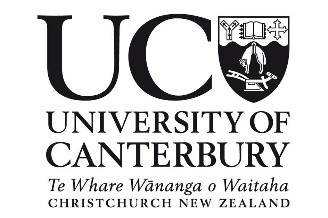
ENEL 464 Embedded Software and Advanced Computing

Department of Electrical and Electronic Engineering

University of Canterbury

Embedded Software Engineering Project

Using FreeRTOS for Embedded Software Operating System

GROUP 10

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Abstract

Give us an abstract G

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# Introduction

A very general description of the project, in your own words please (keep this brief).

# Design and Methods

## Software Architecture

A UML (or other type of chart) showing tasks and main functions, with a very brief operational description.

## Adapting FreeRTOS

How did you use FreeRTOS to achieve your standard "flight-mode" requirements, i.e., as a replacement to what you did last year?

## Special Functions

How were the special functions incorporated in your overall design?

# Implementation

How was your design implemented? For example, any enumerated, special data structures, or abstract data types?

Did you use any object oriented design approaches?

# Results

Did you achieve all the project requirements?

# Discussion

## FreeRTOS as an OS

Reflect on the use of FreeRTOS, as distinct to other or no RTOSs.

## Queues, Mutexes & Semaphores

How were queues, mutexes, and semaphores used in your design, or justification as to why any of these weren’t?

## Additional Features

Adding realism to the HeliRig (up to a page on this; maybe a sketch/block diagram)

## Issues

Did you have some issues? If so, what were they?

# Conclusion

Keep this brief, but a bit of a reflection on the project would be useful

# References

**There are no sources in the current document.**

A.1 Appendix

A Black box Test

A.2 Appendix

List of Tasks and CPU Load Analysis