

**ADVANCED WEB DEVELOPMENT**

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**Software Requirements** **Specification**

Project: Paw Point 360

Team: 3

Name: Syntax Squad

Members:

Diana Carolina Guerra Coronel

Bryan Josué Jácome Noroña

Sebastián David Lasso Vela

NRC: 22406

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# Document Sheet

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| **By the team** | **By the costumer** |
| Syntax Squad |  |

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# Introduction

This Software Requirements Specification (SRS) document describes the functional and non-functional requirements for the **Dog Walking Service Website** project. The system is designed to provide an intuitive, responsive, and user-friendly platform for scheduling and managing dog walking services.

The purpose of this document is to define the software functionalities, interfaces, performance requirements, constraints, and other relevant aspects to ensure a common understanding between the stakeholders, including developers, clients, and project managers.

This document follows the IEEE Std 830-1998 guidelines to maintain a clear and structured format. It serves as the foundation for system design, development, and future maintenance, ensuring that the delivered product meets both user expectations and business objectives.

## Purpose

The purpose of this project is to design and develop a responsive, user-friendly website that serves as a digital platform for a pet-focused business offering four main services: pet shop, dog walking, veterinary care, and dog grooming. The goal is to provide pet owners with a centralized, informative, and interactive space where they can learn about each service, view relevant content (such as staff profiles, tips, and photo galleries), and access essential tools like booking appointments and contacting staff. This document outlines the software requirements necessary to guide the development process, ensuring that the website fulfills the expectations of both the business and its clients.

## Scope

This system will provide a web-based solution accessible from desktop devices. Key features include a clear homepage, an interactive gallery, a team presentation, quick contact buttons, integration with location maps, and a booking form for scheduling rides, vet appointments, and online shopping. The site will be fully manageable without the need for technical knowledge and will include analytics, security (SSL), and social media integration. Features such as a tips blog and a coverage map will also be included to improve user engagement and trust. The platform does not currently include payment processing, GPS tracking, or user login systems.

## Personnel Involved

|  |  |
| --- | --- |
| Name | Diana Carolina Guerra Coronel |
| Role | Analyst, designer and programmer |
| Professional Category | Software development engineer |
| Responsibility | Information analysis and design |
| Contact Information | [dcguerra2@espe.edu.ec](mailto:%64%63%67%75e%72ra%32@es%70e.%65d%75%2ee%63) |

|  |  |
| --- | --- |
| Name | Brayan Josué Jácome Noroña |
| Role | Analyst and documenter |
| Professional Category | Software development engineer |
| Responsibility | All project documentation and processes |
| Contact Information | [bjjacome1@espe.edu.ec](mailto:%62j%6a%61com%651@%65%73%70%65%2e%65%64u%2e%65c) |

|  |  |
| --- | --- |
| Name | Sebastián David Lasso Vela |
| Role | Server Administrator |
| Professional Category | Software development engineer |
| Responsibility | Server connection |
| Contact Information | [sdlasso@espe.edu.ec](mailto:sd%6ca%73%73%6f@%65%73%70%65%2ee%64%75%2eec) |

## Definitions, acronyms and abbreviations

|  |  |
| --- | --- |
| Name | Description |
| User | Person who will use the system to consult information and manage processes. |
| Employee | Person who will use the system for employee administrative purposes. |
| Admin | Person who will use the system for company administrative purposes. |
| SRS | Software Requirements Specification |
| FR | Functional Requirement |
| NFR | Non-functional requirement |
|  |  |

## References

## Summary

# General Description

## Product Perspective

The proposed system is a standalone web-based application developed to support the operations and public presentation of a business that offers pet-related services, specifically a pet shop, dog walking, veterinary care, and grooming. It is intended as an independent solution that provides a structured and informative interface to showcase services, facilitate communication with clients, and improve overall service visibility.

This product is being developed as a new system and does not depend on or integrate with any existing software platforms. It is designed to be deployed on a web server and accessed through standard web browsers on desktop and mobile devices. The architecture will follow modern web development standards, ensuring maintainability, responsiveness, and accessibility.

The system is also designed with scalability in mind, allowing for future extensions such as e-commerce modules, user authentication, or advanced booking systems, although these are not part of the initial scope.

## Product Functionality

## User Characteristics

## Constraints

* Interface to be used with the Internet.
* Domain Usage.
* Languages and technologies in use: HTML, JAVA.
* Servers must be able to handle queries concurrently.
* The system should be designed according to a client/server model.
* The system should have a simple design and implementation, independent of platform or programming language.

## Assumptions and Dependencies

* It is assumed that users (customers, employees and administrators) have stable internet access to be able to use the platform.
* It is assumed that employees and administrators will be trained to use the web system according to their assigned roles.
* It is assumed that the system will be accessed primarily from modern browsers that support HTML5 and CSS3.
* It is assumed that the server will be available 24/7 for continuous operation of the system.
* It is assumed that the PawPoint 360 business already has active physical services (pet shop, grooming, veterinary, walks), and that the system is a digital extension of these.
* The system relies on a reliable hosting provider to host the web application. The system depends on an operational database for the storage and management of user, service and product information.

# Specific Requirements

## Common interface requirements

### User Interfaces

The system will provide a graphical user interface (GUI) accessible through standard web browsers. The interface will be responsive and adapt to various screen sizes (mobile, tablet, desktop). Navigation will be intuitive, using a top or side menu with clearly labeled sections for each of the main service areas. Forms will include input fields, dropdowns, and buttons with clear labels and consistent styling. Accessibility guidelines (WCAG) will be considered to ensure usability for a broader range of users.

### Hardware Interfaces

The system does not require direct interaction with any specialized hardware devices. It is intended to run on any device capable of using a modern web browser, including desktop computers, laptops, tablets, and smartphones.

### Software Interfaces

The system will interface with the following third-party software and services:

* Web Browser Compatibility: Chrome, Firefox, Edge, Safari (latest versions).
* Google Maps API: to display business location and service coverage areas.
* Google Analytics: for tracking website traffic and user behavior.
* WhatsApp Link Integration: for direct communication with staff.  
  No other software dependencies are required for the basic operation of the system.

### Communication Interface

Communication between the client and the server will use the HTTP/HTTPS protocols. All data transmissions involving user input will be secured via SSL encryption. The website will not include real-time communication, email automation, or socket-based interfaces in this initial version.

## Functional requirements

### Functional requirements 1

### Functional requirements 2

### Functional requirements 3

### Functional requirements 4

### Functional requirements 5

### Functional requirements 6

### Functional requirements 7

## Non-functional requirements

### Performance requirements

* Ensure that query design or other processing does not significantly affect database performance or network traffic.
* The system should load the main user interface in less than 3 seconds under normal network conditions.
* Common operations (such as making a reservation or store inquiry) should be executed in less than 2 seconds.

### Security

* The system must implement user authentication via email and encrypted passwords.
* Only administrators will have access to critical system functions (such as user and service management).
* Access control policies must be established to ensure that users can only view and modify information related to their role.
* Sensitive data (such as personal or payment information) must be stored securely, following good encryption and protection practices.

### Reliability

* The system must be able to automatically recover from minor failures without losing critical information.
* Regular backups of the database must be performed.

### Availability

* The system must be available at least 95% of the time during business hours.
* In the event of maintenance, an informative message must be displayed to users regarding the service's unavailability.

### Maintainability

* The source code must be documented to facilitate maintenance and evolution.
* The system must allow for updating modules (for example, adding new services) without affecting overall functionality.
* A modular architecture must be followed to facilitate error isolation and modifications.

### Portability

* The system is designed to be used exclusively on Windows operating systems in its administrative and development environments.
* Correct operation on non-Windows operating systems is not guaranteed.
* The web platform will be accessible from modern Windows-compatible browsers (such as Google Chrome, Microsoft Edge, and Mozilla Firefox).