Use case name: Viewing Application Features	ID: 1	Importance level: Medium
Primary actor: Guest user		Use case type: Detail, Informational

Stakeholders and Interests:
Guest User: Wants to explore the application features before signing up.
System Administrator: Ensures limited access to features for guests.

Brief description: A guest user can view the limited features and functionalities of the application before creating an account.

Trigger: The guest user accesses the application without logging in.

Type: External

Relationships:
Associations: Guest
Include: -
Extend: Account creation

Normal flow of events:
   The guest user accesses the application's features section.
   The system displays a list of available features and their descriptions, such as pet management, product suggestions, and note-taking.
   The guest user selects a feature for detailed information.

Sub-flows:

Alternate/Exceptional flows:
   1. Feature unavailable:
         a. The selected feature is not available for guest users.
         b. A message is displayed: "This feature is only available for registered users."
   2. User attempts to access restricted functionality:
         a. The guest user tries to make changes or use restricted features.
         b. A message prompts the user to create an account to access these functionalities.
    3. System error displaying features:
         a. The system encounters an issue displaying the list of features.
         b. A message is displayed: "An error occurred, please try again later."

Use case name: User Account Creation	ID: 2	Importance level: High
Primary actor: User		Use case type: Detail, Essential

Stakeholders and Interests:
User: Wants to create an account to access personalized features.
System Administrator: Ensures proper registration and account setup.

Brief description: This use case allows the user to create an account, verify their email, and activate their profile.

Trigger: User clicks the "Create Account" button.

Type: External

Relationships:
Association: User
Include: -
Extend: Verifying and activating account

Normal flow of events:
    User fills out the registration form with necessary details.
    A verification email is sent to the user.
    User clicks the link in the email to activate their account.
    System redirects the user to their dashboard.

Sub-flows: -

Alternate/Exceptional flows:
Incomplete form submission:
    User does not fill out all required fields.
    A message prompts: "Please fill out all mandatory fields."
Invalid email address:
    The user provides an incorrect email format.
    A message is displayed: "Invalid email. Please try again."
Email not received:
    User does not receive the verification email.
    A message prompts: "Check your spam folder or resend the link."
Activation failed:
    The activation link fails due to technical errors.
    A message is displayed: "Activation failed. Please try again later."

Use case name: Login	ID: 3	Importance level: High
Primary actor: Guest		Use case type: Detail, Essential

Stakeholders and Interests:

     User   -   Wants to access their account securely.

     System Administrator   -   Wants to ensure secure and efficient user authentication.

Brief description: A new user logs in

Trigger: User clicking on login button

Type: External

Relationships:
     Associations: -
     Include: -
     Extend: Forgot password
     Generalization: -

Normal flow of events:

1 The user clicks on the "Login" button.

2 The system displays a form to enter required login credentials (e.g., username/email and password).

3 The user enters their login credentials and submits the form.

4 The system validates the credentials.

5 If the credentials are valid, the user is directed to their account dashboard.

Sub-flows:

     External Account Login – The user logs in using an external account (e.g Google)

Alternate/Exceptional flows:
    1.   Invalid email
        a.   User enters an email that hasn't been registered
        b.   An error message is shown to the user
    2.   Account not activated
        a.   User tries to login with an account that hasn't been activated
        b.   A message is shown, instructing the user to activate the account
    3.   Invalid password
        a.   User tries to log in with a wrong password
        b.   An error message is shown to the user
        c.   An option for password recovery is displayed

Use case name: Edit and Complete Profile	ID: 4	Importance level: Medium
Primary actor: User		Use case type: Detail, Essential

Stakeholders and Interests:
        User: Wants to update and complete their profile information.
        System: Ensures the validity of the entered data and updates the database.

Brief description: This use case allows the user to update their personal information, such as name, email, photo, and notification preferences, and save the changes to complete their profile.

Trigger: The user selects the "Edit Profile" option from the settings or profile section.

Type: External

Relationship:
        Associations:User
        Include: -
        Extend: -

Normal flow of events:
1. The user logs into their account.
2. The user navigates to the settings or profile section.
3. The user selects the "Edit Profile" option.
4. The user updates personal information such as name, email, image, or notification preferences.
5. The user clicks the "Save Changes" button.
6. The system validates the provided information.
7. If the information is valid, the system saves the changes and displays a confirmation message.

Sub-flows:

Alternate/Exceptional flows:
1. Invalid data input:
        a. The user enters invalid information (e.g., incorrect email format).
        b. The system displays an error message and prompts the user to correct the information.
    c. The user corrects the data and resubmits it.
2. Error Saving Data:
        a. The system encounters an issue (e.g., server error) and cannot save the changes.
        b. An error message is displayed, prompting the user to try again later.

Use case name: Logout	ID: 5	Importance level: High
Primary actor: User		Use case type: Detail, Essential

Stakeholders and Interests:
      User: Wants to end their session and return to the login page.
      System: Ensures proper session termination to maintain system stability.

Brief description: This use case describes how the user logs out of their account and ends their current session.

Trigger: The user selects the "Logout" option from the settings or account menu.

Type: External

Relationship:
      Associations: User
      Include: -
      Extend: -

Normal flow of events:
  1. The user clicks the "Logout" button from the account menu or settings.
  2. The system prompts the user to confirm the logout action.
  3. The user confirms the logout.
  4. The system terminates the current session.
  5. The user is redirected to the login page.

Sub-flows:

Alternate/Exceptional flows:
      1. User cancels the logout confirmation:
          a. The user clicks "Cancel" on the confirmation prompt.
          b. The system aborts the logout process, and the user remains logged in.

Use case name: Deleting User Account	ID: 6	Importance level: High
Primary actor: User		Use case type: Essential

Stakeholders and Interests:
- User: Wants to securely delete their account and all associated data.
- System Admin: Ensures account deletion complies with privacy policies.

Brief description: Users can delete their account by verifying their password and confirming via email. All data, including profile and pet history, will be permanently removed.

Trigger: User selects the "Delete Account" option in the settings menu.

Type: External

Relationships:

Association: User
Include: Verify Password
Extend: Send Email Confirmation

Normal flow of events:
1. The user navigates to the settings section.
2. Selects "Delete Account" and enters their password.
3. Receives an email with a confirmation link.
4. Clicks the link to confirm.
5. The system deletes the account and all related data.

Sub-flows:
S-1: Verify Password.
S-2: Send Email with Confirmation Link.
S-3: Confirm and Complete Deletion.

Alternate/Exceptional flows:
- If the password is incorrect, the system prompts the user to retry.
- If the email confirmation is not completed, the account remains active.

Use case name: Forgot Password	ID: 7	Importance level: High
Primary actor: User		Use case type: Detail, Essential

Stakeholders and Interests:
>   User   -   Wants to reset their forgotten password and regain access to their account.
>   System Administrator   -   Wants to ensure the password reset process is secure and reliable.

Brief description: Allows a user to reset their forgotten password

Trigger: User clicks on the "Forgot Password" link on the login page.

Type: External

Relationships:
>   Associations: -
>   Include: -
>   Extend: -
>   Generalization: -

Normal flow of events:
>   1. User requests a password reset.
>   2. System sends an email with a reset link.
>   3. User sets a new password.

Sub-flows:
>   Send Reset Email: The system generates and sends a secure password reset link to the user's registered email address.
>   Validate Reset Link: The system ensures the reset link is valid and has not expired before allowing the user to reset their password.

Alternate/Exceptional flows:
>   Invalid Email Address**:**
>   a. The user enters an email address not registered in the system.
>   b. The system displays an error message prompting the user to try again or register a new account.
>   Expired Reset Link:
>   a. The user clicks on a reset link that has expired.
>   b. The system displays an error message and prompts the user to request a new reset link.

Use case name: Changing Password	ID: 8	Importance level: Medium
Primary actor: User		Use case type: Essential

Stakeholders and Interests:
    - User: Wants to change their password securely and ensure account safety.

Brief description: This use case allows users to change their current password by verifying their old password and entering a new one, which is immediately updated for login.

Trigger: User selects the "Change Password" option in the settings menu.

Type: External

Relationships:

    Association: User
    Include: Verify Old Password
    Extend: Confirm New Password

Normal flow of events:
1. The user navigates to the settings section.
2. Selects the "Change Password" option.
3. Enters the current password.
4. Enters and confirms the new password.
5. Saves the new password, which is updated immediately.

Sub-flows:
    S-1: Enter Current Password and Verify.
    S-2: Enter and Confirm New Password.
    S-3: Save Changes and Update Password.

Alternate/Exceptional flows:
    - If the old password is incorrect, the system notifies the user and requests re-entry.
    - If the new passwords do not match, the system prompts the user to correct it.

Use case name: Add Pet	ID: 9	Importance level: High
Primary actor: User		Use case type: Detail, Essential

Stakeholders and Interests:

      User   -   Wants to add pet details (name, breed, age, etc.) to manage their pet's information systematically.

      System Administrator   -   Wants to ensure accurate and secure entry and storage of pet details.

Brief description: Add pet information (name, breed, age, photo), validate data, and save to the system.

Trigger: The user selects the "Add Pet" option in the pet management section.

Type: External

Relationships:
      Associations: -
      Include: -
      Extend: -
      Generalization: -

Normal flow of events:
1. The user clicks on the "Add Pet" option in the pet management section.
2. The system displays a form for entering the pet's details (name, breed, age, and photo).
3. The user enters the required information and uploads a photo (optional).
4. The user clicks the "Save" button to submit the details.
5. The system validates the entered information.
6. If the information is valid, the pet is added to the system, and a success message is displayed.

Sub-flows: -

Alternate/Exceptional flows:

      Invalid Information   a. The user submits incomplete or invalid data (e.g., missing mandatory fields).
                                     b. The system displays an error message prompting the user to correct the input.

      Save Failure   a. The system encounters an error while saving the pet information.
                            b. The user is notified and asked to retry later.

Use case name: Edit Pet Information	ID: 10	Importance level: Medium
Primary actor: User		Use case type: Detail, Essential

Stakeholders and Interests:
     User: Wants to update the information of their registered pet
     System: Ensures the provided information is complete and valid before updating the
     records.

Brief description: This use case allows the user to edit and update the information of a registered pet, such as its name, type, and breed, and save the changes.

Trigger: The user selects a specific pet from the list of registered pets and clicks the "Edit" button.

Type: External

Relationship:
     Associations: User
     Include: -
     Extend: -

Normal flow of events:
1. The user navigates to the "Manage Pets" section.
2. The system displays a list of registered pets.
3. The user selects a pet to edit and clicks the "Edit" button.
4. The user updates the desired information (e.g., name, type, breed).
5. The user clicks the "Save" button.
6. The system validates the provided information.
7. If the information is valid, the system saves the changes and displays a confirmation message.

Sub-flows:
1. Saving Changes:
    a. If validation is successful, the system updates the pet's information in the database.
    b. A success message is shown to the user.

Alternate/Exceptional flows:
1. Incomplete Information Provided:
    a. The user leaves some required fields blank or enters invalid data.
    b. The system displays an error message prompting the user to complete the required fields.
    c. The user completes the missing fields and resubmits.
2. System Error:
    a. The system encounters an issue (e.g., server error) while saving the changes.
    b. An error message is displayed, and the user is prompted to try again later.

Use case name: Purchase items from the online pet shop	ID: 11	Importance level: High
Primary actor: user		Use case type: Detail, Essential

Stakeholders and Interests:
User: Wants to browse and purchase pet products easily.
Pet Shop System: Provides a platform to browse and purchase items efficiently.

Brief description: This use case allows the user to browse and select items for their pet and add them to the shopping cart for purchase.

Trigger: The user enters the online pet shop section.

Type: External

Relationships:
Association**:** User
Include: -
Extend: Product selection and purchase

Normal flow of events:
1. User enters the pet shop section.
2. User browses products in various categories.
3. User selects a product and adds it to the cart.

Sub-flows:

Alternate/Exceptional flows:
1. Product not available:
    a. The selected product is out of stock.
    b. A message is displayed: "Product not available."
2. System error:
    a. The system fails to load the product list.
    b. A message is displayed: "An error occurred. Please try again."
3. Invalid product selection:
    a. User tries to add an invalid product to the cart.
    b. A message is displayed: "Invalid product selection."

Use case name: Product recommendation based on pet type and breed	ID: 12	Importance level: Medium
Primary actor: User		Use case type: Detail, Essential

Stakeholders and Interests:
User: Expects personalized product recommendations for their pet.
Recommendation System: Ensures relevant products are displayed to users.

Brief description: This use case allows the system to recommend suitable products for a pet based on its type and breed.

Trigger: The user provides information about their pet's type and breed.

Type: External

Relationships:
Association: User
Include: -
Extend: Viewing and selecting products

Normal flow of events:
1.   User provides details about their pet's type and breed.
2.   The system displays personalized product recommendations.
3.   User selects a recommended product.

Sub-flows:

Alternate/Exceptional flows:
1.   No matching products:
     a.   The system cannot find any products matching the pet's type or breed.
     b.   A message is displayed: "No products found for your pet."
2.   User rejects recommendations:
     a.   The user does not accept the recommended products.
     b.   The system redirects them to the general product catalog.

Use case name: Online Payment Gateway	ID: 13	Importance level: Medium
Primary actor: User		Use case type: Detail, Essential

Stakeholders and Interests:
User: Wants a secure and seamless payment process.
Payment Gateway Provider: Ensures secure and successful transactions.

Brief description: This use case allows the user to complete their purchase by securely paying through an online gateway.

Trigger: User selects a payment method at checkout.

Type: External

Relationships:
Association: User
Include: -
Extend: Completing the purchase

Normal flow of events:
1. User selects a payment gateway.
2. User provides payment details and completes the transaction.
3. A confirmation message is displayed upon success.

Sub-Flows:
 None

Alternate/Exceptional flows:
1. Payment declined:
   a. User's payment is declined due to insufficient funds or incorrect details.
   b. A message is displayed: "Payment unsuccessful. Please try again."
2. Gateway timeout:
   a. The gateway does not respond within the expected time.
   b. A message is displayed: "Payment timeout. Please try again later."
3. System error:
   a. The payment process fails due to technical issues.
   b. A message is displayed: "An error occurred. Please try again."

Use case name: Online Veterinary Appointment Booking	ID: 14	Importance level: High
Primary actor: User		Use case type: Detail, Essential

Stakeholders and Interests:

      User   -   Wants to book an appointment with a veterinarian at a convenient time.

      Veterinarian - Wants an organized schedule for appointments.

      System Administrator -   Wants to ensure the booing system functions properly and without errors, providing users with a seamless experience.

Brief description: Online appointment booking with a veterinarian by the user, selecting time and vet.

Trigger: The user selects the "Online Veterinary Appointment Booking" option.

Type: External

Relationships:
      Associations: -
      Include: -
      Extend: -
      Generalization: -

Normal flow of events:
      1. The user clicks on the "Online Veterinary Appointment Booking" option.
      2. The system displays a list of available veterinarians.
      3. The user selects their desired veterinarian.
      4. The system shows available time slots for the selected veterinarian.
      5. The user chooses a date and time and confirms the booking.
      6. The system processes the booking and displays a confirmation message.

Sub-flows:
      Viewing Appointments:
      a. The user selects the "View Appointments" option.
      b. The system displays the user's current bookings.
      Modifying Appointments:
      a. The user selects an appointment to modify.
      b. The system displays modification options (date, time, or veterinarian).
      c. The user confirms desired changes.
      d. The system updates the appointment and displays a success message.

Alternate/Exceptional flows:

      System Error

      a. A technical issue prevents the booking.
      b. The system notifies the user and prompts them to retry later.

Use case name: Medical Record		ID: 15	Importance level: High
Primary actor: User			Use case type: Detail, Essential

Stakeholders and Interests:

User : Wants to create and manage medical records for their pets, including vaccinations and checkup history.

Veterinarian - Wants access to accurate and complete pet medical records for better care.

System Administrator - Wants to ensure reliable storage and retrieval of medical records.

Brief description: Create and manage pet medical records including vaccination and checkup history.

Trigger: The user clicks on the "Medical Record" option.

Type: External

Relationships:
Associations: -
Include: -
Extend: -
Generalization: -

Normal flow of events:
1. The user selects the "Manage Animal Medical Records" option.
2. The system checks if a medical record already exists for the pet.
3. If no record exists, the user provides relevant medical information for the pet, such as name, breed, age, vaccination history, and past checkup details, to create or update the record.
4. The system validates the input data.
5. Upon successful validation, the medical record is created, and a success message is displayed.
6. The user can view and update vaccination schedules or checkup history.

Sub-flows:

Add Vaccination Details User enters details such as vaccine type, date, and next due date.

Update Checkup History User records veterinary checkup notes and treatment details.

Alternate/Exceptional flows:

Record Already Exists	a. The system detects an existing record. b. The user is directed to view or update the record instead of creating a new one.
Invalid Input Data	a. The user enters incomplete or invalid details. b. The system highlights the errors and prompts corrections.
Save Failure	a. System failure prevents saving the record. b. The user is notified and asked to retry later.

Use case name: Online Veterinary Consultation	ID: 16	Importance level: High
Primary actor: Pet Owner		Use case type: Essential

Stakeholders and Interests:
- Pet Owner: Wants quick and reliable advice for pet health issues remotely.
- Veterinarian: Aims to provide accurate diagnosis and guide pet owners.

Brief description: Pet owners consult veterinarians online for medical advice

Trigger: User logs into the system and selects consultation option.

Type: External

Relationships:

Associations: Pet Owner
Include: Upload Pet Details and Medical Records
Extend: Suggest Physical Appointment

Normal flow of events:
1. The user logs into the online platform.
2. Selects a veterinarian based on specialty or availability.
3. Chooses a communication method (text, image, or video).
4. Provides details of the issue and uploads any required documents or images.
5. Receives advice or guidance from the veterinarian.
6. If needed, the vet recommends an in-person appointment.

Sub-flows:
S-1: Upload images or videos for better diagnosis.
S-2: Engage in live chat with the vet for real-time advice.
S-3: Review and save the consultation outcome.

Alternate/Exceptional flows:
- If uploads fail, the system prompts the user to retry.
- If the veterinarian is unavailable, the system suggests alternative options.

Use case name: Requesting a Caretaker for Pets in Emergencies	ID: 17	Importance level: High
Primary actor: Pet Owner		Use case type: Essential

Stakeholders and Interests:
- Pet Owner: Needs urgent care for their pet in emergency situations.
- Caretaker: Wants to ensure the pet is well-cared for based on user requirements.

Brief description: Pet owners can request a caretaker for their pets in emergencies by providing location and care details.

Trigger: User logs into the system and navigates to the caretaker request section.

Type: External

Relationships:

- Association: Pet Owner
- Include: Specify Details, Confirm Request
- Extend: Notify Caretaker

Normal flow of events:
1. The user logs into the caretaker request section.
2. Registers their geographical location.
3. Views and selects available caretakers in the area.
4. Defines details such as duration and type of care required.
5. Confirms the request, and the caretaker contacts the user.

Sub-flows:
S-1: Register Location and View Available Caretakers.
S-2: Define Care Requirements.
S-3: Confirm Request and Notify Caretaker.

Alternate/Exceptional flows:
- If no caretakers are available, the system notifies the user and suggests alternatives.
- If the request fails, the system prompts the user to retry or modify details.

Use case name: Pet Insurance Registration and Management	ID: 18	Importance level: Medium
Primary actor: Pet Owner		Use case type: Detail, Essential

Stakeholders and Interests:
- Pet Owner: Wants to register and manage insurance for their pets conveniently.
- Insurance Company: Wants to provide accurate and comprehensive coverage options to customers.

Brief description: Pet owners consult veterinarians online for medical advice

Trigger: User logs into the system and selects the pet insurance option.

Type: External

Relationships:

Association: Pet Owner
Include: Select Coverage, Make Payment
Extend: Notify User for Renewal

Normal flow of events:
1. The user logs into the platform and navigates to the insurance section.
2. Views the available insurance plans and selects one.
3. Provides details of the pet (e.g., type, age, health status).
4. Confirms the coverage and makes payment.
5. Receives confirmation and policy details.

Sub-flows:
S-1: View and Compare Insurance Plans.
S-2: Input Pet Details and Verify.
S-3: Make Payments and Receive Confirmation.

Alternate/Exceptional flows:
- If payment fails, the system notifies the user and suggests retrying.

Use case name: Providing Educational Content for Pet Care	ID: 19	Importance level: Medium
Primary actor: User		Use case type: Detail, Essential

Stakeholders and Interests:
      User: Wants to access educational content related to pet care and have the option to save   articles for offline use.
      System: Provides personalized and relevant content based on the type and needs of the user's pet and enables content saving for offline access.

Brief description: This use case allows the user to browse, filter, and save educational articles related to pet care for later offline access.

Trigger: The user selects the option to view educational content from the system menu.

Type: External

Relationship:
      Associations: User
      Include: -
      Extend: -

Normal flow of events:
1. The user navigates to the "Educational Content" section in the application.
2. The system displays a list of articles and content related to pet care.
3. The user selects an article of interest.
4. The user reads the article.
5. The user has the option to save the article for offline access.
6. The system saves the article to the user's favorites and confirms the action with a success message.

Sub-flows:
1. Filtering Articles by Pet Type:
   a. The user selects a specific pet type (e.g., dog, cat) from the filter options.
   b. The system filters and displays only the articles related to the selected pet type.

Alternate/Exceptional flows:
1. Search for Specific Content:
   a. The user uses the search or filtering options to find content based on pet type, behavior, or health.
   b. The system refines the displayed articles based on the selected filters or search terms.