Functional Specifications
Product -

Product Version:	
Document Version:	
Last Edited Date:	
Author(s):	
Revision History:	

{Insert company information, copyright notices, warnings, and restrictions here. An example follows:}

Functional Specifications - Product Name

{Note that this template strongly resembles the one for requirements. In many cases, a functional spec document is derived from the original requirements document.}

1. Introduction

{Insert any introductory remarks here concerning the purpose of the specification. This section is optional if the Executive Summary is sufficient for an introduction. An introduction might be needed to say something like, “Company X has requested Consulting Firm Y to gather requirements for a software system to do Z. This document contains the initial requirements gathered by Consulting Firm X. etc. etc.”.}

2. Executive Summary

2.1 System Vision

{This section contains an overall description of the product or system to be developed. It should be written for non-technical readers. It should be no more than three or four paragraphs, and written at about the level of a marketing brochure.}

2.2 Application Domain

{This is a description of the part of the real world affected by this system. This includes users and anyone else who interacts with this system (such as customers), plus any physical plant, equipment, or other tangible real-world items affected.}

2.3 System Overview

{This section (which is typically not in the requirements document) should detail the high level functional areas of the system to be developed. It should give a non-technical explanation of the purpose for each functional area, along with some concrete examples of things within that functional area. The functional areas can be handled under their individual headings, like this:}

2.3.1 Functional Area A

2.3.2 Functional Area B

2.4 General Plan

{This section lists the expected plan to study, specify, and develop the system, including information such as who it to be involved, and whether the work is to be done in an immediate time frame or later. If the functional specification is sufficiently developed, a general estimate of resources and time needed may be included here, but details should be left to another section.}

3. Background Information

{This section is especially important for commercial products, but may be helpful for corporate systems as well. It describes general background information that was known before requirements gathering or that turned up in general research. It might have several sections similar to the ones presented below.}

3.1 Why the User Needs This Product

3.2 The Market For This Product

3.3 Similar Competitive Products

3.4 Market Research

3.5 Results of User Surveys / Focus Groups

4. General Requirements of the System

{Discuss high-level product requirements here. Examples of topics would be the general databases that the product accesses, the operating systems the product will run on, and other products that this product must work with or be compatible with.}

{From this point, sections on specific functions should be written. Each should have an appropriate heading which is derived from the function discussed in that section, e.g., "Report Types" or "Selection Criteria".}

5. Functional Area A

{Like general requirements, except that the requirements are related to a particular functional area. Also, the requirements should be limited to those actually expected to be included in the product. By this time, "wish list" items that will not be included should not be listed. They may be listed under one of the sections for future versions below, if desired.}

{All requirements should also be compared to other requirements, and any conflicts should be noted. All requirements should be analyzed to see if everything is known that will be needed to design for the requirement (i.e. the requirement definition is "complete").}

{Some requirements may be structured in a "laundry list" style, with appropriate priorities for each requirement, like this:}

Requirement	Priority	Notes
Allow new customers to be added on the fly	Must have	Current system does not support this capability
Backtrack to address after entering ordered items	Important	See use case #3 below

{To analyze requirements for completeness, comparison grids may be needed which look like this:}

Transaction type	User class 1	User class 2	User class 3
Type A	OK	OK	Not possible
Type B	Not possible	Only available for customer type X	OK
Type C	OK	OK	?? - still to be determined
Type D	OK	Not possible	Available only during the last week of the month
Type E	Only available if security clearance is above level 7	Requires override from manager	OK

6. {Using This Template}

{This template is a starting point for producing a specification document. Instructions are included at various points and are enclosed in braces. All instructions should be deleted from the actual specification document.}

{The document includes heading styles which allow standard numbering of sections. The document will be easier to maintain if this automatic numbering is used. Manually inserting section numbers is discouraged. All chapter and topic headings should receive an appropriate style (Heading 1, Heading 2, Heading 3, or Heading 4), depending on how they fit into the document structure. Formatting headings with these styles will allow automatic generation of a table of contents (see below).}

{The document includes a footer which contains a page number. The footer should be edited to reflect the product the specification is for. To edit a footer, start with the View menu and select Headers and Footers. Use the tooltips on the toolbar which appears for further instructions.}

{The document includes a table of contents at the end. The top of the table of contents page includes instructions for updating the table of contents. Appropriate styles for table of content entries have been created, but may be changed if desired. The table of contents is in a separate section, and includes its own footer with page numbers in the i, ii, iii, etc. format. It is placed at the end to keep it out of the way and prevent it from affecting page numbers in the actual document. After printing, the table of contents should be moved to the front.}

{Two special styles are included which are useful in specifications. The "Question" style should be used during the early stages of specification production when unresolved issues remain. The style causes text to be indented and shaded so that unresolved questions will not be overlooked when reviewing the document. Such text will look like this:}

{Question: Is the above analysis correct?}

{Use of this style is highly recommended.}

{The other style is called “Sample Code” and is used to format code, code-like algorithms, or other text that should be in a fixed-font style with short lines. It is formatted in Courier New with no spacing above or below paragraphs. You may wish to enhance this style to add a border if your document contains lots of this kind of text.}

{Any sections or topics in this template which are not needed for a particular project should be deleted.}

7. {Miscellaneous Sections}

{This begins a series of suggested sections which may or may not apply to your situation. Use these as necessary and delete any that you don't need.}

8. Use Cases

{If use case analysis was done, relevant use cases may be summarized in a separate section. Alternatively, use cases may be placed with their relevant functional sections above, with each functional section having a sub-section named "Use Cases".}

9. Data Sources

{Include any information about where data is supposed to come from here, along with relevant data formats if they are not too bulky. If they are voluminous, place them in a separate document and just refer to them here.}

10. Distribution and Support Requirements

{How with this system be distributed to end users? Are there special functions or features needed in the product to assist support personnel?}

11. Infrastructure Details

{What platforms should this system run on? What browsers should it support? What networking considerations does this product raise?}

12. Hardware/Software Compatibility Requirements

{What systems or platforms must this new system be compatible with? What client platforms must it support?}

13. Features for Future Versions

{This can contain those desirable capabilities that it was not practical to include in this version. Knowing about these now can help the development team design hooks for use in the future. }

14. Dropped Requirements

{This section can contain requirements which were dropped during analysis, along with reasons why the requirements were not included.}

15. Success Measurements

{What are the criteria that will be used to judge success or failure of this product or system?}

16. Major Unresolved Issues

{In addition to items highlighted throughout the document, are there major unknowns? Are there still major decisions about system functionality which have not been made?}

17. Preliminary Estimates for Development

{If the functional spec has reached a sufficiently advanced stage of development, a general estimate of time required can be included. This should be broken down at least by functional area, with various tasks and their expected resource requirements listed.}

{A preliminary estimate is often expressed as a range. The range may be quite large if there are major unresolved issues, such as "five to twelve man-months". The purpose of the estimate is to enable a "go / no go" decision rather than pin down a deadline for completion.}

Table of Contents

{To update the table of contents, place the cursor in the contents text below and press F9. Follow the directions on the dialog box which appears. Delete this paragraph before printing or distributing the document.}

1. INTRODUCTION 1

2. EXECUTIVE SUMMARY 1

2.1 System Vision 1
2.2 Application Domain 1
2.3 System Overview 1
2.3.1 Functional Area A 1
2.3.2 Functional Area B 1
2.4 General Plan 1

3. BACKGROUND INFORMATION 2

3.1 Why the User Needs This Product 2
3.2 The Market For This Product 2
3.3 Similar Competitive Products 2
3.4 Market Research 2
3.5 Results of User Surveys / Focus Groups 2

4. GENERAL REQUIREMENTS OF THE SYSTEM 2

5. FUNCTIONAL AREA A 2

6. {USING THIS TEMPLATE} 3

7. {MISCELLANEOUS SECTIONS} 4

8. USE CASES 4

9. DATA SOURCES 4

10. DISTRIBUTION AND SUPPORT REQUIREMENTS 4

11. INFRASTRUCTURE DETAILS 4

12. HARDWARE/SOFTWARE COMPATIBILITY REQUIREMENTS 4

13. FEATURES FOR FUTURE VERSIONS 4

14. DROPPED REQUIREMENTS 4

15. SUCCESS MEASUREMENTS 5

16. MAJOR UNRESOLVED ISSUES 5

17. PRELIMINARY ESTIMATES FOR DEVELOPMENT 5