Universiti Teknologi MARA

DOORBELL AUTOMATION SYSTEM (HARDWARE PART)

Rohida binti Ghazali

Thesis submitted in fulfillment of the requirements for Bachelor of Science (Hons) Data Communication and Networking
Faculty of Computer and Mathematical Sciences

January 2014

ACKNOWLEDGEMENTS

In the name of Allah, the Most Merciful and the Most Compassionate.

All praises to ALLAH S.W.T for all His bless that I had during finishing this thesis with the project decided to be done. Alhamdulillah and peace upon Prophet Muhammad S.A.W, this thesis is finally finished according to the time and objectives required.

First of all I would like to address my deepest appreciation to Mrs Shapina binti Haji Abdullah for her guidance and ideas in carrying out this project as my supervisor. And highly thanks to Mr. Kamarul Ariffin bin Abdul Basit as my lecturer in the Project (CSP650) subject that always gave his guidance for student how to write the best report.

My sincere gratitude to my project partner, Mohd Farez Fauze bin Ahmad Helme, for his cooperation in accomplishing the objectives of the thesis. Many thanks to all my IT friends for support especially Ahmad Adam Rusly, always give the brilliant support and ideas.

And the most thanks to my family for their encouragement in finishing this course gloriously. Last but not least, for my classmates who have given an advices and suggestion to make this thesis achieves its goals.

Thank you, may ALLAH bless all of you.

ABSTRACT

In a matter of very few years, the Internet consolidated itself as a very powerful platform that has changed forever the way we do business, the way we communicate and the way we live. The Internet is a global system of interconnected computer networks that use the standard Internet Protocol Suite (TCP/IP) to serve several billion users worldwide. Therefore, this project will use the new technologies for enhance the best product of doorbell. The Doorbell Automation System is one of the products that adopt advanced technology. It focused in used a new platform such as Raspberry Pi as a CPU that will integrate the device attached near the door. The objectives of this project is to give a function of device attach such as camera and button. All the devices will integrate each other and the raspberry pi function as a main control unit where it will connect to the database. The functions of raspberry pi as a platform that will send the image information to be saved in database. This project has the capability to send and retrieve an image thru mobile. As a result of this project, the devices system are develop with programming code and the data are save successfully in the database thru Internet. This product will satisfy the different requirement of various residential house and high-storied buildings. With connection to the network, this doorbell will integrate to the system that sends an image to be record in the system. It will be good assistant if residential house need security for apartment building or home and the file image can be view in anytime at anywhere.

TABLE OF CONTENTS

CHAPTER 3: METHODOLOGY