Rabbeshly Station

Software Requirements Specification

0.2

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1. Introduction

The introduction to the Software Requirement Specification (SRS) document should provide an overview of the complete SRS document. While writing this document please remember that this document should contain all of the information needed by a software engineer to adequately design and implement the software product described by the requirements listed in this document. (Note: the following subsection annotates are largely taken from the IEEE Guide to SRS).

1.1 Purpose

A well-rounded ERP and Marketplace system, that provides various services to the car industry and users in Libya. Everyday-drivers, Mechanics, Shops-Owners, Scrapyards and the government, all will benefit from the variety of services the system will provide.

1.2 Scope

1. Features: 1.1 Everyday-Drivers:

   Owned Car Station, Benefits:

   - Help up-keep the condition of the Engine, Gear Box and pumps through regular maintenance reminders.
   - Improve the safety and quality of life for the owner through providing a feedback of the Car’s most replaced/malfunctioning parts.

   Marketplace Station, Benefits:

   - Benchmark the car when it is time to sell, through showcasing the history of regular, recommended and critical maintenance of the car, helping the owner at selling his beloved car at its fair price.
   - Provide the true price of the car parts needed to be bought for the repair.

   Service Station, Benefits:

   - Connect the owner with various Service-Offering entities in the market, easing the repair and care of his car without having to look for a trusted shop or mechanic.

   1.2 Shop Owners:

   <shopname> Station:

   - Storage management, from the shop, through the app, from the desktop site.
   - Procurement suggestions based on past sales.

   Marketplace Station, Benefits:

   - Online account to help drive more market acquisition.

- Advertisements to help acquire a larger market-share and help Shop Owners reach more customers.
- Ease of reach to past customers to provide after-sale services.
- Improve the businesses public image and protect its reputation by giving General data of the shops such as: *main parts sold, avg price of some parts sold, price-fairness ratio to compare its prices with other competitors etc.*
- Ease of B2B purchases and services such as: *sending the parts a car needs to be fixed at a nearby workshop etc.* increasing the number of sales funnels a business can have, hence influencing the sales/storage-management positively.

1.3 Workshops:

1.4 Mechanics:

1.5 Cars Enthusiasts:

1.6 B2B Services:

1.7 Government Entities:

1.8 Scrapyards:

what the “Rabbeshly Station” not do/provide:

1.3 Definitions, Acronyms, and Abbreviations

This subsection should provide the definitions of all terms, acronyms, and abbreviations required to properly interpret the SRS. This information may be provided by reference to one or more appendixes in the SRS or by reference to other documents.

1.4 References

This subsection should:
(1) Provide a complete list of all documents referenced elsewhere in the SRS, or in a separate, specified document.
(2) Identify each document by title, report number - if applicable - date, and publishing organization.
(3) Specify the sources from which the references can be obtained.
This information may be provided by reference to an appendix or to another document.

1.5 Overview

This subsection should:
(1) Describe what the rest of the SRS contains
(2) Explain how the SRS is organized.

2. General Description

This section of the SRS should describe the general factors that affect 'the product and its requirements. It should be made clear that this section does not state specific requirements; it only makes those requirements easier to understand.

2.1 Product Perspective

This subsection of the SRS puts the product into perspective with other related products or projects. (See the IEEE Guide to SRS for more details).

2.2 Product Functions

This subsection of the SRS should provide a summary of the functions that the software will perform.

2.3 User Characteristics

This subsection of the SRS should describe those general characteristics of the eventual users of the product that will affect the specific requirements. (See the IEEE Guide to SRS for more details).

2.4 General Constraints

This subsection of the SRS should provide a general description of any other items that will limit the developer's options for designing the system. (See the IEEE Guide to SRS for a partial list of possible general constraints).

2.5 Assumptions and Dependencies

This subsection of the SRS should list each of the factors that affect the requirements stated in the SRS. These factors are not design constraints on the software but are, rather, any changes to them that can affect the requirements in the SRS. For example, an assumption might be that a specific operating system will be available on the hardware designated for the software product. If, in fact, the operating system is not available, the SRS would then have to change accordingly.

3. Specific Requirements

This will be the largest and most important section of the SRS. The customer requirements will be embodied within Section 2, but this section will give the D-requirements that are used to guide the project's software design, implementation, and testing.

Each requirement in this section should be:

- Correct
- Traceable (both forward and backward to prior/future artifacts)
- Unambiguous
- Verifiable (i.e., testable)

- Prioritized (with respect to importance and/or stability)
- Complete
- Consistent
- Uniquely identifiable (usually via numbering like 3.4.5.6)

Attention should be paid to the carefuly organize the requirements presented in this section so that they may easily accessed and understood. Furthermore, this SRS is not the software design document, therefore one should avoid the tendency to over-constrain (and therefore design) the software project within this SRS.

3.1 External Interface Requirements

3.1.1 User Interfaces

3.1.2 Hardware Interfaces

3.1.3 Software Interfaces

3.1.4 Communications Interfaces

3.2 Functional Requirements

This section describes specific features of the software project. If desired, some requirements may be specified in the use-case format and listed in the Use Cases Section.

3.2.1 <Functional Requirement or Feature #1>

3.2.1.1 Introduction
3.2.1.2 Inputs
3.2.1.3 Processing
3.2.1.4 Outputs
3.2.1.5 Error Handling

3.2.2 <Functional Requirement or Feature #2>

…

3.3 Use Cases

3.3.1 Use Case #1

3.3.2 Use Case #2

…
…

3.5 Non-Functional Requirements

Non-functional requirements may exist for the following attributes. Often these requirements must be achieved at a system-wide level rather than at a unit level. State the requirements in the following sections in measurable terms (e.g., 95% of transaction shall be processed in less than a second, system downtime may not exceed 1 minute per day, > 30 day MTBF value, etc).

3.5.1 Performance

3.5.2 Reliability

3.5.3 Availability

3.5.4 Security

3.5.5 Maintainability

3.5.6 Portability