Schweitzer Scheduler System

System Requirements Specification

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Version 1.1

April 28, 2019

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## Purpose

* The purpose of this document is to define functional, non-functional specifications for the development of a computer application that will manage the multiple procedures involved in requesting maintenance and repairs services from the Schweitzer company. This will be used by the company technicians and customers.

## Product Scope

* The main purpose of the Revision’s System is to speed up the process of accepting a work request and delivering a technician to realize an installation or maintenance. To have a better management of the clients, generating a list of frequent clients giving to each one a unique ID.

## Personnel involved

|  |  |
| --- | --- |
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| **Responsibility** | Support to offer quality software |
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## Glossary

|  |  |
| --- | --- |
| ***Name*** | ***Description*** |
| **QA** | Quality Assurance |
| **FR** | Functional requirement |
| **SRS** | Software Requirements Specification |
| **NFR** | Non-functional requirement |

## References

|  |  |
| --- | --- |
| **Document** | **Reference** |
| Standard IEEE 830 - 1998 | IEEE |

## Overview

This document consists of three sections. The first section realizes an introduction and give a general vision of resource specification of the system.

The second section of the document realizes a general description about the system, with the purpose to know the principal functions to do, associated data, factors, restrictions, dependencies that affect the development, without going into details.

Finally, the third section of the document is where define in detail the requirements that system will satisfy.

# General Description

## Product Perspective

The system will be a product designed to work in a PC with Windows OS, as a desktop

App which provides a fast and efficient performance.

## Product Functionality

**Imagen que contiene cielo, texto, exterior

Descripción generada automáticamente**

## User Features

|  |  |
| --- | --- |
| **Type of users** | Technician |
| **Formation** | Degree in Electronic Engineering |
| **Activities** | Do maintenances, installations and give support to clients |

|  |  |
| --- | --- |
| **Type of users** | Client |
| **Formation** | NA |
| **Activities** | Request different kind of services |

## Restrictions

* Interface to work in PC with Windows OS
* Languages and technologies in use: Java.
* The system must be able to notify the services incoming to the technicians
* The system will have a design and implementation simple and independent of the platform or program language.

## Assumptions and Dependencies

* Suppose to be the case, all the following requirements described are stable.
* The devices where the program will be executed must have the minimum requirements before indicated to guarantee a correct execution.

# Specific Requirements

## Functional Requirements

|  |  |
| --- | --- |
| **Requirement identification:** | FR01 |
| **Requirement Name:** | Type of user selection |
| **Characteristics:** | The user must to select the kind of user. |
| **Requirement description:** | The system could be showing the two kind of users, a technician or client, if are the technician must enter the ID |
| **NON functional requirement:** | * NFR01 |
| **Requirement priority:**  High | |

|  |  |
| --- | --- |
| **Requirement identification:** | FR02 |
| **Requirement Name:** | Verify work orders |
| **Characteristics:** | To the technician show all orders of service |
| **Requirement description:** | The technician has a quick look to the pending orders of service. If the technician realized a provisional maintenance the system shows it. |
| **NON functional requirement:** | * NFR04 |
| **Requirement priority:**  High | |

|  |  |
| --- | --- |
| **Requirement identification:** | FR03 |
| **Requirement Name:** | Verify work orders |
| **Characteristics:** | To the technician show all orders of service |
| **Requirement description:** | The technician is notified the work orders this could be a maintenance or repair. |
| **NON functional requirement:** | * NFR04 * NFR02 |
| **Requirement priority:**  High | |

|  |  |
| --- | --- |
| **Requirement identification:** | FR04 |
| **Requirement Name:** | Order Status |
| **Characteristics:** | Shows and configure the status of the orders. |
| **Requirement description:** | The status of the orders could be realized, pending or provisional. If the status is provisional the technician must stablish a new visit date. |
| **NON functional requirement:** | * NFR04 |
| **Requirement priority:**  High | |

|  |  |
| --- | --- |
| **Requirement identification:** | FR05 |
| **Requirement Name:** | Request Maintenance |
| **Characteristics:** | Create a maintenance or repair order. |
| **Requirement description:** | The system creates a maintenance or repair order, this order will be notified to the technician |
| **NON functional requirement:** | * NFR02 * NFR04 |
| **Requirement priority:**  High | |

|  |  |
| --- | --- |
| **Requirement identification:** | FR06 |
| **Requirement Name:** | Spare Parts List Review |
| **Characteristics:** | Shows an overview of the spare list. |
| **Requirement description:** | Have an inventory that shows the quantity of the spare parts available to realize the maintenances and repairs. |
| **NON functional requirement:** | * NFR02 |
| **Requirement priority:**  High | |

|  |  |
| --- | --- |
| **Requirement identification:** | FR07 |
| **Requirement Name:** | Sell Form |
| **Characteristics:** | Set and show a provisional form |
| **Requirement description:** | The system generates a form with price and cost of the parts that will be used in the maintenance or repair |
| **NON functional requirement:** | * NFR02 |
| **Requirement priority:**  High | |

## Non-Functional Requirements

|  |  |
| --- | --- |
| **Requirement identification:** | NFR01 |
| **Requirement Name:** | Interface of the system |
| **Characteristics:** | The system presents a simple user interface so that it is easy to use for system users. |
| **Requirement description:** | The system must have an intuitive and simple user interface. |
| **Requirement priority:**  High |  |

|  |  |
| --- | --- |
| **Requirement identification:** | NFR02 |
| **Requirement Name:** | Performance |
| **Characteristics:** | It must be a desktop application; it is not connected to the internet |
| **Requirement description:** | The system didn’t need an internet connection is fully functional without it. |
| **Requirement priority:**  High |  |

|  |  |
| --- | --- |
| **Requirement identification:** | NFR03 |
| **Requirement Name:** | Portability |
| **Characteristics:** | The application must to run in windows |
| **Requirement description:** | The app only run in windows computers |
| **Requirement priority:**  High |  |

|  |  |
| --- | --- |
| **Requirement identification:** | NFR04 |
| **Requirement Name:** | Storage |
| **Characteristics:** | All of the data will be saved. |
| **Requirement description:** | The data will be saved in files with .csv extension. |
| **Requirement priority:**  High |  |

# Common Requirements of Interfaces

## User interface

The interface with the user will consist of a set of windows with buttons, lists and text fields. This must be built specifically for the proposed system and will be viewed from any PC.

## Hardware Interfaces

It will be necessary to have computer equipment in perfect condition with the following characteristics:

• Processor of 1.66GHz or higher.

• Minimum memory of 256Mb.

• Mouse.

•Keyboard.

## Software Interfaces

• Operating System: Windows XP or higher

## Functional Requirements

Functional Requirement 1

* Type of user selection: The user must to select the kind of user.

The system could be showing the two kind of users, a technician or client, if are the technician must enter the ID

Functional Requirement 2

* Verify work orders: To the technician show all orders of service.
* The technician has a quick look to the pending orders of service. If the technician realized a provisional maintenance the system shows it.
* The technician is notified the work orders this could be a maintenance or repair.

Functional Requirement 3

* Order Status: Shows and configure the status of the orders.

The status of the orders could be realized, pending or provisional. If the status is provisional the technician must stablish a new visit date.

Functional Requirement 4

* Request Maintenance: Create a maintenance or repair order.

The system creates a maintenance or repair order, this order will be notified to the technician.

Functional Requirement 5

* Spare Parts List Review: Shows an overview of the spare list.

Have an inventory that shows the quantity of the spare parts available to realize the maintenances and repairs.

Functional Requirement 6

* Sell Form: Set and show a provisional form.

The system generates a form with price and cost of the parts that will be used in the maintenance or repair.