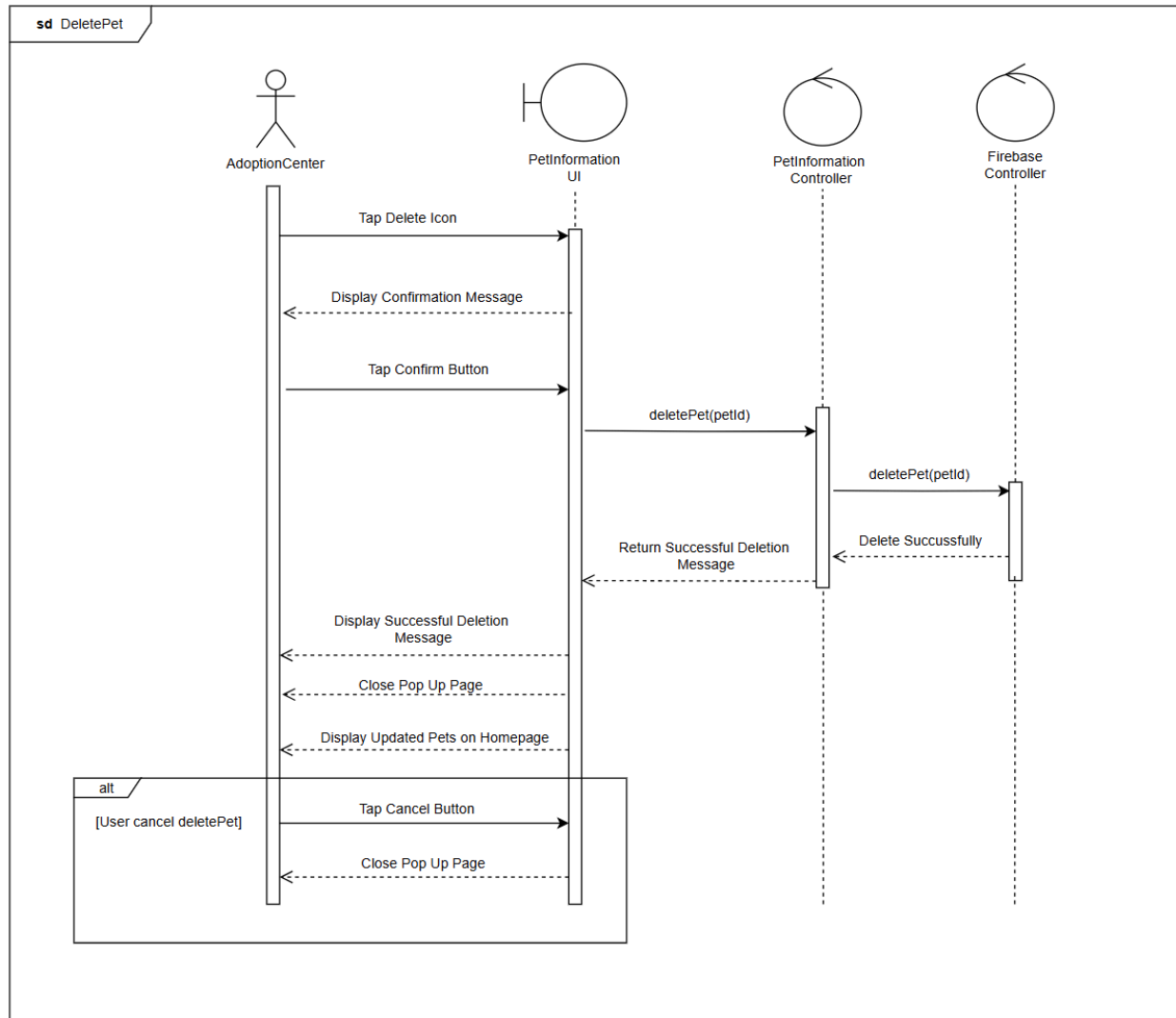
Actor:	User
Description:	Allow users to add a new pet and its information such as name, date of birth, breed, sex, weight, coat color, special markings and medic conditions.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user has a device with PetCare installed.</li> <li>2. The user is logged in and authenticated.</li> <li>3. The user has registered at least a pet.</li> </ol>
Postconditions:	The new registered pet is added successfully into the database and the system displays it in the My Pets section on the Home page
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user clicks on the '+' icon in the My Pets section on the Home page.</li> <li>2. The system displays a pop-up form for users to input the following information: <ol style="list-style-type: none"> <li>a. Pet name</li> <li>b. Date of birth</li> <li>c. Breed</li> <li>d. Sex</li> <li>e. Weight</li> <li>f. Coat color</li> <li>g. Special markings</li> <li>h. Medic conditions</li> </ol> </li> <li>3. The user taps on the "Done" button to submit the form after entering the information of its pet.</li> <li>4. The system redirects the user to the Home page.</li> </ol>
Alternative Flows:	AF-S3: The user does not want to add a new pet <ol style="list-style-type: none"> <li>1. If the user taps on the "Cancel" button, the system will redirect the user back to the Home page with no new pet added.</li> </ol>
Exceptions:	EX3: Form submission error <ol style="list-style-type: none"> <li>1. Form submission fails due to network issues or server errors, the system displays an error pop-up message asking the user to try again later.</li> </ol>
Includes:	None
Special Requirements:	None
Assumptions:	Database is connected.
Notes and Issues:	None



## Delete Pet

Use Case ID:	26		
Use Case Name:	Delete Pet		
Created By:	Sih Jia Qi	Last Updated By:	Sih Jia Qi
Date Created:	26th August 2024	Date Last Updated:	26th August 2024

Actor:	User
Description:	Allow users to delete their pet and its information.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user has a device with PetCare installed.</li> <li>2. The user is logged in and authenticated.</li> <li>3. The user has registered at least a pet.</li> </ol>
Postconditions:	The deleted pet will be removed from the My Pets section.
Priority:	Medium
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user taps on the image or name of one of their pets in the My Pets section on the Home page.</li> <li>2. The user taps on the "Delete" icon on the Pet Information popup.</li> <li>3. The system displays a popup with the "Confirm" and "Cancel" buttons.</li> <li>4. The user taps on the "Confirm" button.</li> <li>5. The user is redirected to the Home page.</li> </ol>
Alternative Flows:	AF-S3: Cancel delete option <ol style="list-style-type: none"> <li>1. If the user taps on the "Delete" button, the user will be redirected back to the Home page with no changes made to the pet information.</li> </ol>
Exceptions:	EX4: Data deletion failure <ol style="list-style-type: none"> <li>1. If the system is unable to delete the pet due to network issues or server issues, the system displays an error message and prompts the user to try again later.</li> <li>2. The pet is not deleted and will be displayed in the My Pets section.</li> </ol>
Includes:	None
Special Requirements:	None
Assumptions:	Database is connected.
Notes and Issues:	None



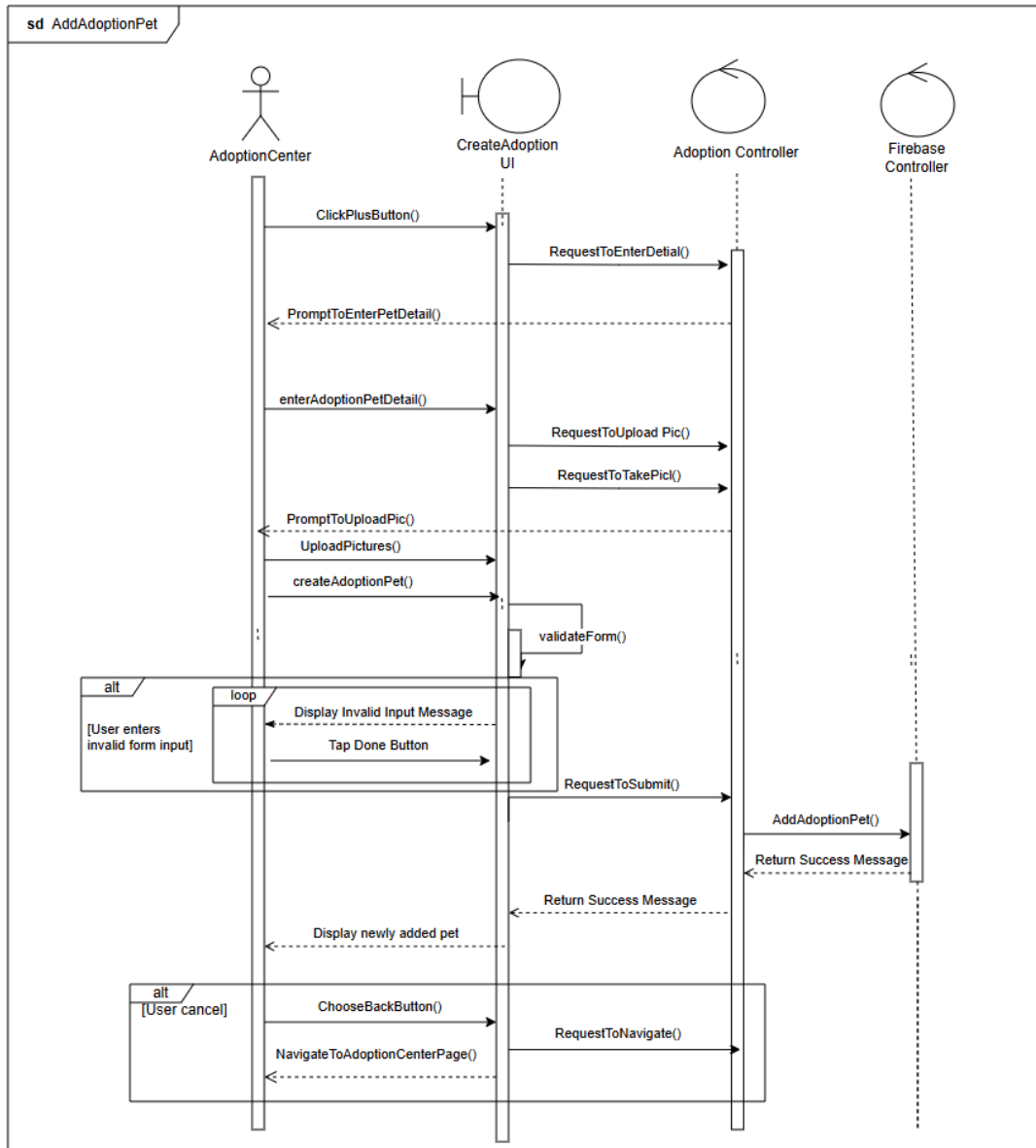
## Add Adoption Pet

Use Case ID:	27		
Use Case Name:	Add Adoption Pet		
Created By:	Lim Chun Wen	Last Updated By:	Lim Chun Wen
Date Created:	26th August 2024	Date Last Updated:	26th August 2024

Actor:	Adoption Center
Description:	Allows the adoption center to upload pets that are available for adoption.
Preconditions:	<ol style="list-style-type: none"> <li>1. The adoption center is logged in and authenticated in admin format</li> <li>2. The adoption center has the pet and wants to publish an adoption.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The system successfully saves and publishes the pets to the app.</li> <li>2. Other users are able to view the available pets in listview format.</li> </ol>
Priority:	High
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> <li>1. The system displays a "Add" button at "Adoption" page for adoption center to post their listing on a particular pets to the "adophome"</li> <li>2. When adoption center selects the "Add Button", the system will bring to another page to fill up the details on the pets</li> <li>3. Adoption center will manually fills in the item form: <ol style="list-style-type: none"> <li>a. Pets Name</li> <li>b. Price</li> <li>c. Description</li> <li>d. Age</li> <li>e. Breed</li> <li>f. Color</li> <li>g. Gender</li> <li>h. Upload Images <ol style="list-style-type: none"> <li>i. There will be 2 options for users to upload images, it is through taking photos directly from a phone camera or uploading from their own storage.</li> </ol> </li> <li>i. Type</li> <li>j. Adoption Center : Name</li> <li>k. Adoption Center : Phone Number</li> <li>l. Adoption Center : Email</li> </ol> </li> <li>4. If the adoption center selects the "Submit" button, the system will save this information into the database and display a prompt to inform the user that "pets have been successfully posted".</li> </ol>
Alternative Flows:	AF-S4: Missing or Incomplete form <ol style="list-style-type: none"> <li>1. The system displays a prompt to inform the user that there are missing fields / wrong data types that require attention.</li> <li>2. Once everything is validated, the system will go to step 4.</li> </ol>

	AF-S4: Existing Pets <ol style="list-style-type: none"> <li>1. The system displays a prompt to inform user that there are existing Pets added by user previously</li> <li>2. Give user a pop out dialog box to ask user whether they want to update the detail of the item</li> </ol>
Exceptions:	EX1: Form submission fails due to network issues or server errors, the system displays an error popup message asking the user to try again at a later time.
Includes:	None
Special Requirements:	System needs to validate input data.
Assumptions:	Pets are in good or proper condition for adoption.
Notes and Issues:	None



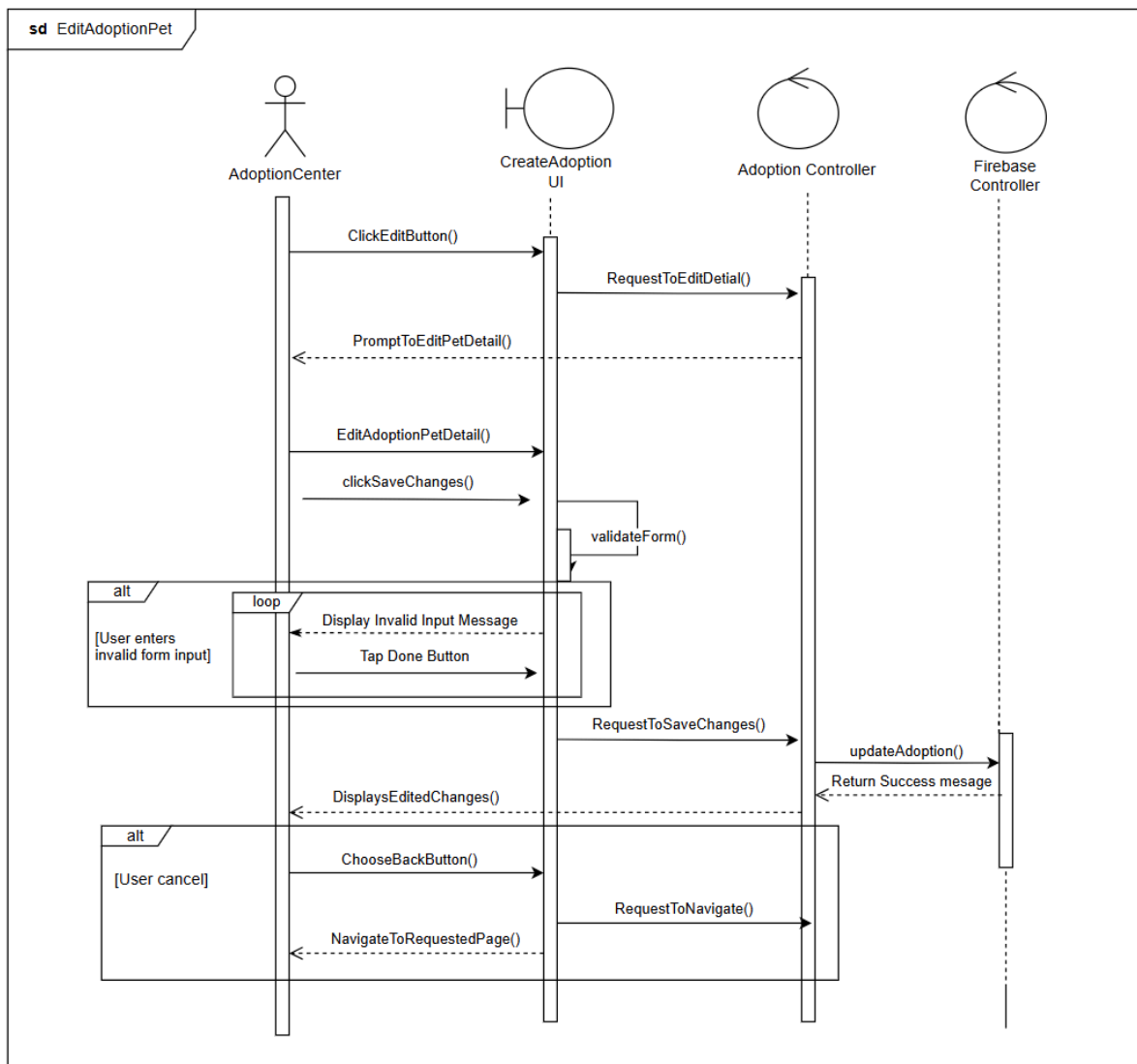


## Edit Adoption Pet

Use Case ID:	28		
Use Case Name:	Edit Adoption Pet		
Created By:	Lim Chun Wen	Last Updated By:	Lim Chun Wen
Date Created:	26th August 2024	Date Last Updated:	26th August 2024

Actor:	Adoption Center
Description:	Allows the users to edit the pet detail that have uploaded for listings
Preconditions:	<ol style="list-style-type: none"> <li>1. The user is logged in and authenticated in admin state.</li> <li>2. The user has uploaded or created the pet posting in the database</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The system successfully saves and updates the information in the app.</li> <li>2. Other users are able to view the updated listing in listview format.</li> </ol>
Priority:	High
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> <li>1. The system displays a "Edit " button at page under a particular pets</li> <li>2. When user selects the "Edit Button",User will be able to modify the information in the form: <ol style="list-style-type: none"> <li>a. Pets Name</li> <li>b. Price</li> <li>c. Description</li> <li>d. Age</li> <li>e. Breed</li> <li>f. Color</li> <li>g. Gender</li> <li>h. Upload Images <ol style="list-style-type: none"> <li>i. There will be 2 options for users to upload images , it is through taking photos directly from a phone camera or uploading from their own storage.</li> </ol> </li> <li>i. Type</li> <li>j. Adoption Center : Name</li> <li>k. Adoption Center : Phone Number</li> <li>l. Adoption Center : Email</li> </ol> </li> <li>3. If the user selects the "Submit" button,the system will save this information into the database and display a prompt to inform the user that "Pets have been successfully edited".</li> </ol>
Alternative Flows:	<p>AF-S3: Missing or Incomplete form</p> <ol style="list-style-type: none"> <li>3. The system displays a prompt to inform users that there are missing fields / wrong data types that require attention.</li> <li>4. Once everything is validated , the system will go to step 3.</li> </ol> <p>AF-S3: Existing Pet</p> <ol style="list-style-type: none"> <li>1. The system displays a prompt to inform user that there are existing item added by user previously</li> </ol>

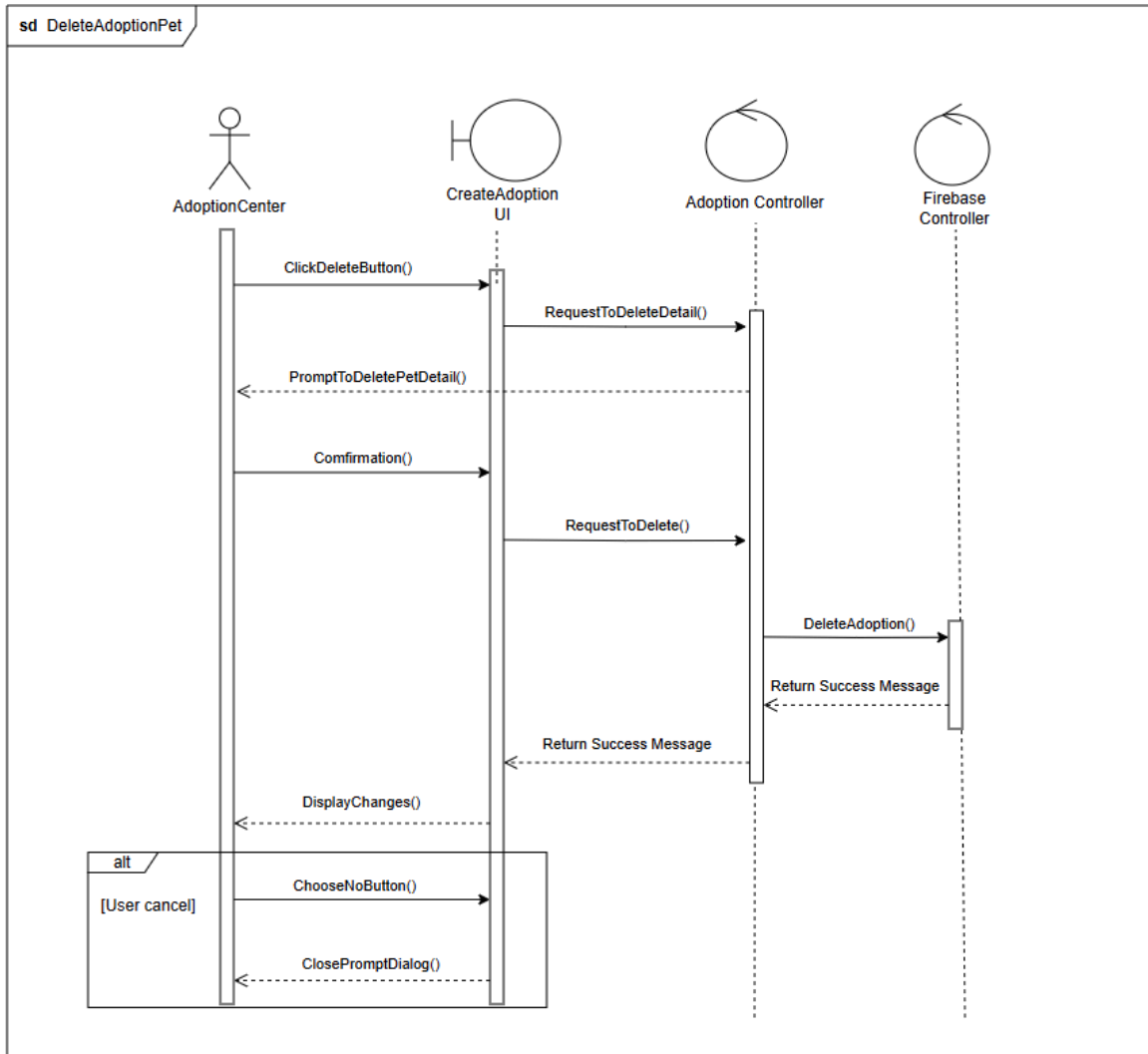
Exceptions:	EX1: Form submission fails due to network issues or server errors, the system displays an error popup message asking the user to try again at a later time.
Includes:	None
Special Requirements:	System needs to validate user input data
Assumptions:	User have uploaded information of the pets and the data are captured in the database.
Notes and Issues:	None.



## Delete Pet Adoption

Use Case ID:	29		
Use Case Name:	Delete Pet Adoption		
Created By:	Lim Chun Wen	Last Updated By:	Lim Chun Wen
Date Created:	26th August 2024	Date Last Updated:	26th August 2024

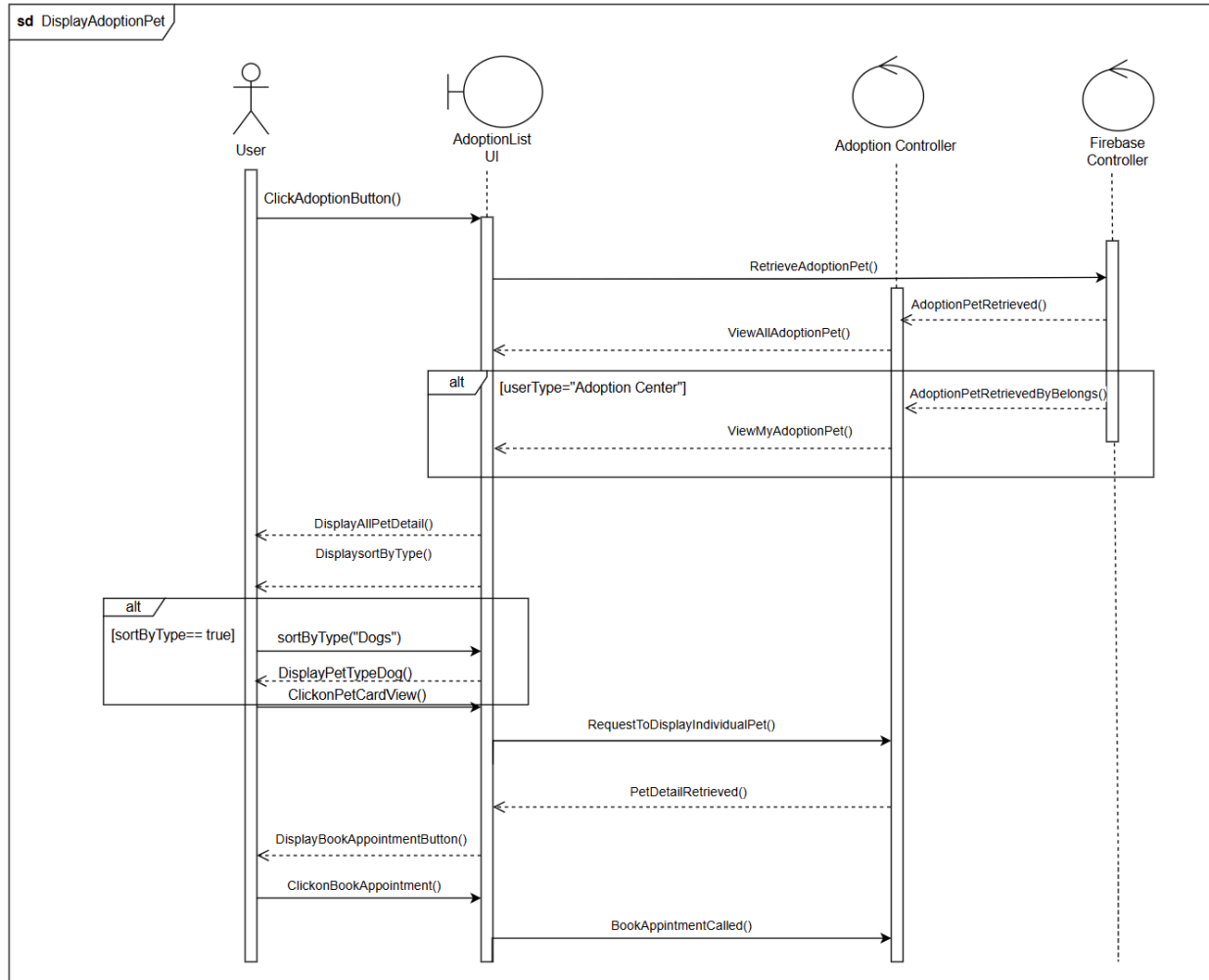
Actor:	Adoption Center
Description:	Allows adoption center to delete the detail of the pets once it has been adopted or not for adoption anymore
Preconditions:	<ol style="list-style-type: none"> <li>1. The user is logged in and authenticated in the adoption center account.</li> <li>2. The user has created the pet posting in the database</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The system successfully deletes the pet's details and updates the information in the database.</li> <li>2. Item is removed from the "my pets house" page.</li> </ol>
Priority:	High
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> <li>1. The system displays a "Delete" button at individual pet page under individual page(adoption user)</li> <li>2. When the user selects the "Delete Button",the system will prompt the user for confirmation.</li> <li>3. When confirmation is clicked ,the system will display a dialogue box informing the user that "Pet has been successfully deleted".</li> </ol>
Alternative Flows:	AF-S2 : User cancel the deletion <ol style="list-style-type: none"> <li>1. System will go back to individual pet page</li> </ol>
Exceptions:	None
Includes:	None
Special Requirements:	None
Assumptions:	User want to remove the pet from the adoption listings
Notes and Issues:	None



## Display Adoption Pet

Use Case ID:	30		
Use Case Name:	Display Adoption Pet		
Created By:	Lim Chun Wen	Last Updated By:	Lim Chun Wen
Date Created:	26th August 2024	Date Last Updated:	26th August 2024

Actor:	User
Description:	Allows the users to view the available pets uploaded by the adoption center and make contact with them.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user is logged in and authenticated.</li> <li>2. The adoption center has the information of pets in the database.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The buyer successfully makes contact with the adoption and makes an appointment.</li> </ol>
Priority:	High
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> <li>1. User navigates to the Adoption page.</li> <li>2. System retrieves and display all the currently available pets for adoption</li> <li>3. User click on one of the pet listing to view more detail regarding the detail of the pets</li> <li>4. User clicks on "Book an appointment", the system will open WhatsApp and make contact with the adoption center.</li> <li>5. Buyer successfully booked an appointment with the adoption center.</li> </ol>
Alternative Flows:	AF-S2 : User filter pet by type <ol style="list-style-type: none"> <li>1. System will filter out and only display the type of pet selected by the user at the filter section</li> <li>2. Flow continue back to step 3</li> </ol>
Exceptions:	EX1: The user does not have WhatsApp installed on their mobile device.
Includes:	
Special Requirements:	None
Assumptions:	User do not misused the system
Notes and Issues:	None



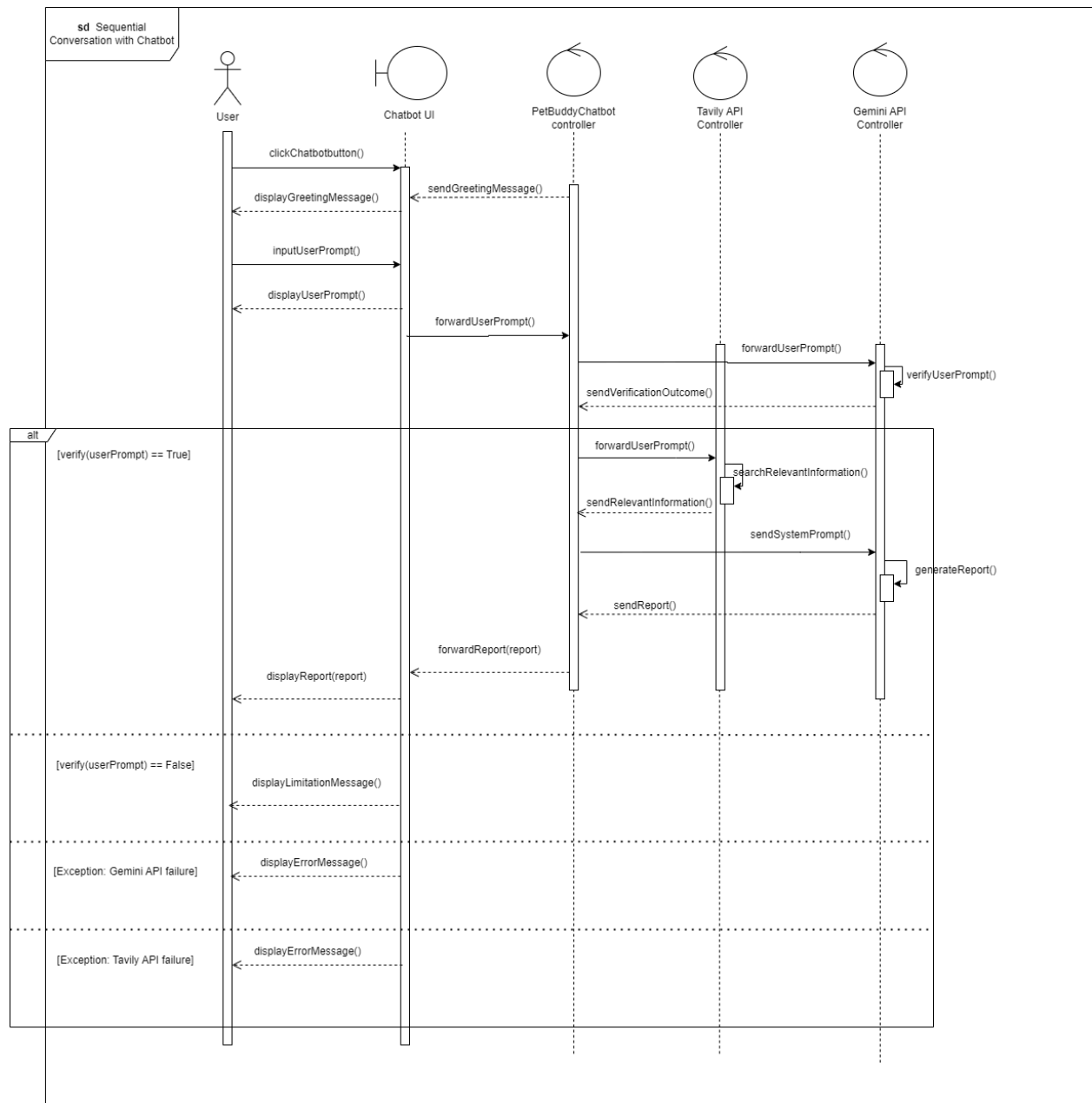
## Sequential Conversation With Chatbot

Use Case ID:	31		
Use Case Name:	Sequential Conversation With Chatbot		
Created By:	Hng Cherng Khai	Last Updated By:	Hng Cherng Khai
Date Created:	26th August 2024	Date Last Updated:	26th August 2024

Actor:	User PetBuddy Chatbot
Description:	This use case describes the interaction between the user and the PetBuddy Chatbot, focusing on a sequential conversation where the chatbot assists the user with pet care queries. The chatbot starts the conversation and awaits user input, then responds accordingly based on the user's prompt, using external APIs like Tavily and Gemini to generate appropriate responses.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user has accessed the PetBuddy web or mobile app and navigated to the chatbot interface.</li> <li>2. Tavily API and Gemini API are functioning and integrated into the system.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The user receives a detailed response or report based on their pet care-related prompt and online sources.</li> <li>2. The conversation flow follows a structured sequence of input and response, ensuring that only relevant prompts are processed.</li> <li>3. If the prompt is unrelated to pet care or involves map locations, the chatbot informs the user of its limitations.</li> </ol>
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. User clicks on the PetBuddy Chatbot icon.</li> <li>2. The user is navigated to the PetBuddy Chatbot page.</li> <li>3. PetBuddy Chatbot automatically initiates the conversation with a greeting: <ul style="list-style-type: none"> <li>• "Hi there! 🐾 I'm PetBuddy, your pet care research assistant. How can I help you and your pet today?"</li> </ul> </li> <li>4. User inputs a text prompt into the chat box.</li> <li>5. PetBuddy chatbot displays the user's input in the chat interface.</li> <li>6. PetBuddy chatbot forwards the user's input to the Google Gemini API.</li> <li>7. Google Gemini API verifies if the user's prompt is related to a pet care topic and does not involve a map location search.</li> <li>8. Google Gemini API sends the verification outcome to the PetBuddy chatbot.</li> <li>9. If the user's prompt is related to a pet care topic and does not involve a map location search, the PetBuddy chatbot forwards the user's prompt to the Tavily API for information retrieval.</li> <li>10. Tavily API searches online sources, scrapes and filters relevant information based on the prompt.</li> <li>11. PetBuddy chatbot receives the relevant information from Tavily API.</li> <li>12. PetBuddy chatbot sends a system prompt to the Gemini API to generate a report based on the received information.</li> <li>13. Gemini API generates the report, including reference links, and sends it to the PetBuddy chatbot.</li> <li>14. The PetBuddy chatbot displays the report in the chat interface.</li> <li>15. Step 4 to Step 11 repeats until the user clicks on the "close" button to close the chat.</li> </ol>



	16. The user navigates back to the home screen.
Alternative Flows:	<p>AF-S8: If the prompt is unrelated to pet care</p> <ol style="list-style-type: none"> <li>1. The PetBuddy chatbot displays a limitation message clarifying its limitations: <ul style="list-style-type: none"> <li>- "I'm sorry, I can only assist with pet care-related questions. Please ask me something about pets, their care, or related topics."</li> </ul> </li> <li>2. The system returns to step 4.</li> </ol> <p>AF-S8: If the prompt involves map location search</p> <ol style="list-style-type: none"> <li>1. The PetBuddy chatbot displays a limitation message clarifying its limitations: <ul style="list-style-type: none"> <li>- "I'm sorry, I cannot assist in searching map locations. Please ask me something about pets, their care, or related topics that are not related to map location search."</li> </ul> </li> <li>2. The system returns to step 4.</li> </ol>
Exceptions:	<p>EX1: APIs Unavailable:</p> <p>If either the Tavily API or Gemini API is unavailable, the PetBuddy chatbot must respond with a fallback message:</p> <ul style="list-style-type: none"> <li>- "Error occurred. Please try again later."</li> </ul>
Includes:	<p>xxx- Retrieve Information</p> <p>xxx- Generate Report</p>
Special Requirements:	None
Assumptions:	None
Notes and Issues:	None



## Retrieve Information

Use Case ID:	32		
Use Case Name:	Retrieve Information		
Created By:	Hng Cherng Khai	Last Updated By:	Hng Cherng Khai
Date Created:	26th August 2024	Date Last Updated:	26th August 2024

Actor:	Tavily API PetBuddy chatbot
Description:	This use case describes the process by which the PetBuddy chatbot retrieves relevant pet care information based on the user's prompt. The chatbot forwards the user's query to the Tavily API, which searches online sources for relevant information.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user has entered a valid pet care-related prompt.</li> <li>2. The user's prompt does not involve map location search.</li> <li>3. The Tavily API is online and accessible by the system.</li> </ol>
Postconditions:	The PetBuddy chatbot successfully retrieves pet care information extracted from online sources in Google via the Tavily API.
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. PetBuddy chatbot sends the user's prompt to the Tavily API for information retrieval.</li> <li>2. Tavily API performs an online search, scraping data from websites based on the user's prompt.</li> <li>3. Tavily API filters and extracts relevant information based on the user's pet care prompt.</li> <li>4. Tavily API sends the extracted information back to the system.</li> </ol>
Alternative Flows:	None
Exceptions:	<p>EX1: APIs Unavailable:</p> <p>If Tavily API is unavailable, the PetBuddy chatbot must respond with a fallback message:</p> <ul style="list-style-type: none"> <li>- "I'm currently unable to retrieve information. Please try again later."</li> </ul>
Includes:	None
Special Requirements:	None
Assumptions:	None
Notes and Issues:	None

## Generate Report

Use Case ID:	33		
Use Case Name:	Generate Report		
Created By:	Hng Cherng Khai	Last Updated By:	Hng Cherng Khai
Date Created:	26th August 2024	Date Last Updated:	26th August 2024

Actor:	Gemini API PetBuddy chatbot
Description:	This use case describes the process by which the PetBuddy Chatbot generates a detailed report for the user based on their pet care-related query. After retrieving relevant information via the Tavily API, the PetBuddy chatbot uses the Gemini API to generate a comprehensive report that is returned to the user through the chatbot interface.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user has entered a valid pet care-related prompt.</li> <li>2. The user's prompt does not involve map location search.</li> <li>3. The PetBuddy chatbot has successfully retrieved pet care information extracted from online sources in Google.</li> <li>4. The Gemini API is online and accessible by the system.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The system successfully receives a detailed report using the Gemini API.</li> <li>2. The PetBuddy chatbot is ready to display the report to the user</li> </ol>
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The PetBuddy chatbot shall send a system prompt to the Gemini API . <ol style="list-style-type: none"> <li>a. The PetBuddy chatbot prompt is formulated to ask Gemini API to generate a report. <ol style="list-style-type: none"> <li>i. The report must be based on the original prompt provided by the user</li> <li>ii. The report must be based on the received information returned from the Tavily API call.</li> <li>iii. The report must include reference links.</li> </ol> </li> </ol> </li> <li>2. Gemini API generates the report.</li> <li>3. Gemini API sends the report to the PetBuddy chatbot.</li> </ol>
Alternative Flows:	None
Exceptions:	EX1: APIs Unavailable: If Gemini API is unavailable, the PetBuddy chatbot must respond with a fallback message: - "I'm currently unable to retrieve information. Please try again later."
Includes:	None
Special Requirements:	None

Assumptions:	The Gemini API can generate a detailed and accurate report based on the data received.
Notes and Issues:	None