Electrocardiogram Device and Application Coding Style Document

Version 1.0

# Document Revision History

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| --- | --- | --- | --- | --- |
| **Version** | **Date** | **Author** | **Change summary** | **Reviewed By** |
| 1.0 | 11/12/19 | Megan Jones | Put together first copy of coding styles from coding style notes |  |

# Summary

This document outlines the coding standards to be used throughout the electrocardiogram project.

## File Headers

Function headers must include the file name, a brief description of the file, the date it was created, the author and list any associated test files.

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\* @file main.c faheuifhauiwhiuwehiufhew iuheuiheiuh ehiuaewhfuiew

\* @date 25/10/19

\* @author JAMN

\* @breif test file

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## Define Variables

Any define variables should be all capitals and have underscores between words.

#define VARIABLE;

#define VARIABLE\_WITH\_MORE\_WORDS;

## Variable Declarations

Variable names should be all lowercase with underscores between words. Data types of variables must be defined on the same line.

int example\_variable\_declaration;

## Struct Definitions

Struct names should be uppercase with underscores between words.

struct Struct\_Example{

};

## Comments

Comments should always be written for groups of code. Code groups should share relevance to a similar functionality.

/\* comment here \*/

example code;

similar example code;

/\* comment again \*/

unrelated example code;

## Function Names

Function names should be lowercase with underscores between words.

function\_name;

## Function Banners

Function banners should follow the Doxogen function banner style. It should include a description of the function and the function’s parameters.

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\* A brief history of Doxygen-style banner comments.

\*

\* This is a Doxygen-style C-style "banner" comment. It starts with a "normal"

\* comment and is then converted to a "special" comment block near the end of

\* the first line. It is written this way to be more "visible" to developers

\* who are reading the source code.

\* This style of commenting behaves poorly with clang-format.

\*

\* @param theory Even if there is only one possible unified theory. it is just a

\* set of rules and equations.

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void doxygen\_banner( int theory );

## Argument Spacing

When listing function arguments there must always be spaces in between the different arguments.

argument\_example(arg1, arg2, arg3);

## Braces

Brace placement must follow the Kernighan and Ritchie standard. Opening braces must be on the next line on the same indentation level of the previous line. Closing braces must be on a line of their own at the same indentation as the opening braces.

braces\_example(args)

{

}

## Indentations

Indentations must always be 4 spaces long.