

**ADVANCED WEB DEVELOPMENT**

****

**Software Requirements** **Specification**

Project: BLAK BOX | Tech Store

Team: 3

Name: Syntax Squad

Members:

Diana Carolina Guerra Coronel

Brayan Josué Jácome Noroña

Sebastián David Lasso Vela

NRC: 22406

*Instructions for using this format.*

*This format is a standard template for software requirements documents.*

*It is based on and complies with IEEE Std 830-1998.*

*Sections not considered applicable to the described system may be justifiably marked as*

*not applicable (NA).*

*Notes:*

*Text in blue indicates that it should be removed and, if necessary, replaced with the content described in each section.*

*Text in brackets such as "[Insert text here]" allows direct inclusion of text with the appropriate color and style for the section by clicking on it with the mouse pointer.*

*The headings and subheadings for each section are defined as MS Word styles, so their consecutive numbering is automatically generated according to the "Heading 1, Heading 2, and Heading 3" styles.*

*The indentation of the text within each section is automatically generated by pressing Enter at the end of the heading line. (Indented Normal 1, Indented Normal 2, and Indented Normal 3 styles).*

*The document index is a table of contents that MS Word updates based on the document headings.*

*Once you've finished writing it, you should tell Word to update all of its content to reflect the final version.*

# Document Sheet

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Revision** | **Author** | **Verified** |
| 17/05/2025 |  | Diana Guerra Coronel Brayan Jácome Noroña Sebastián Lasso Vela |  |

Document validated by the parties on:

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

Content

[Document Sheet 3](#_Toc197259224)

[1. Introduction 6](#_Toc197259225)

[1.1. Purpose 6](#_Toc197259226)

[1.2. Scope 6](#_Toc197259227)

[1.3. Personnel Involved 6](#_Toc197259228)

[1.4. Definitions, acronyms and abbreviations 6](#_Toc197259229)

[1.5. References 6](#_Toc197259230)

[1.6. Summary 6](#_Toc197259231)

[2. General Description 6](#_Toc197259232)

[2.1. Product Perspective 6](#_Toc197259233)

[2.2. Product Functionality 6](#_Toc197259234)

[2.3. User Characteristics 6](#_Toc197259235)

[2.4. Constraints 6](#_Toc197259236)

[2.5. Assumptions and Dependencies 6](#_Toc197259237)

[3. Specific Requirements 6](#_Toc197259238)

[3.1. Common interface requirements 6](#_Toc197259239)

[3.1.1. User Interfaces 6](#_Toc197259240)

[3.1.2. Hardware Interfaces 6](#_Toc197259241)

[3.1.3. Software Interfaces 6](#_Toc197259242)

[3.1.4. Communication Interface 6](#_Toc197259243)

[3.2. Functional requirements 6](#_Toc197259244)

[3.2.1. Functional requirements 1 6](#_Toc197259245)

[3.2.2. Functional requirements 2 6](#_Toc197259246)

[3.2.3. Functional requirements 3 7](#_Toc197259247)

[3.2.4. Functional requirements 4 7](#_Toc197259248)

[3.2.5. Functional requirements 5 7](#_Toc197259249)

[3.2.6. Functional requirements 6 7](#_Toc197259250)

[3.2.7. Functional requirements 7 7](#_Toc197259251)

[3.3. Non-functional requirements 7](#_Toc197259252)

[3.3.1. Performance requirements 7](#_Toc197259253)

[3.3.2. Security 7](#_Toc197259254)

[3.3.3. Reliability 7](#_Toc197259255)

[3.3.4. Availability 7](#_Toc197259256)

[3.3.5. Maintainability 7](#_Toc197259257)

[3.3.6. Portability 7](#_Toc197259258)

# Introduction

This Software Requirements Specification (SRS) document describes the functional and non-functional requirements for the **PawPoint 360 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 or GPS tracking.

## Personnel Involved

|  |  |
| --- | --- |
| Name | Diana Carolina Guerra Coronel |
| Role | Analyst, designer and programmer |
| Professional Category | Software development engineer |
| Responsibility | Information analysis, design, communication with the costumer, developer. |
| 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, developer. |
| 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 | All project documentation and processes, developer. |
| 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

de Octubre de, I. S. 830-1998 22. (n.d.). Especificaci ́on de Requisitos seg ́un el est ́andar de IEEE 830. Ucm.Es. Retrieved May 5, 2025, from <https://www.fdi.ucm.es/profesor/gmendez/docs/is0809/ieee830.pdf>

(N.d.). Mascotamoda.com. Retrieved May 5, 2025, from <https://mascotamoda.com/?srsltid=AfmBOooimCJE5ILthg1Z5F9vBW0O3HVLZt--1-NAETVltTNCT7o76tiQ>

## Summary

The system is a customizable and manageable web platform designed for a pet business offering retail, dog walking, veterinary care, and grooming services. Its purpose is to centralize business information, enable online bookings, facilitate contact with staff, and enhance the customer experience through interactive content such as galleries and maps.

# General Description

## Product Perspective

The proposed system is a standalone web application developed to support the operations and public presentation of a business about to start selling products, specifically a technology store specializing in the sale of desktop computer components. It is conceived as a standalone solution that provides a structured and informative interface to showcase products, facilitate customer communication, and improve overall service visibility.

It is designed to be deployed on a web server and accessed through standard web browsers on desktop computers 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 online payment modules, user authentication with APIs, and others, although these are not part of the initial scope.

## Product Functionality

The PawPoint 360 system will offer a web-based platform that allows users to interact with a business specializing in pet services. Key product functionalities include:

* **Clear and intuitive navigation:** through a structured home page with access to the main sections.
* **Display of services offered:** including dog walking, veterinary care, dog grooming, and pet store.
* **Online appointment booking:** for services such as dog walking, veterinary consultations, and grooming, using a form accessible from the site.
* **Interactive multimedia gallery:** displaying photos, videos, and visual content related to services and clients.
* **Team introduction section:** where users can meet the staff providing the services. Quick contact buttons: integrated with social media and messaging services (WhatsApp, email, etc.).
* **Location map:** with a map service to show the business's location.

## User Characteristics

The PawPoint 360 website is designed for use by the following types of registered users:

**End Users (Pet Owners):**

* People interested in purchasing services such as dog walking, veterinary care, grooming, or pet store purchases.
* To access key features such as booking appointments or submitting forms, users must register and log in to the system.
* Registration will be simple and include basic information such as name, email address, and phone number.
* Users are assumed to have basic web navigation and form management skills.

**Site Administrators:**

* Authorized business personnel responsible for managing site content, bookings received, and blog information.
* You will have access to a secure administrative panel through a credentialed login.
* Your duties will include editing services, reviewing appointments, updating the gallery, and publishing content.
* No technical experience is required, as the panel will be intuitive and designed for non-technical users.

## 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

### Home Page

* The system should display a home page with clear information about the services offered.
* The home page should include quick access to key sections such as the store, dog walking, veterinary services, and grooming.

### Service Management

* + - * The system should allow users to view detailed information about each of the four services.
      * The system should allow users to book appointments for dog walking, veterinary care, and grooming services.

### Booking Forms

* + - * The system should include a form for scheduling reservations based on availability.
      * The form should request client information (name, contact information), type of service, date, and time.

### Interactive Gallery

* + - * The system should allow users to view a photo gallery of pets, facilities, and events.

### Team Introduction

* + - * The system should display staff profiles with a photo, name, specialty, and a brief description.

### Quick Contact Buttons

* + - * The system should allow the user to easily contact the company through visible buttons (WhatsApp, phone, email).

### Map Integration

* + - * The system should display a map of the company's location using services like Google Maps.

### Contact Form

* + - * The system should allow contact messages to be sent through a web form.

### Social Media Integration

* + - * The system should display links to the company's social media channels.

## 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 should be executed in less than 2 seconds.

### Security

* 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.

### 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 on Windows operating systems in its administrative and development environments.
* The web platform will be accessible from modern Windows-compatible browsers (such as Google Chrome, Microsoft Edge, and Mozilla Firefox).