

Software Requirements Specification

Document Version 1

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PawCare: Pet Services

Project Description:

The purpose of this project is to provide all sorts of pet services in one spot. Whether you need services for pet sitting, grooming, or health checkups it is all in one app on PawCare. Users will be able to scroll through a list of services after signing up and schedule appointments for the certain service, time, and day. The app will also allow providers to create services for customers to schedule.

The scope for the Customer includes the ability to create profiles (including pets), browse/filter service providers, schedule/manage appointments, make payments, receive reminders, chat with direct messages, and leave reviews. The Customer will not be able to create posts and can only provide reviews (once the service is complete). The scope for the Provider includes the ability to create a profile, customize services, manage appointments, create listings/posts, respond to reviews, customize payment processing, and check business/customer insights. The app will not provide direct pet care services but it will act as a marketplace connecting pet owners with service providers, and there is no direct hiring or employment of service providers. They operate as independent contractors.

Key features of PawCare includes service listings with features such as filters that provide service type, location, and ratings Booking system that can schedule, reschedule or cancel appointments. User Profile that can be customized for both customers and providers. The ratings included for providers. Payment integration that provides a secure in-app payment and invoice. Notifications and reminders for both customers and providers for appointments and updates, and an in-app chat support with admins.

Responsibility:

Customer: Yasmine

Project Description + Provider: Libby

Admin: Sajid

Functional Requirements: Providers

FR0: The app will allow Providers to create a profile with service type (grooming, dog walking, pet sitting, etc.)

Data Provided: Name, Age, ID/Business License, Email, Password, Type of Animal Service, Pricing, Location, Profile Picture.

FR1: The app will allow Providers to modify their profile

FR2: The app will allow Providers to customize their services and schedule / create listings and posts

Data Provided: Date and Time, Type of Service, Description, Pricing, Location

FR3: The app will allow Providers to manage their appointments

Data Provided: Confirmation Status, Customer details, Date and Time

FR4: The app will allow Providers to respond to reviews/dispute reviews

Data Provided: Reason for dispute, dispute evidence

FR5: The app will allow Providers to manage payment processing

Data Provided: Payment Information

FR6: The app will allow Providers to check business/customer insights

Non-Functional Requirements: Providers

- NFR1: The system will give notifications within 5 seconds of action being taken (scheduling, booking, canceling)
- NFR2: Response time for any action (updating a profile, scheduling an appointment) should be less than 2 seconds under normal load
- NFR3: Providers must complete identity verification before offering services (government ID and business license verification (One time thing for the certain service))
- NFR4: Providers must agree to safety guidelines (proper handling of pets, emergency procedures) before creating an account
- NFR5: Providers should be able to set preferences for pet size, breed restrictions, and service limitations.
- NFR6: Customer insights are updated when a new service is completed or review is added
- NFR7: The system shall allow providers to dispute reviews securely, with admin response within 24 hours

The 3 most important Non-Functional Requirements to Providers are NFR2, NFR5, and NFR6. NFR2: Response time for any actions should be less than 2 seconds. This corresponds to the speed and it is important that the application stays within this guideline to ensure a smooth experience. NFR5: Providers should be able to set preferences for pet size, breed restrictions, and service limitations. This corresponds with ease of use. The providers when creating the profile can set preferences if wanted to give them a control for what they prefer to care for. NFR6: Viewing new customer insights when changes are made is important and it corresponds with reliability. Ensuring that customer insights are updated accurately and timely contributes to system availability and failure rate reduction.

Scenario Provider:

Actor	Provider
Use-Case Name	Create a Profile
Description	Allow Providers to create a profile with service type (grooming, dog walking, pet sitting, etc.)
Pre-Condition	User has to open application
Post-Condition	User has to login with Email and Username
Main Flow	<ol style="list-style-type: none">1. System displays a login or sign up page2. User chooses to sign up3. User enters required data4. User must agree to Safety guidelines to continue5. User is asked to pick a service6. Asked to be certified with government ID/business license7. User account is created and is brought to the login page
Alternative Path	<ol style="list-style-type: none">6. Certification fails<ul style="list-style-type: none">- Error message is shown to user- Use case resumes at step 5
Exception	-

Actor	Provider
Use-Case Name	Modify Profile / Delete Profile
Description	Allow Providers to modify their profile or delete their profile
Pre-Condition	The provider must be logged in
Post-Condition	The provider's information will be changed
Main Flow	<ol style="list-style-type: none"> 1. System displays a menu 2. Provider selects edit profile 3. Provider selects what information is changed 4. System will check if the information is valid 5. Provider selects save information 6. Provider's information is changed
Alternative Path	<ol style="list-style-type: none"> 3. Provider selects delete profile <ul style="list-style-type: none"> - Provider receives a confirmation button - Provider confirms - Use case resumes at step 6 4. System detects error and information is not valid (e.g. name: 927923) <ul style="list-style-type: none"> - Error message is shown to user - Use case resumes at step 3
Exception	At any point of the main flow when provider wishes to cancel, the user can select cancel and resume at step 1

Actor	Provider
Use-Case Name	Create services
Description	Providers customize their services and schedule or create listings and posts such as dog walker, groomer, vet, etc.
Pre-Condition	The provider must be logged in and verified
Post-Condition	The listing will be public for pet owners
Main Flow	<ol style="list-style-type: none"> 1. System displays a menu 2. Provider selects 'create listing' 3. Provider inputs information for listing (service type, cost, date/time) 4. System checks verification of service 5. Provider confirms 6. Listing is posted for pet owners to view
Alternative Path	<ol style="list-style-type: none"> 4. Provider inputs service that they are not verified for <ul style="list-style-type: none"> - Error message shown to user "you are not verified for this service" - Use case resumes at 3.
Exception	At any point of the main flow when provider wishes to cancel, the user can select cancel and resume at step 1

Actor	Provider
Use-Case Name	View customer statistics
Description	This use case lets a provider see insights about their services or customer base.
Pre-Condition	Provider must be logged in
Post-Condition	Provider receives customer statistics
Main Flow	<ol style="list-style-type: none"> 1. System displays a menu 2. Provider selects 'view customer insights' 3. System displays customer statistics (e.g. rating, price paid)
Alternative Path	
Exception	If the provider has had no customers, display 'you have not had any customers yet' and display empty(default) charts/data

Actor	Provider
Use-Case Name	Reply to review
Description	This use case lets a provider see all of their reviews, and if desired, to write a reply to the review
Pre-Condition	Provider must be logged in
Post-Condition	Providers receives customer reviews
Main Flow	<ol style="list-style-type: none"> 1. System displays a menu 2. Provider selects 'view profile' 3. Provider selects 'view customer reviews' 4. System displays lists of reviews left by customers
Alternative Path	<ol style="list-style-type: none"> 4. Provider chooses to respond to reviews <ul style="list-style-type: none"> - Provider selects 'respond to review' - Provider provides response - Provider confirms response - Use-case resumes 4
Exception	If there are no reviews left by any customers, display 'you currently have no reviews' and stay on the profile display

Functional Requirements: Admin(s)

FR0: The app will allow admin(s) to manage user profiles, including verification of identity and service type.

Data Managed: Name, Age, Email, Type of Service, Business ID/License

FR1: Admin(s) can review, approve or reject provider profile and service listings.

Data Managed: Profile Information, Service Type, Pricing, Location

FR2: Admin(s) can monitor and moderate provider activities, ensuring compliance with app policies and guidelines.

Data Managed: Service Customization, Schedule, Posts

FR3: Admin(s) have access to view and manage all appointments, including confirmation status and customer details

Data Managed: Appointment Details, Date and Time

FR4: Admin(s) can review and manage provider responses to customer reviews and handle disputes if necessary.

Data Managed: Dispute reasons, Evidence provided

FR5: Admin(s) oversee payment processing, ensuring security and resolving payment related issues.

Data Managed: Payment Information, Transaction Details

FR6: Admin(s) can access business and customer insights to analyze app usage and trends.

Data Managed: Business Metrics, Customer Behaviour.

Non-Functional Requirements: Admin(s)

NFR1: The system should be available 99.9% of the time to ensure that admin(s) can manage the platform without disruptions, ensuring seamless administration and monitoring

NFR2: The response time for any admin(s) actions (such as profile approval, post management, or review moderation) should be less than 3 seconds under normal load to ensure efficient administration.

NFR3: All sensitive data related to users (providers and customers), payment information, and business insights must be securely stored and transmitted using encryption standards.

NFR4: The admin(s) interface should be intuitive and user-friendly, allowing admin(s) to quickly navigate through the platform and perform tasks with minimal training or documentation.

NFR5: The system should be able to scale with increasing user and provider data, ensuring that admin(s) can manage larger datasets effectively as the app grows.

NFR6: The system must have regular backup and disaster recovery mechanisms to ensure that admin(s) can restore important data in case of failures.

NFR7: Admin(s) should have access to real-time logs and monitoring tools to track activities, identify issues, and respond to potential incidents efficiently.

NFR8: The system should allow admin(s) to respond to disputes or issues (e.g., reviews, provider complaints) within 24 hours to maintain a smooth and trustworthy user experience.

These requirements are designed to ensure the smooth and efficient operation of the app from an Admin perspective, focusing on system performance, security, scalability, and reliability.

Scenario Provider:

Actor	Admin
Use-Case Name	Manage User Access
Description	Allow admin(s) to manage customer's and provider's access to the system, including banning users based on behavior
Pre-Condition	Admin(s) must be logged in and have the required permissions to manage user access.
Post-Condition	User's access to the system is modified (e.g., banned, suspended, or restricted) based on admins' decision.
Main Flow	<ol style="list-style-type: none">1. Admin(s) log into the system.2. Admin(s) navigate to the "Manage Users" section.3. Admin(s) select a user (provider or customer) to review and system displays the user's activity and review history5. Admin(s) evaluate if the user has violated policies (writing unacceptable reviews)6. If a violation is confirmed, admin(s) take action (ban, suspend, or restrict).7. System updates the user's access status and notifies the user of the action.
Alternative Path	<ol style="list-style-type: none">1. If no violation is found, admin(s) can continue to review other users.2. If an error occurs, an error message is displayed, and the action is paused until the issue is resolved.
Exception	If admin(s) lack permission to modify user access, the system denies the action and shows an error message.

Actor	Admin(s)
Use-Case Name	Moderate Services
Description	Allow admin(s) to view provider services and remove any listings that may be inappropriate, violating platform policies or guidelines.
Pre-Condition	Admin(s) must be logged into the system with the required permissions to moderate services.
Post-Condition	Inappropriate service listings are removed, and the provider is notified of the action taken.
Main Flow	<ol style="list-style-type: none"> 1. Admin(s) log in. 2. Navigate to "Manage Services". 3. Select a service listing to review. 4. View service details. 5. Evaluate for violations. 6. Remove inappropriate listing. 7. Notify provider of removal.
Alternative Path	<ol style="list-style-type: none"> 1. No violation: continue reviewing listings. 2. Error: system displays an error message.
Exception	No permission: action denied with error message.

Actor	Provider
Use-Case Name	Moderate reviews
Description	Allow Sys Admin to view and remove unacceptable reviews and replies.
Pre-Condition	Sys Admin must be logged in and have permission to moderate reviews.
Post-Condition	Unacceptable reviews and replies are removed from the system.
Main Flow	<ol style="list-style-type: none"> 1. Admin(s) log in. 2. Navigate to "Manage Reviews". 3. View all reviews and replies. 4. Evaluate for unacceptable content. 5. Remove inappropriate reviews/replies. 6. Notify user of removal.
Alternative Path	<ol style="list-style-type: none"> 1. No violation: continue reviewing. 2. Error: system shows error message.
Exception	No permission: action denied with error message.

Actor	Admin(s)
Use-Case Name	View Usage Statistics
Description	Allow admin(s) to view system usage data to monitor activity.
Pre-Condition	Admin(s) must be logged in and have access to system analytics.
Post-Condition	Admin(s) views updated usage statistics.
Main Flow	<ol style="list-style-type: none"> 1. Admin(s) log in. 2. Navigate to "Usage Statistics". 3. View system activity data (e.g., active users, service usage). 4. Analyze trends and insights.
Alternative Path	<ol style="list-style-type: none"> 1. No data: system shows message "No data available". 2. Error: system displays error message.
Exception	No permission: action denied with error message.

Functional Requirements: Customer

FR0: The app will allow customers to create an account by providing their details (name, email, password, etc.).

Data Provided: Name, Email, Password, Phone Number, Address.

FR1: The app will allow customers to modify their profile information, including contact details and preferences.

Data Provided: Name, Email, Phone Number, Address.

FR2: The app will allow customers to search for available providers based on service type (grooming, pet sitting, etc.), location, and pricing.

Data Provided: Service Type, Location, Pricing.

FR3: The app will allow customers to book services from providers, specifying service details (date, time, etc.).

Data Provided: Service Type, Date, Time, Location.

FR4: The app will allow customers to leave reviews and ratings for providers based on the services they received.

Data Provided: Review Text, Rating (1-5 stars).

FR5: The app will allow customers to view and manage their upcoming and past appointments.

Data Provided: Appointment Details (Provider, Service Type, Date, Time)

FR6: The app will allow customers to securely make payments for services rendered.

Data Provided: Payment Information, Transaction Details.

FR7: The app will provide customers with a way to contact support for help with bookings, issues, or refunds.

Data Provided: Support Inquiry, Customer Details.

Non-Functional Requirements

NFR1: The system should ensure a response time of less than 2 seconds for any customer action (e.g., searching for services, booking appointments) under normal load.

NFR2: The app must have an intuitive and user-friendly interface, making it easy for customers to navigate, search for services, and manage bookings without training.

NFR3: All customer data, including personal information and payment details, must be securely stored and transmitted using encryption standards.

NFR4: The system should have an uptime of 99.9% to ensure customers can access and use the app without major disruptions.

NFR5: The app should be compatible with both iOS and Android devices, as well as major browsers.

NFR6: The system should scale to handle increasing numbers of customers and service requests efficiently as the app grows in popularity.

NFR7: The app should ensure that all customer data (profile, booking, payments) is accurate and up-to-date, with no inconsistencies.

NFR8: Customer support must be available 24/7 for any customer inquiries or issues related to bookings, services, or payments.

Actor	Customer
Use-Case Name	Create/Modify Customer Profile
Description	Allows a customer to create or modify their profile by adding personal details and preferences.
Pre-Condition	Customer must be logged in to create or modify their profile.
Post-Condition	Customer's profile is updated with the new or modified information.
Main Flow	<ol style="list-style-type: none"> 1. Customer logs in. 2. Customer navigates to "Profile" section. 3. Customer enters or modifies personal details and preferences. 4. Customer saves changes. 5. System updates the profile.
Alternative Path	<ol style="list-style-type: none"> 1. If data validation fails (e.g., invalid email), the system shows an error message and asks the customer to correct it. 2. If an error occurs, an error message is displayed.
Exception	If the customer lacks permission to edit the profile, the system denies the action and displays an error message.

Actor	Customer
Use-Case Name	View Available Services
Description	Allows the customer to see a list of available services and/or providers that fit their preferences.
Pre-Condition	Customer must be logged in and have access to the service list.
Post-Condition	Customer views a list of available services and providers.
Main Flow	<ol style="list-style-type: none"> 1. Customer logs in. 2. Customer navigates to "Available Services". 3. System displays a list of services/providers. 4. Customer can filter by service type, location, or other preferences. 5. Customer views service details and reviews.
Alternative Path	<ol style="list-style-type: none"> 1. If no services match the customer's preferences, the system displays a message: "No services found". 2. If an error occurs, the system shows an error message.
Exception	If the customer lacks permission to view services, the system denies the action and displays an error message.

Actor	Customer
Use-Case Name	Subscribe to Available Services
Description	Allows the customer to subscribe to a service by signing up.
Pre-Condition	Customer must have viewed the service and selected it.
Post-Condition	The service is added to the customer's list of subscribed services.
Main Flow	<ol style="list-style-type: none"> 1. Customer logs in. 2. Customer views available services. 3. Customer selects a service to subscribe to. 4. System adds the service to the customer's list. 5. Customer receives confirmation of subscription.
Alternative Path	<ol style="list-style-type: none"> 1. If the service is unavailable or fully booked, the system notifies the customer. 2. If an error occurs during subscription, the system displays an error message.
Exception	If the customer lacks permission to subscribe, the system denies the action and shows an error message.

Actor	Customer
Use-Case Name	Write Review
Description	Allows the customer to write a review for a provider after using their service.
Pre-Condition	Customer must have completed a service with a provider.
Post-Condition	Review is added to the system and displayed on the provider's profile.
Main Flow	<ol style="list-style-type: none"> 1. Customer logs in. 2. Customer navigates to the service they used. 3. Customer writes a review and rates the service. 4. Customer submits the review. 5. System posts the review to the provider's profile.
Alternative Path	<ol style="list-style-type: none"> 1. If the review contains inappropriate content, the system prompts the customer to modify it. 2. If an error occurs, the system displays an error message.
Exception	If the customer is not authorized to write a review, the system denies the action and shows an error message.