ReqView Software Requirements Specification Example

Project: DEMO

Document: SRS

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1. Introduction

1.1 Purpose

The main purpose of this document is to provide a working example of a *Software Requirements Specification* (SRS) based on ISO/IEC/IEEE 29148:2018 standard.

Note: This is an example document, which is not complete.

1.2 Scope

This document specifies requirements for a simple application for <u>requirements management of software and system products</u>.

The application allows users to:

- Capture requirements specifications
- Manage requirements using custom attributes
- Set up requirements traceability
- Browse the requirements traceability matrix
- Comment and review requirements
- Filter and search requirements
- Import requirements from MS Word or Excel
- Export requirements to DOCX, XLSX, PDF, HTML, or CSV
- Analyze requirements coverage and impact of changes
- Print requirements specifications

The application stores documents as human readable files with open file format.

The application runs offline without connection to any server.

Note: The application functionality corresponds to <u>ReqView</u> v1.0 released in 2015. Check all advanced requirements management features it offers now.

1.3 Product perspective

1.3.1 System interfaces

The application runs in the latest version of Chrome or Firefox browser on Windows, Linux and Mac.

1.3.2 User interfaces

The application GUI provides menus, toolbars, buttons, panes, containers, grids allowing for easy control by a keyboard and a mouse.

1.3.3 Hardware interfaces 1.3.4 Software interfaces

The application allows import a structured MS Word document via HTML data format.

The application allows populating a MS Word document with project data via HTML data format.

The application allows import / export a list of requirements from / to MS Excel sheet via CSV data format.

The application stores project data in JSON format to enable easy integration with 3rd party applications.

1.3.5 Communications interfaces 1.3.6 Memory constraints 1.3.7 Operations 1.3.8 Site adaptation requirements 1.3.9 Interfaces with services

1.4 Product functions

Product functions are summarized in Section 2. User Stories of NEEDS document.

1.5 User characteristics

1.6 Limitations

1.7 Assumptions and dependencies

1.8 Definitions

Custom Attribute: Additional requirement property capturing additional requirements properties such as requirements source, status, priority, verification method, fit criterion, ...,

Document: A structured requirements specification capturing textual requirements for a given product or service.

Link: A directed association between related requirements allowing to analyze requirements coverage, gaps and impact of changes.

Link Type: Property of traceability links allowing to analyze links with different semantic independently, e.g., satisfaction and verification links.

1.9 Acronyms and abbreviations

CSV: Comma Separated Values

DNF: Disjunctive Normal Form

ID: Identifier

GUI: Graphical User Interface

HTML: Hypertext Markup Language

SRS: Software Requirements Specification

2. Requirements

2.1 External interfaces

- 2.2 Functions
- 2.2.1 File Operations
- 2.2.1.1 Create Document

[DEMO-SRS-53] The application shall allow users to create a new empty document.

[DEMO-SRS-54] If the current document contains unsaved changes then the application shall allow users to save the changes before closing the document.

2.2.1.2 Open File

[DEMO-SRS-56] The application shall allow users to open a document from a chosen file.

2.2.1.3 Save Local File

[DEMO-SRS-59] The application shall allow users to save the opened document into a file.

2.2.1.4 Document Template

[DEMO-SRS-61] The application shall allow users to create a document template file from the opened document.

[DEMO-SRS-62] Document templates shall store structure of document sections and definition and values of requirement attributes.

[DEMO-SRS-63] The application shall allow users to create a new document from a chosen document template file preserving the structure of document sections and the definition and values of requirement attributes.

2.2.1.5 Import

[DEMO-SRS-72] The application shall allow users to import a MS Word document preserving structure of document sections and paragraphs, rich text description of requirements and images. [DEMO-SRS-73] The application shall allow users to import a MS Excel table of requirements preserving section headings, levels, unformatted text description of requirements and values of custom attributes.

2.2.1.6 Export

[DEMO-SRS-76] The application shall allow users to export the displayed document view to HTML.

[DEMO-SRS-77] The application shall allow users to export requirements to CSV.

2.2.2 Document View

2.2.2.1 Table of Contents

[DEMO-SRS-80] The application shall display the table of contents containing section headings organized according to their document tree hierarchy.

[DEMO-SRS-81] When user clicks on a document section in the table of contents then the application shall focus the section in the requirements table.

2.2.2.2 Requirements Table

[**DEMO-SRS-83**] The application shall display the document in a requirements table containing the following columns: *ID*, *Description*, *Discussion*, *Links* and a column for each custom requirement attribute.

[DEMO-SRS-84] The *ID* column of the requirements table shall display unique requirement identifiers.

[**DEMO-SRS-85**] The *Description* column of the requirements table shall display the section numbers, headings, requirement text descriptions and attachments.

[DEMO-SRS-86] The *Discussion* column of the requirements table shall display requirement comments with information about comment author, date and text ordered by date and time.

[DEMO-SRS-87] The *Links* column of the requirements table shall display requirement traceability links grouped by link types.

[DEMO-SRS-88] The application shall allow users to change width of each requirements table column.

[DEMO-SRS-190] The application shall allow users to reorder requirements table columns.

[**DEMO-SRS-89**] The application shall allow users to show and hide requirements table columns except the *ID* column.

[DEMO-SRS-90] The application shall allow users to sort all requirements table columns except the *Discussion* and *Links* columns by ascending or descending order.