Functional Specifications Document

<Project Title>

Project Code:

Internal Advisor:

External Advisor:

Project Manager:

Project Team:

Submission Date:

_____

Project Manager's Signature

Document Information

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Definition of Terms, Acronyms and Abbreviations

This section should provide the definitions of all terms, acronyms, and abbreviations required to interpret the terms used in the document properly.

Term	Description
ASP	Active Server Pages
RS	Requirements Specifications

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1. Introduction

1.1 Purpose of Document

Describe the purpose of this document and provide a description of the intended audience i.e., the personnel who will be reading this document.

1.2 Project Overview

State a brief description of the project under study. Describe how the software will be used and identify the relevant goals and benefits.

1.3 Scope

List down the scope of the project. Describe what the system will and will not do.

2. Functional Requirements

This section should contain a textual description of the requirements related to the customer's business. This should contain a list of all the business events related to the business process.

3. Non-functional Requirements

3.1 Performance Requirements

The performance characteristics of the system that are required by the business should be outlined in this section. Performance characteristics include the speed, precision, capacity, safety, and reliability of the software. These characteristics define the performance of the project.

3.2 Safety Requirements

Specify the requirements that are concerned with possible loss, damage, or harm that could result from the use of the system. Define any safeguards or actions that must be taken, as well as potentially dangerous actions that must be prevented. Identify any safety certifications, policies, or regulations to which the system must conform.

3.3 Security Requirements

Specify any requirements regarding security, integrity, or privacy issues that affect the use of the system and protection of the data used or created by the system. Define all user authentication or authorization requirements, if any. Identify any security or privacy policies or certifications the system must satisfy.

3.4 User Documentation

List the user documentation components that will be delivered along with the software, such as user manuals, online help, and tutorials.

4. Assumptions and Dependencies

List any assumed factors that could affect the stated requirements. These factors are not system constraints, but areas where future changes might drive changes in the requirements. The project could be affected if these assumptions are incorrect, are not shared, or changed.

Also, identify any dependencies the project has on external factors. For example, if you expect to integrate into the system some components that are being developed by another project, you are dependent upon that project to supply the correctly operating components on schedule.

5. System Architecture

This section should provide the complete architecture of the system with description. Diagrammatic architecture is compulsory. Also include Data Flow Diagrams in this section.

6. Use Cases

6.1 Use Case Diagrams

In this section provide use case diagrams using UML convention.

6.2 Use Case Description

Each Use Case has a description, which describes the functionality that will be built in the proposed system. The template for Use Case description is given below:

<table>
<tr><th colspan="4"><Use case Id: name></th></tr>
<tr><td colspan="4">Actors: <List of actors (external agents), indicating who initiated the use case></td></tr>
<tr><td colspan="4">Feature: <Feature from which the use case is driven></td></tr>
<tr><td colspan="2">Use case Id:</td><td colspan="2">Write use case reference number.</td></tr>
<tr><td colspan="2">Pre-condition:</td><td colspan="2"><List the assumptions required before this Use Case can be executed. ></td></tr>
<tr><td colspan="4">Scenarios</td></tr>
<tr><td>Step#</td><td colspan="2">Action</td><td>Software Reaction</td></tr>
<tr><td>1.</td><td colspan="2">Numbered actions of the actors</td><td>Numbered description of system responses</td></tr>
<tr><td>2.</td><td colspan="2"></td><td></td></tr>
<tr><td></td><td colspan="2"></td><td></td></tr>
<tr><td colspan="4">Alternate Scenarios: Write additional, optional, branching or iterative steps. Refer to specific action number to ensure understandability.</td></tr>
<tr><td colspan="4">1a:

2a:</td></tr>
<tr><td colspan="4">Post Conditions</td></tr>
<tr><td>Step#</td><td colspan="3">Description</td></tr>
<tr><td></td><td colspan="3">Sequentially list conditions expected at the completion of the use case.</td></tr>
<tr><td></td><td colspan="3"></td></tr>
<tr><td></td><td colspan="3"></td></tr>
<tr><td colspan="2">Use Case Cross referenced</td><td colspan="2"><Related use cases, which use or are used by this use case></td></tr>
<tr><td colspan="2">User Interface reference</td><td colspan="2">List user interface(s) that are related to this use case. Use numbered list in case of more than one user interface elements.</td></tr>
<tr><td colspan="4">Concurrency and Response
Give an estimate of the following
• Number of concurrent users
• Expected response time of the use case</td></tr>
</table>

7. Graphical User Interfaces

Give a detailed account of user interfaces included in this project.

<User Interface Id: Title>	
Interface Id.	*Write the reference number assigned to this UI.*
Use case Reference	*Refer to the use case invoking this UI.*
Snapshot	
Include a labeled snapshot of the user interface.	
Data dictionary reference	
Label	**Data dictionary identifier**
	Refer to fields in data dictionary

8. Requirements Traceability Matrix

Sr. #	Feature	Use case ID	UI ID	Priority	Build Number	Use Case Cross reference (Related Use Cases)

The columns carry the following meaning:

- *Feature: Lists system features based on which use cases are built.*
- *Use Case ID: Write the ID of the use case for easy lookup*
- *UI ID: Write the user interface ID for this use case.*
- *Priority: Give an appropriate rating to each use case according to its priority*
- *Build Number: Write the reference number to which this feature belongs.*
- *Use Case Cross Ref: Write the related use cases separated with commas.*

9. References

This section should provide a complete list of all documents referenced at specific point in time. Each document should be identified by title, report number (if applicable), date, and publishing organization. Specify the sources from which the references can be obtained (This section is like the bibliography in a published book).

Ref. No.	Document Title	Date of Release/ Publication	Document Source
PGBH01-2003-Proposal	Project Proposal	Oct 20, 2003	<Give the path of your Project repository/Folder>

10. Appendices

Include supporting details that would be too distracting to include in the main body of the document.