**Procedure CDP08 – Embedded Development** *(version 2.0)*

# Design (10 points)

You should provide some designs showing how you intend to implement the functional requirements.

## What to submit

* Circuit diagrams
* Flow diagrams showing interactions

## Scale

The following scale should be used as a guideline when evaluating this objective:

|  |  |  |
| --- | --- | --- |
| Circuit diagrams  *5 points* | Circuit diagrams are **provided**, correct, and **in line** with functional requirements. | 5 points |
| Circuit diagrams are **provided**, but contain **errors**, or are **not in line** with functional requirements | 2 points |
| No circuit diagrams | 0 point |
| Flow diagrams  *5 points* | Flow diagrams are **provided**, correct, and **in line** with functional requirements. | 5 points |
| Flow diagrams are **provided**, but contain **errors**, or are **not in line** with functional requirements | 2 points |
| No flow diagrams | 0 point |

# Implementation (10 points)

You should **build the device** as per agreed specification and designs, i.e. complete every item allocated to you on the current sprint’s Backlog, as agreed with project manager.

## What to submit

* Photos of the device, showing implementation of circuit diagrams.
* You should also **demonstrate** the prototype to date, and highlight how it functions according to the flow diagrams submitted.

## Scale

The following scale should be used as a guideline when evaluating this objective:

|  |  |
| --- | --- |
| 10 points | The device was built as per specification and diagrams, and is **fully functional**. |
| 8 points | The device was built as per specification and diagrams, with some **minor errors and omissions** |
| 5 points | The device is built but **does not implement all features** specified in the specification, and/**or contains errors**. |
| 2 points | The device is **barely functional**, very little of the specification was implemented. |
| 0 point | **No** implementation |

# Software (10 points)

You are also responsible for producing **the code** (e.g. C or C++) required to meet the agreed specification. Your code should be fully functional, and commented appropriately.

## What to submit

* Code listings, highlighting **your** contributions.
* GitLab commit logs showing **your** commits
* GitLab commit graphs showing **your** commits

## Scale

|  |  |  |
| --- | --- | --- |
| Implementation of functional requirements  *7 points* | **All** requirements have been implemented and are fully functional. Code is fully commented. | 7 points |
| **Most** requirements have been implemented and are fully functional – some minor omissions or bugs | 5 points |
| **Very few** of the requirements have been implemented, and/or a lot of **errors** and **bugs** | 2 points |
| **No** implementation | 0 point |
| Use of Version Control  *3 points* | **All code was committed** to a version control system on a regular basis | 3 points |
| **All code was committed** to a Version Control system, but intermittently. | 2 points |
| Partial use of a Version Control System (not all code submitted, intermittent use) | 1 point |
| **No Version Control system** used | 0 point |