Title

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1 MARTIN Introduction

State the objectives and overview of the document at a high-level.

2 SASJA Test Goal

What is the overall goal of the testing effort, what are the final deliverables, who are the stakeholders, i.e., for whom are you doing it, applicable laws and (international) standards.

3 SASJA The Product

Identification of the SUT: What is the product (SUT – System Under Test) being tested, its version, its operation context, required platform, its interfaces, and how is it executed.

4 TERPSTRA The Specification

What is the test basis, i.e., its specification, and all documentation describing what the SUT shall do. (Do not include specification documents, but refer to them.)

5 MARTIN Risks

What are the risks of the product (at a high level), of the development process, and of the test process. How are risks handled and mitigated.

6 SASJA Test Environment

What is the (controlled) environment in which experiments are performed, what is the test architecture, i.e., how are SUT and test system positioned and connected, which environment and infrastructure (hardware, software, middleware, databases, libraries, . . .) are required for testing, how to access the SUT and its interfaces, which stubs and drivers are needed, are tests performed in a laboratory, production, or user environment.

7 MARTIN Quality Characteristics

Which quality characteristics are tested (IS 9126 or other quality model: functionality, reli- ability, usability, . . .),

8 MARTIN Levels and Types of Testing

Which levels and types of tests are performed: (V-model: unit, integration, module, sys- tem, acceptance, . . .), which units, components, subsystems, .

. . are tested and for what, accessibility (white/black box), verification vs. validation tests, ...

9 TERPSTRA Who will do the Testing

Who tests what, and what are the roles: developer, (independent) tester, user, alpha, certi- fication, . . .),

10 SASJA Test Generation Techniques

As far as already known or required, e.g., by applicable standards: black-box (equivalence partitioning, boundary value analysis, error guessing, cause-effect graphing, decision tables, state transitions, use case testing, exploratory testing, . . .), white-box (path, statement, (multiple) condition, decision/branch, function, call, loop, MC/DC coverage, . . .), mutation testing, combinatorial testing, ...

11 TERPSTRA Test Automation

As far as applicable, which parts of the testing will be automated, which test tools will be used in the various phases of the testing process (planning, preparation, test generation, test execution, completion), which tests are performed manually, what is automated, and which tools have to be obtained or developed.

12 MARTIN Exit Criteria

What are the criteria for going from one test phase to the next, when is testing finished, when is the product considered sufficiently tested, what are the (final) evaluation criteria.

13 TERPSTRA Testware

Which test products are recorded, consolidated, and kept for reuse.

14 TERPSTRA Issue Registration

How are issues (defects) registered, analysed, reported, and handled.