**System Design Document**

**of XXXXXXXXXXXX**

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| **Release number** | **Date** | **Description** |
| R01 |  |  |
| R02 |  |  |

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# Introduction

<This document is the System Design Document of ……   
This document contains the choices for the key components and design considerations of the …….. >

## Background and context

*<describe in short the project, project goals>*

## Definitions and Abbreviations

### Definitions

|  |  |
| --- | --- |
| *<text marked>*: | Text marked needs to be changed or completed. |
|  |  |

### Abbreviations

*<* *Complete this list with your own abbreviations …>*:

# Concept selection

*<before “jumping to conclusions” show the reader you have checked literature, scientific papers and other designs in order to finally make a trade off and selection (use the matrix for this) and find the best concept/alternative for your solution of the module design)*

Be sure you include the following in this section:

* Functional decomposition
* Literature research
* Concept development and selection (in matrix to show they comply to the specifications)
* Selection matrix and weighing factors (In case MoSCoW principles are applied>

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Requirements** |  |  |  |  |  |  |  |
| **Concepts** |  |  |  |  |  |  |  |
| C1 |  |  |  |  |  |  |  |
| C2 |  |  |  |  |  |  |  |
| C3 |  |  |  |  |  |  |  |
| C4 |  |  |  |  |  |  |  |
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# Specifications

## Translation of the requirements in specifications.

<Be sure that you cover all the requirements by the specifications for the selected (final) concept: show that in a matrix. Define indicators for all specifications. Indicator means in other words: make all specifications measurable (see for more details chapter 3).>

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| **Requirements** | (one may use the coding from the SRD) |  |  |  |  |  |  |
| **specifications** |  |  |  |  |  |  |  |
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## Test plan

*<In the section you describe how the specifications of your system design will be tested to show, after prototyping your design, you have reached all the specifications of the system given to you by the product manager; This all according the V-model (chapter 1.8, point 4) guidelines >*

# Architecture (Team chapter)

<Put the following things in this chapter:

overall

* Detailed block diagram
* Name busses and design blocks

HW design

*<Describe the overall system hardware and organization. Include a list of hardware blocks with a brief description of each block, input and output definitions and diagrams showing the connectivity between the blocks. If appropriate, use subsections to address more subsystems.>*

1. Block diagram Hardware
2. Definition of the interfaces (inputs and outputs) for each block

SW design

*<Describe the overall system software and organization. Include a list of software modules (this could include functions, subroutines, or classes), computer languages, and programming computer‐aided software engineering tools (with a brief description of the function of each item). Use structured organization diagrams/object‐oriented diagrams that show the various segmentation levels down to the lowest level. All features on the diagrams should have reference numbers and names. Include a narrative that expands on and enhances the understanding of the functional breakdown. If appropriate, use subsections to address each module.*

***Note:*** *The diagrams should map to the Requirements Definition document data flow diagrams, providing the physical process and data flow related to the logical process and data flow. Insert any software architecture documents or provide a reference to where they are stored.>*

1. Block diagram Software (Architecture)
2. Definition of the interfaces (inputs and outputs) for each block; pre and post conditions
3. Risk analysis used components, ranking
4. The names in the blocks should match with the subchapters names below
5. Describe the functionality/tasks/responsibility of each block in the system overview
6. planning

Figure 2.1: Block diagram>

## HW Block 1

## SW Block 2

# System test plan

<Write the system test plan>

# References

<Mandatory

|  |  |
| --- | --- |
| [1.1] | Orientation Document of ???  Author:  Filename:  Date: |
| [1.2] | Definition Document of ???  Author:  Filname:  Date: |
|  |  |

Referenced

|  |  |
| --- | --- |
| [2.1] | Author:  Version:  www. |
| [2.2]  > |  |