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DANGEROUS SNORING DETECTION

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“I declare that this report entitled “*DangerousSnoring Detection*” is the result of my own group research except as cited in the references. The report has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.”

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ACKNOWLEDGEMENT

We are grateful and would like to express our sincere gratitude to our supervisor, Miss Rosmawati binti Shafie for her invaluable guidance, continuous encouragement and constant support in making this final year project possible to do. We are really appreciate her guidance from the initial to the final level that enabled us to develop an understanding of this final year project thoroughly. Without her advice and assistance it would be a lot tougher to completion. We also sincerely thanks for the time spent proofreading and correcting our mistakes.

We also would like to express special thanks to our friends for their suggestions and co-operation in complete this project in right time. At the same time, we would like to thanks to all of engineer assistants and staff at the laboratory because they have give a permission to used PCB laboratory when we are doing the PCB circuit implementing.

We acknowledge our sincere indebtedness and gratitude to our parents for their love, dream and sacrifice throughout our life. We're really thankful for their sacrifice, patients, and understanding that were inevitable to make this work possible. Their sacrifice had inspired us from the day we learned how to read and write until what we have become now. We cannot find the appropriate words that could properly describe our appreciation for their devotion, support and faith in our ability to achieve our dreams.

Lastly, we would like to thanks any person which contributes to our final year project directly or indirectly. We would like to acknowledge their comments and suggestions, which was crucial for the successful completion of this project.

ABSTRACT

Snoring is usually a nocturnal sound which without known may disturb and can cause misery by the snorer. Thus, it have developing snorer device that is 'pillow vibration' to ease the symptoms of sleep apnea sufferers. It is a pillow that generates vibration by using motor with the universal-vibration motor inside the pillow. The system operates by using a microcontroller Atmega328 that use in Arduino as a main part of the project. The input part of Atmega328 will detect the frequency by using a electric microphone. The audio or signal will amplify by using BC 547 microphone amplifier. BC547 is an NPN bi-polar junction transistor. A transistor, stands for transfer of resistance, is commonly used to amplify current.

In addition, the output will connect to the LCD, led, buzzer and motor. The Arduino is multi-function because it can be use in any types of the project. The microcontroller on the board is programmed using the Arduino programming language (based on Wiring) and the Arduino development environment (based on Processing). The features of pillow is, it is function as an alarm instead of vibrator device. This pillow is comfortable to use with the vibration as well as the firm of the box of the circuit was under cover by the pillow.

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