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SMART Doorbell for Hearing Impaired People

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ABSTRACT

People with hearing impairment face everyday challenges in identifying the occurrence of household sounds. This project describes a smart doorbell system that will be used by hearing impaired people to make ease of their life routine. The objectives of this paper is to design and implement a low cost stand-alone device for deaf people to notify doorbell ringing who live alone in their house. This new system uses mobile application to notify user when visitor pressed the doorbell. The system also have an indoor alert to the owner of the house. Test results shows the functionality of the smart doorbell system and it also shows the importance of the Internet of Things in modern days especially for people with disability. The system is reliable, effective, and easy to use and also enhances the security of the user.

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CHAPTER ONE

INTRODUCTION

In chapter one will discuss preparation and provide about information for SMART doorbell for hard hearing impaired people. Next, in chapter one will prepare information about Background of Study, Problem Statement, objective of the project, Scope and Significance of Study and Summary.

1.1 Background of Study

A study conduct by Rezaul (2015) found that In Malaysia there is a minority group of people with disabilities (PWDs) is deliberated and can be highest exposed for social separation. Furthermore, in world population 15% according from WHO and World Bank (2011) approximated has some appearance of disabilities. Next, the number of people with disabilities that registered with Department of Social Welfare is 197,519 in statistics. From the last December 2012 according to Department of Social Welfare the total people with disabilities that actually registered is 359,203.

According to Rashid (2015), study found that people with disabilities that registered the total is 305640. There are many people with disabilities such as 12,713 multiples disable,117,699 learning, 39303 hearing, 2130 mental 180 speech and 27363 visual. In Malaysia the people with disabilities done the registered based on they willing and volunteer that make the data incomplete because the data not show the actually number of people with disabilities if the name is registered dead the data is not update or deleted in the main record. Moreover, people with disabilities will predicted to increase as long as up growth of diseases, gain of population age people and rise used of methodology to people with disabilities.