SMART HOME PROTOTYPE WITH INTERNET OF THINGS (IOT) CONCEPT USING RASPBERRY PI AND ARDUINO

FINAL REPORT

BY
BENBEN BAGUS PRASETYO ABDI
NIM 14631022

UNIVERSITY OF MERDEKA MALANG
D3 ENGLISH PROGRAM
AUGUST 2017

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in partial fulfillment of the requirements
for the degree of *Ahli Madya* in Diploma Three of English

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This is to testify that the Final Report of BENBEN BAGUS PRASETYO ABDI has been approved by the advisor for further approval by the Examining Committee

Malang, August 15th, 2017

Advisor,

Misianto, S.Pd., M.Pd.

This is to testify that the Final Report presented by BENBEN BAGUS PRASETYO ABDI on August 22nd, 2017 has been examined.

Malang, August 25th, 2017

Examiner 1,

Elfirahmi Thamrin, S.Pd., M.Pd.

Examiner 2,

Karlina Karadila Y., S.Pd.

Acknowledged by
Head of Program,

Drs. Suatmo Panca Putra, M.Pd.

ABSTRACT

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Key Words: Smart Home, Internet of Things, Raspberry PI, Arduino.

Smart Home is a technology where a home that has integrated household appliances that can communicate with each other with the concept of the Internet of Things. Internet of Things (IoT) is a concept where electronic objects around us can communicate each other through a network such as Internet. The writer chose the topic in accordance with the writer's major faculty. Furthermore, the concept of Internet of Things has great potential for technological development in the future. Based on these topics the writer created a smart home prototype project that uses Raspberry Pi and Arduino to simulate the concept of Internet of Things. Raspberry PI is a small-sized computer with the same ability as a computer in general. This device was created for the purpose of developing IoT-based projects. As well as Raspberry Pi, Arduino is aimed at IoT-based project development but the difference is its ability. Arduino can only perform simple tasks such as reading the sensor and giving instructions (on or off) to electronic equipment. In the making of this project the writer has some technical problems but with the knowledge that the writer gets, the problems can be resolved and complete this project. The final product of this project is a prototype that can be simulated as a smart home. There are several benefits that can be gained from this project one of them is to know how the concept of the Internet of Things works interactively. The writer expects that this project can be a reference for someone who wants to make a smart home in actual life.

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TABLE OF CONTENTS

LIST OF PICTURES

LIST OF TABLES

LIST OF APPENDICES