Software Requirements Specification Template

CT216—Software Engineering 1

The following template can be used as a guide to complete the Software Requirements Specification (SRS) assignment of CT216.

**Template Usage:**

Text contained within angle brackets (‘<’, ‘>’) shall be replaced by your project-specific information and/or details. For example, <Project Name> will be replaced with either ‘Real time portal’.

Italicized text is included to briefly annotate the purpose of each section within this template. This text should not appear in the final version of your submitted SRS.

This cover page is not a part of the final template and should be removed before your SRS is submitted.

<Project Name>

Software Requirements Specification

<Version>

<Date>

<Your Name(s)>

Prepared for

CT216—Software Engineering I

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# 1. Introduction

The introduction to the Software Requirement Specification (SRS) document should provide an overview of the project. While writing this document please remember that this document should contain all of the information needed by a software engineer to adequately design and implement the software product described by the requirements listed in this document.

## 1.1 Purpose

*What is the purpose of this SRS and the (intended) audience for which it is written.*

## 1.2 Scope

*This subsection should:*

*(1) Identify the software system(s) to be produced by name; for example, MongoDB database, Real time update module, etc*

*(2) Explain what the software system(s) will, and, if necessary, will not do*

*(3) Describe the application of the software being specified. As a portion of this, it should:*

*(a) Describe all relevant benefits, objectives, and goals.*

## 1.3 References

*This subsection should:*

*(1) Provide a complete list of all documents referenced elsewhere in the SRS, or in a separate, specified document.*

*(2) Identify each document by title, report number - if applicable - date, and publishing organization.*

*(3) Specify the sources from which the references can be obtained.*

*This information may be provided by reference to an appendix or to another document.*

## 1.4 Overview

*This subsection should:*

*(1) Describe what the rest of the SRS contains*

*(2) Explain how the SRS is organized.*

# 2. Specific Requirements

This will be the largest and most important section of the SRS.

Each requirement in this section should be:

* Correct
* Unambiguous
* Verifiable (i.e., testable)
* Prioritized (with respect to importance and/or stability)
* Complete
* Consistent
* Uniquely identifiable (usually via numbering like 3.4.5.6)

Attention should be paid to the careful organization of the requirements presented in this section so that they may easily accessed and understood. Furthermore, this SRS is not the software design document, therefore one should avoid the tendency to over-constrain (and therefore design) the software project within this SRS.

## 2.1 Interface Requirements

### 2.1.1 User Interfaces

*Give an example of what the user interface will look like, you can use screenshots of existing applications or create a mocked up version using powerpoint. It does not have to be anything fancy just something that conveys what the interface will look like.*

## 2.2 Functional Requirements

This section describes specific features of the software project. If desired, some requirements may be specified in the use-case format and listed in the Use Cases Section. List a number of functional requirements for the application.

### 2.2.1 <Functional Requirement or Feature #1>

2.2.1.1 Introduction

2.2.1.2 Inputs

2.2.1.3 Processing

2.2.1.4 Outputs

2.2.1.5 Error Handling

### 2.2.2 <Functional Requirement or Feature #2>

…

## 2.3 Use Cases & Use Case Diagram

*Define a number of use cases for the application and create a use case diagram or multiple diagrams depending on your use cases. Also create the associated the use case descriptions.*

### 2.3.1 Use Case Diagram(s)

### 2.3.1 Use Case Description #1

### 2.3.2 Use Case Description #2

…

## 2.4 Activity Diagram

### 2.4.1 Use Case Diagram(s)

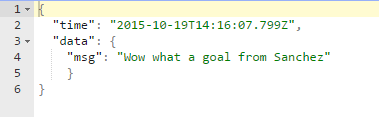
## 2.5 Data Flow Diagrams

*DFDs model data in transit between processes in a software system.*

### 2.5.1 Data flow diagram

## 2.5 Database Schema (JSON)

In this section please specify a schema for the documents that will be stored in the NoSQL database. A sample schema below shows JSON data containing a timestamp and a message. For your applications, you will need to decide at a high level how your data will be represented through your various schemas.



# 3. Project Timeline

*The timeline should give a general overview of the dates and delivery of the various stages of the project.*

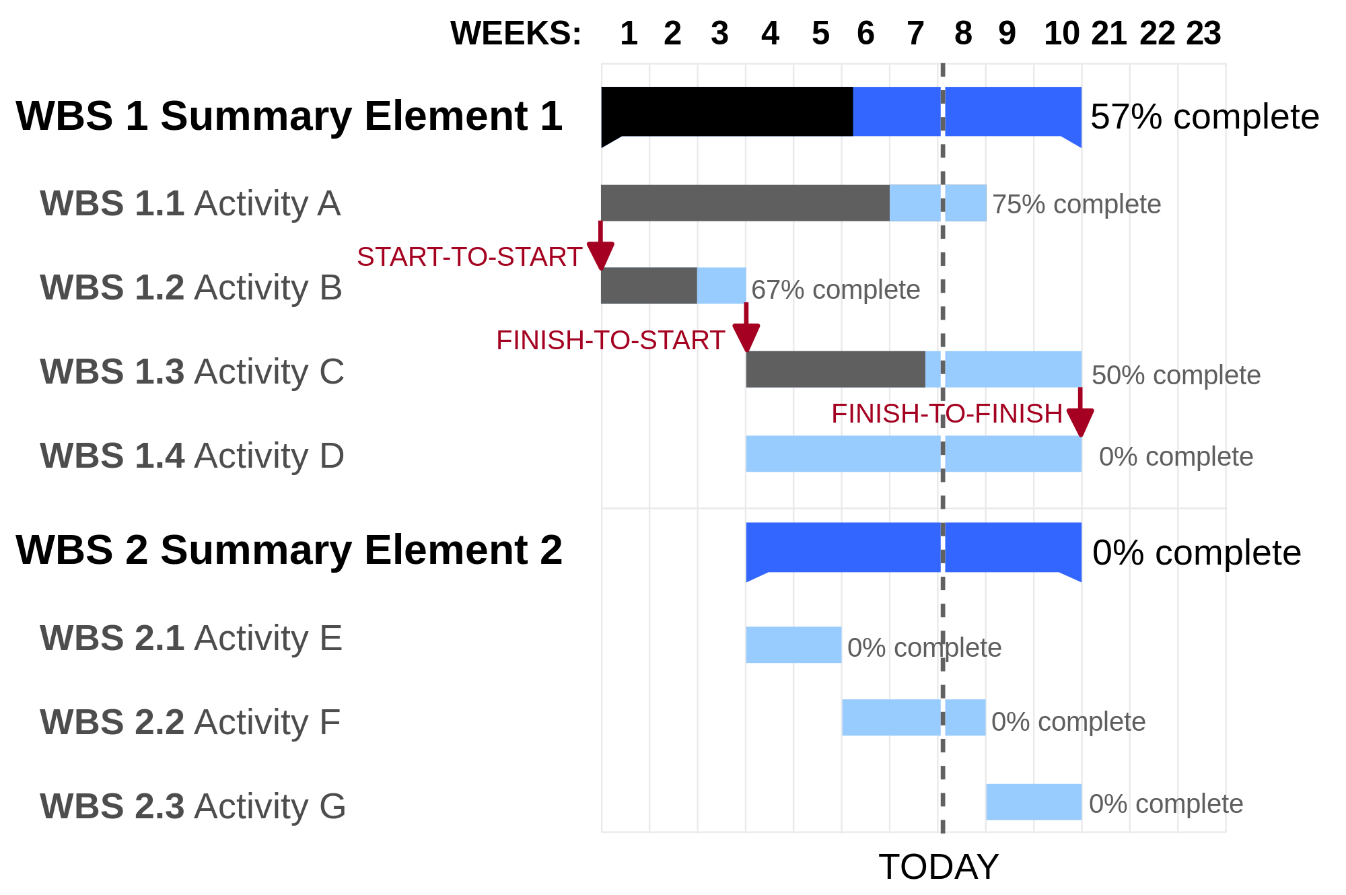


Figure 1 : Sample Gantt Chart which could possibly be used

# A. Appendices

Appendices may be used to provide additional (and hopefully helpful) information. If present, the SRS should explicitly state whether the information contained within an appendix is to be considered as a part of the SRS’s overall set of requirements.

## A.1 Appendix 1

## A.2 Appendix 2