**Farmer Plus**

SRS Quality Report

28/12/2010

FAST – NUCES

Revision History

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# Quality Checker

According to the SQA plan (Section 4.4.1), the quality shall be measured according to the following criterion.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SRS Checklist** | | | | | |
| **Sr#** | **Specifications** | **Comply** | | | **Overall Quality (Q)**  **= 94.6%** |
| **Y** | **N** | **NA** |
| 1 | Are all requirements complete - Qr = | 93.75 % |  |  |
| 2 | Are all requirements correct - Qd | 98.46% |  |  |
| 3 | Is the requirements document complete - Qc | 91.67 % |  |  |

## Completeness

The criteria for ***completeness***, as discussed by [1], are as follows:

**Requirements completeness**

1. Responses of the software to all realizable classes of input data in all realizable classes of situations is included

Where is the number of requirements for which input classes have been defined and is the total number of requirements.

**Documentation Completeness (*Q d*)**

1. All pages numbered; all figures and tables numbered, named, and referenced; allterms defined; all unitsof measure provided; and all referenced material present
2. No sections of the document is marked as “To be determined”

Where is the number of labeled document objects (tables, figures etc) for which input classes have been defined and is the total number of object types.

## 1.2 Correctness

The criterion for ***correctness***, as discussed by [1], refers to the fact that every requirement contributes towards the satisfaction of some need of the user. It is measured as follows:

* Percentage of requirements in the SRS that have been validated.

Where is the number of requirements that have been validated and is the total number of requirements. Validation is done through

Tracing the origin of each requirement to **need**

# Measurement

## Completeness (Requirements)

### 2.1.1 Classes of Input data (1 for complete and 0 for incomplete/no input)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | Req ID | Input | No | Req ID | Input | No | Req ID | Input |
| 1 | ILF1 | 1 | **23** | IPF9 | 1 | **45** | SPF2 | 1 |
| 2 | ILF2 | 1 | **24** | IPF10 | 1 | **46** | SPF3 | 1 |
| 3 | ILF3 | 1 | **25** | SLF1 | 1 | **47** | SPF4 | 1 |
| 4 | ILF4 | 1 | **26** | SLF1 | 1 | **48** | SPF5 | 1 |
| 5 | ILF5 | 1 | **27** | SLF2 | 1 | **49** | SPF6 | 1 |
| 6 | ILF6 | 1 | **28** | SLF3 | 1 | **50** | SPF7 | 1 |
| 7 | ILF7 | 1 | **29** | SLF4 | 1 | **51** | SPF8 | 1 |
| 8 | ILF8 | 0 | **30** | SLF5 | 1 | **52** | SPF9 | 1 |
| 9 | ILF9 | 1 | **31** | SLF6 | 1 | **53** | CMF1 | 1 |
| 10 | ILF10 | 1 | **32** | SLF7 | 1 | **54** | CMF2 | 1 |
| 11 | ILF11 | 1 | **33** | SLF8 | 1 | **55** | CMF3 | 0 |
| 12 | ILF12 | 1 | **34** | SLF9 | 1 | **56** | CMF4 | 1 |
| 13 | ILF13 | 1 | **35** | SLF10 | 1 | **57** | CMF5 | 0 |
| 14 | ILF14 | 1 | **36** | SLF11 | 1 | **58** | CMF6 | 1 |
| 15 | IPF1 | 1 | **37** | SLF12 | 1 | **59** | CMF7 | 1 |
| 16 | IPF2 | 1 | **38** | SLF13 | 1 | **60** | CMF8 | 1 |
| 17 | IPF3 | 1 | **39** | SLF14 | 1 | **61** | CMF9 | 1 |
| 18 | IPF4 | 1 | **40** | SLF15 | 1 | **62** | CMF10 | 1 |
| 19 | IPF5 | 1 | **41** | SLF16 | 1 | **63** | CMF11 | 0 |
| 20 | IPF6 | 1 | **42** | SLF17 | 1 | **64** | CMF12 | 0 |
| 21 | IPF7 | 1 | **43** | SLF18 | 1 | **65** | CMF13 | 1 |
| 22 | IPF8 | 1 | **44** | SPF1 | 1 |  |  |  |
| *Requirement Completeness Qr= 60/64 x 100 = 93.75%* | | | | | | | | |

## Completeness (Document)

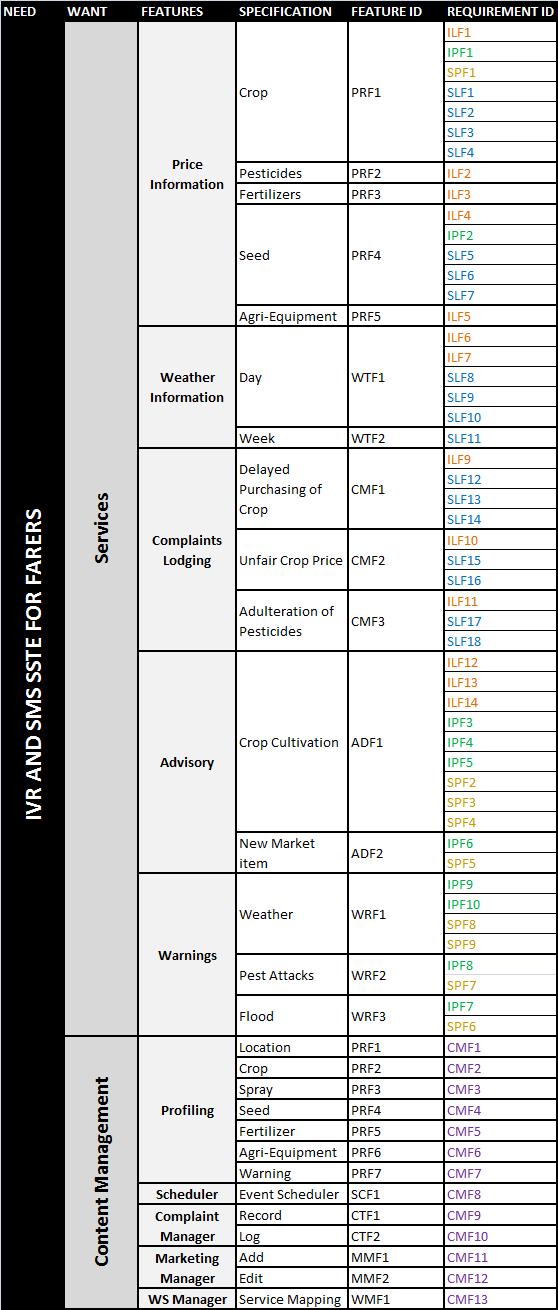
|  |  |  |  |
| --- | --- | --- | --- |
| Sr No | Quality Attribute | Value | Comments |
| 1 | All pages are numbered | 1 |  |
| 2 | All pages are named | 1 | Header/footer |
| 3 | All pages are referenced | 1 | Table of contents |
| 4 | All figures are numbered | 1 |  |
| 5 | All figures are named | 1 |  |
| 6 | All figures are referenced | 1 | List of figures and Tables |
| 7 | All tables are numbered | 1 |  |
| 8 | All tables are named | 1 |  |
| 9 | All tables are referenced | 1 | List of figures and Tables |
| 10 | All terms are provided | 1 |  |
| 11 | All referenced material are provided | 0 |  |
| 12 | All sections are present. | 1 |  |
| *Document Completeness (Qd) = 11/12 x 100= 91.67%* | | | |

## Correctness (Requirements)

### 2.3.1 Trace to Need [Refer Traceability Matrix – APPENDIX – A]

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | Req ID | Traced | No | Req ID | Traced | No | Req ID | Traced | No | Req ID | Traced |
| 1 | ILF1 | 1 | **18** | IPF4 | 1 | **35** | SLF10 | 1 | **52** | SPF9 | 1 |
| 2 | ILF2 | 1 | **19** | IPF5 | 1 | **36** | SLF11 | 1 | **53** | CMF1 | 1 |
| 3 | ILF3 | 1 | **20** | IPF6 | 1 | **37** | SLF12 | 1 | **54** | CMF2 | 1 |
| 4 | ILF4 | 1 | **21** | IPF7 | 1 | **38** | SLF13 | 1 | **55** | CMF3 | 1 |
| 5 | ILF5 | 1 | **22** | IPF8 | 1 | **39** | SLF14 | 1 | **56** | CMF4 | 1 |
| 6 | ILF6 | 1 | **23** | IPF9 | 1 | **40** | SLF15 | 1 | **57** | CMF5 | 1 |
| 7 | ILF7 | 1 | **24** | IPF10 | 1 | **41** | SLF16 | 1 | **58** | CMF6 | 1 |
| 8 | ILF8 | 0 | **25** | SLF1 | 1 | **42** | SLF17 | 1 | **59** | CMF7 | 1 |
| 9 | ILF9 | 1 | **26** | SLF1 | 1 | **43** | SLF18 | 1 | **60** | CMF8 | 1 |
| 10 | ILF10 | 1 | **27** | SLF2 | 1 | **44** | SPF1 | 1 | **61** | CMF9 | 1 |
| 11 | ILF11 | 1 | **28** | SLF3 | 1 | **45** | SPF2 | 1 | **62** | CMF10 | 1 |
| 12 | ILF12 | 1 | **29** | SLF4 | 1 | **46** | SPF3 | 1 | **63** | CMF11 | 1 |
| 13 | ILF13 | 1 | **30** | SLF5 | 1 | **47** | SPF4 | 1 | **64** | CMF12 | 1 |
| 14 | ILF14 | 1 | **31** | SLF6 | 1 | **48** | SPF5 | 1 | **65** | CMF13 | 1 |
| 15 | IPF1 | 1 | **32** | SLF7 | 1 | **49** | SPF6 | 1 |  |  |  |
| 16 | IPF2 | 1 | **33** | SLF8 | 1 | **50** | SPF7 | 1 |  |  |  |
| 17 | IPF3 | 1 | **34** | SLF9 | 1 | **51** | SPF8 | 1 |  |  |  |
| *Requirement Correctness Qc= 64/65 x 100 = 98.46%* | | | | | | | | |  |  |  |

# APPENDIX – A



**TABLE 4: Traceability Matrix**

# Reference

[1] Identifying and Measuring Quality in a Software Requirements Specification By Alan Davis, Scott Overmyer, Kathleen Jordan, Joseph Caruso, Fatma Dandashi, Anhtum Dinh, Gary Kincaid, Glen Ledeboer, Patricia Reynolds, pradip Sitaram, Anh Ta, and Mary Theofanos