# Checklist Completeness Functional Design

| | |
|---|---|
| Project | |
| Project Group | |
| Checked by | |

## General

| Topic | Checked |
|---|---|
| Is the cover page complete? | |
| • Contains the text: 'Functional Design'? | |
| • Contains the place and date of completion of the Functional Design? | |
| • Is the group number/code of the project group present? | |
| • Contains the all the correct names of all project members and their correct student number? | |
| Is there an Abbreviation explanation? | |
| Is there a Glossary? | |
| Are there References ? | |

## Lay-out

| Topic | Checked |
|---|---|
| Is there a table of contents with page numbers? | |
| Are the chapters numbered? | |
| Are the page numbers on pages present? | |
| Are the chapters clearly indicated? | |

## Use of Language

| Topic | Checked |
|---|---|
| Is the Functional Design document clearly-written? | |
| Is there correct language used (use spelling and grammar checking )? | |
| Is the language correct? No I, you , or we! | |
| No using of long sentences? | |
| Is the Functional Design document 'pointy ' written, with a clear structure and enumerations? | |
| Are unknown concepts explained first before they are used? | |
| Is the Functional Design always viewed from the same person? | |

# The chapters of the Functional Design

## 1  Introduction

| Topic | Checked |
|---|---|
| Is there a short description of the project? | |
| Is there a clear goal for the Functional Design Document? | |
| Is there a clear overview of the document? | |

## 2  Analysis of requirements

| Topic | Checked |
|---|---|
| Are all the Functional requirements analysed  ? (see SR document) | |
| Are all the Technical requirements analysed  ? ( see SR document) | |

(example : system requirement : the data has to be shown in a graphical representation,
The analysis brings the conclusion that you have to use a screen )

## 3      Concept principles

### 3.1      Description of alternative concepts

| Topic | Checked |
|---|---|
| Are there enough (at least 3) alternative concepts? | |
| Are the alternative concepts reasonable? | |
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### 3.2      Comparison of concept principles

| Topic | Checked |
|---|---|
| Are the most important criteria for comparison chosen? (i.e. accuracy, safety, costs, dimensions, power, ease of implementation, ....) | |
| Is the comparison clearly done in a table? | |
| Is there a motivated choice possible ? | |
| Are the choices well motivated? | |
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### 3.3      Choice of the most promising concept principle

| Topic | Checked |
|---|---|
| Are all choices made? | |
| | |

## 4  Elaboration of chosen concept to functional design

### 4.1 Overview of concept design

| Topic | Checked |
|---|---|
| Is there  a clear overview  of the concept design? | |
| Is there a clear technical block diagram ? | |
| Is the technical block diagram complete? | |
| • Electronically | |
| • Mechanical | |

### 4.2 Elaboration of concept design
### 4.2.1  Mechanical

| Topic | Checked |
|---|---|
| Is the mechanical functional design clear? | |
| Is the mechanical functional design complete? | |

### 4.2.2  Electrical

| Topic | Checked |
|---|---|
| Is the electrical functional design clear? | |
| Is the electrical functional design complete? | |
| • Supply | |
| • Amplifiers | |
| • Buttons | |
| • Display | |

### 4.2.3  Electronic

| Topic | Checked |
|---|---|
| Is the electronic functional design clear? | |
| Is the electronic functional design complete? | |
| • I/O architecture | |
| Are the interfaces between all the blocks clearly described? | |

### 4.2.4  Software

| Topic | Checked |
|---|---|
| Is the software architecture design clear? | |
| Is the software architecture design complete? | |
| • High level architecture | |
| • Low level architecture | |
| Are the interfaces between all the blocks clearly described? | |

### 4.3     Functional design integration

| Topic | Checked |
|---|---|
| Is the functional design integration clear? | |
| | |

### Appendix

| Topic | Checked |
|---|---|
| Are the difficult calculations done in the appendix? (i.e. The required power of a motor) | |