

QUT Student ePortfolio for Don Misura Minduwara Kaluarachchi

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Introduction

EGB 240 Professional Reflection

This is my reflection for the EGB240 assessment 1A which required us to build a two tone siren

Professional skills

3.2 Effective oral and written communications

EGB 240 Professional Reflection

In this unit EGB240 we have documented a design portfolio, a .brd file and Gerber files for the implementation of a two-tone siren on a printed circuit board. This design's audiences were other engineers, manufacturers and customers.

The primary focus of the design portfolio was for other engineers, manufacturers of similar designs and was structured so that they understand the technical concepts of the design project allowing them to recreate and modify the design to their needs. To ensure this the portfolio included a schematic which explained the functionality of each component and explaining how the individual components work together to produce the working design. The design portfolio has information on the layout of the design and its assembly so that other engineers themselves can build it. It also has simulations run to show that the required specifications have been met and that the design functions as required. The portfolio also includes the components and their respective prices so that manufacturers can either produce the components or use it as a reference for manufacture. A .brd file was also submitted which can be used as a reference by other engineers to get an overview of the PCB design

While technical concepts were explained in depth simple language was used so that the design could be understood by customers and other parties interested in the design but don't have the technical knowledge. For example, the part 2 of the design portfolio is such that it explains the components of the design and explain the aim and function of the design.

The design was put together and was documented within a certain time period which mirrors real world situations of reaching a deadline. While learning new concepts in the lectures we were allowed to explore and come up with creative ways to bring about the specifications required by the design and then test its effectiveness during the workshop. We received feedback from the lecturers and the workshop coordinators as to how we can improve this design. As shown by the reflection above I believe that this unit allowed for the necessary proficiency required by Engineers Australia