SOFTWARE REQUIREMENTS SPECIFICATION

for

<Project>

Version 1.24.8 approved

Prepared by <author>

<Organization>

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Revision History

Name	Date	Reason For Changes	Version
J.-M. Bruel	2021-01-22	First Draft	1.0
J.-M. Bruel	2023-01-28	Check after publication of the Handbook	1.23
J.-M. Bruel	2023-06-12	Add reqs automated numbering	1.23.1
J.-M. Bruel	2023-08-25	Add Minimum Requirements Outcome Principle	1.23.8
J.-M. Bruel	2023-12-22	Remove section numbers	1.23.12
J.-M. Bruel	2024-08-01	Add warning about non empty chapters	1.24.8

This document follows the requirements documentation structure presented in the Handbook of requirements and business analysis, by Bertrand Meyer.

Contents

Goals

Contents

Comment: *Goals are "needs of the target organization, which the system will address". While the development team is the principal user of the other books, the Goals book addresses a wider audience: essentially, all stakeholders.*

G.1 Context and overall objective

Comment: *High-level view of the project: organizational context and reason for building a system.*
Comment: *This chapter should not be empty!*

Goal 1. This is a goal example. If you need explicit (and automatic) numbering, you can use the definitions in the `.tex` template. Is is refined by 3

Requirement 2. *This is a requirement example. It illustrates how numbering is continuous and cross-types (if this is what you need).*

G.2 Current situation

Comment: *Current state of processes to be addressed by the project and the resulting system.*

Requirement 3. *This is a requirement example. It refines 1*

G.3 Expected benefits

Comment: *New processes, or improvement to existing processes, made possible by the projectâ€™s results.* Comment: *This chapter should not be empty!*

G.4 Functionality overview

Comment: *Overview of the functions (behavior) of the system. Principal properties only (details are in the System book).*

G.5 High-level usage scenarios

Comment: *Fundamental usage paths through the system.*

G.6 Limitations and exclusions

Comment: *Aspects that the system need not address.*

G.7 Stakeholders and requirements sources

Comment: *Groups of people who can affect the project or be affected by it, and other places to consider for information about the project and system.* **Comment:** *This chapter should not be empty!*

Environment

Contents

Comment: *The Environment book describes the application domain and external context, physical or virtual (or a mix), in which the system will operate.*

E.1 Glossary

Comment: *Clear and precise definitions of all the vocabulary specific to the application domain, including technical terms, words from ordinary language used in a special meaning, and acronyms. This chapter should not be empty!*

E.2 Components

Comment: *List of elements of the environment that may affect or be affected by the system and project. Includes other systems to which the system must be interfaced.*

E.3 Constraints

Comment: *Obligations and limits imposed on the project and system by the environment.* **Comment:** *This chapter should not be empty!*

E.4 Assumptions

Comment: *Properties of the environment that may be assumed, with the goal of facilitating the project and simplifying the system.*

E.5 Effects

Comment: *Elements and properties of the environment that the system will affect.*

E.6 Invariants

Comment: *Properties of the environment that the systemâ€™s operation must preserve.*

System

Contents

Comment: *The System book refines the Goal one by focusing on more detailed requirements about the system under development, mainly its constituents, behaviors and properties.*

S.1 Components

Comment: *Overall structure expressed by the list of major software and, if applicable, hardware parts.*
Comment: *This chapter should not be empty!*

S.2 Functionality

Comment: *One section, S.2.n, for each of the components identified in S.2, describing the corresponding behaviors (functional and non-functional properties).* **Comment:** *This chapter should not be empty!*

S.3 Interfaces

Comment: *How the system makes the functionality of S.2 available to the rest of the world, particularly user interfaces and program interfaces (APIs).*

S.4 Detailed usage scenarios

Comment: *Examples of interaction between the environment (or human users) and the system: use cases, user stories.*

S.5 Prioritization

Comment: *Classification of the behaviors, interfaces and scenarios (S.2, S.3 and S.4) by their degree of criticality.*

S.6 Verification and acceptance criteria

Comment: *Specification of the conditions under which an implementation will be deemed satisfactory.*

Project

Contents

Comment: *The Project book describes all the constraints and expectations not about the system itself, but about how to develop and produce it.*

P.1 Roles and personnel

Comment: *Main responsibilities in the project; required project staff and their needed qualifications.*

P.2 Imposed technical choices

Comment: *Any a priori choices binding the project to specific tools, hardware, languages or other technical parameters.*

P.3 Schedule and milestones

Comment: *List of tasks to be carried out and their scheduling.* **Comment:** *This chapter should not be empty!*

P.4 Tasks and deliverables

Comment: *Details of individual tasks listed under P.3 and their expected outcomes.* **Comment:** *This chapter should not be empty!*

P.5 Required technology elements

Comment: *External systems, hardware and software, expected to be necessary for building the system.*

P.6 Risks and mitigation analysis

Comment: *Potential obstacles to meeting the schedule of P.4, and measures for adapting the plan if they do arise.*

P.7 Requirements process and report

Comment: *Initially, description of what the requirements process will be; later, report on its steps.*