



Ice Cream Manager ^[ICM]

SOFTWARE REQUIREMENTS SPECIFICATION DOCUMENT

Version No. v0.1

Project Document Revision History

VERSION	DATE	REVISION AUTHOR	DESCRIPTION OF REVISION
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1.0 Introduction

This section provides an overview of the entire requirement document. This document describes all data, functional and behavioral requirements for software.

1.1 Goals and Objectives

Overall goals and software objectives are described.

1.2 Statement of Scope

A description of the software is presented. Major inputs, processing functionality and outputs are described without regard to implementation detail.

1.3 Software Context

The software is placed in a business or product line context. Strategic issues relevant to context are discussed. The intent is for the reader to understand the 'big picture'.

1.4 Major Constraints

Any business or product line constraints that will impact the manner in which the software is to be specified, designed, implemented or tested are noted here.

2.0 Usage Scenario

This section provides a usage scenario for the software. It organized information collected during requirements elicitation into use-cases.

2.1 User Profiles

The profiles of all user categories are described here.

2.2 Use-Cases

LIST of all use-cases for the software are presented.

2.3 Special Usage Considerations

Special requirements associated with the use of the software are presented.

3.0 Data Model and Description

This section describes information domain for the software

3.1 Data Description

Data objects that will be managed/manipulated by the software are described in this section.

3.1.1 Data Objects

For each data object in 3.1 describe their major attributes.

3.1.2 Relationships

Relationships among data objects are described using CRC cards. No attempt is made to provide detail at this stage.

3.1.3 Complete Data Model

An UML Class model for the software is developed

3.1.4 Data Dictionary

A reference to the data dictionary is provided. The dictionary is maintained in electronic form.

4.0 Functional Model and Description

Description of major software functions along with UML Use Case, sequence, and communication diagrams.

4.1 Use Cases

A detailed description of each software function is presented by completing a use case template.

Cross reference this document with file name of use case summary document

LIST all of the use cases cross-listed with the file names of actual document

4.2 Software Interface Description

The software interface(s) to the outside world is(are) described.

4.2.1 External Machine Interfaces

Interfaces to other machines (computers or devices) are described.

4.2.2 External System Interfaces

Interfaces to other systems, products or networks are described.

4.2.3 Human Interface

An overview of any human interfaces to be designed for the software is presented.

4.3 Sequence Diagrams

Used to model the class interactions needed for the use cases.

4.4 Communication Diagrams

Used to model the message passing structure of the system functions.

5.0 Behavioral Model and Description

A description of the behavior of the software is presented.

5.1 Description for Software Behavior

A detailed description of major events and states is presented in this section.

5.1.1 Events

A listing of events (control, items) that will cause behavioral change within the system is presented.

5.1.2 States

A listing of states (modes of behavior) that will result as a consequence of events is presented.

5.2 State Transition Diagrams

Depict the manner in which the software reacts to external events.

6.0 Restrictions, Limitations, and Constraints

Special issues which impact the specification, design, or implementation of the software are noted here.

7.0 Validation Criteria

The approach to software validation is described.

7.1 Classes of Tests

The types of tests to be conducted are specified, including as much detail as is possible at this stage. Emphasis here is on black- box testing.

7.2 Expected Software Response

The expected results from testing are specified.

7.3 Performance Bounds

Special performance requirements are specified.

8.0 Appendices

Presents information that supplements the Requirements Specification

8.1 System Traceability Matrix

A matrix that traces stated software requirements back to the system specification.

8.2 Product Strategies

If the specification is developed for a product, a description of relevant product strategy is presented here.

8.3 Analysis Metrics to be Used

A description of all analysis metrics to be used during the analysis activity is noted here.

8.4 Supplementary Information (as required)

8.5 Software Requirements Specification Review and Signoff

Review and Signoff of the Software Requirements Specification Document.

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