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Home Automation

Bachelor's in information technology

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Certificate

We accept that work entailed by the report with the title “Home Automation”, presented by Mr. Noman Afzal and Mr. Usama Tariq as a verification to the required criteria for the partial fulfilment of the degree of bachelor’s in information technology, department of Computer Sciences.

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Abstract

The proposed project aims to automate the manually maintained home switches and other electronic appliances. Home Automation which has been very popular using Internet of things (IOT) as IOT allows user to easily install configure devices according to their needs and do their day-to-day work using the internet. Home automation allows users to be able to easily reduce the power consumption which results in bill saving and more control over their home as they can easily be updated while using the internet. The system proposed would not change the entire structure of switches, but we would add a micro-controller chip that would be configured with it and these micro-controller chips are centralized systems that would tell statues of these switches to the user using a friendly user-interface application. There are sensors used in home automation which can trigger alert when there is an incident near to happen like smoke detection, anti-theft, temperature, and humidity sensors.

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Table of Contents

Abstract **3**

Acknowledgement **4**

Introduction **10**

1.1 Overview *10*

1.2 Objective *11*

1.3 Problem Description *11*

1.3.1 Main functions of the system are as follows: 12

1.4 Project Scope *12*

1.5 Tools and Technology *12*

1.5.1 Arduino Esp8266 12

1.5.2 DHT11 Sensor 13

1.5.3 MQ2 Sensor 13

1.5.4 IR sensor 13

1.5.5 5v Battery 13

1.5.6 TCP/IP protocol 13

1.5.7 Android Studio 13

1.5.8 Male to Male, Male to Female, and Female to Female wires 14

1.5.9 LED 14

Literature Review **15**

2.1 Existing systems *15*

2.1.1 Home automation using Raspberry pi. 15

2.1.2 Home Automation using Arduino UNO. 15

2.1.3. Home Automation using NodeMCU and Blynk. 15

2.2 Limitations and Drawbacks *16*

2.3. Proposed solution *18*

Requirement Specification **19**

3.1 Application Overview *19*

3.2 General Description *19*

3.2.1 User Characteristics 19

3.2.2 Product Functions 19

3.3 Requirement specification *20*

3.3.1 Functional Requirements 20

3.3.2 Non-Functional Requirements 21

3.4 Use cases. *23*

3.4.1. Login **23**

3.4.2. Switch On/Off **25**

3.4.3. Smoke detection **26**

3.4.4. Theft detection **29**

3.4.5. Temperature and Humidity **31**

3.4.6. Use cases of the whole System 32

Design **33**

4.1 Architecture Diagram *33*

4.2 SEQUENCE DIAGRAM *34*

4.3 CLASS DIAGRAM *37*

4.4 Activity Diagram *38*

4.5. Application Modules **39**

System Implementation **41**

5.1. System Architecture *41*

5.1.1. Mobile application 41

5.1.2. Arduino a Microcontroller Chip 41

5.1.3. Firebase Cloud Database 42

5.2. System internal components (Tutorialspoint, 2021) *42*

5.2.1. Show dashboard 42

5.2.2. Portion selection 42

5.2.3. Switch on/off appliance. 42

5.2.4. Smoke Detection 42

5.2.5. Intruder Detection 42

5.2.6. Temperature and humidity monitoring 43

5.3. Tools and Technology *43*

5.3.1. Relay: 43

5.3.2. JAVA: 43

5.3.3. Arduino IDE: 43

5.3.4. Sensors: 44

5.3.4.1 IR sensor 44

5.3.4.2 MQ2 Sensor 44

5.3.4.3 DHT11 Sensor 44

5.3.5. ANDROID STUDIO: 44

5.3.6. Firebase 44

5.3.7. Arduino Esp8266 44

5.4. Methodology: *45*

Phase 1: Sensor Interfacing 45

Phase 2: Appliances Interfacing 45

Phase 3: Finalize hardware 45

Phase 4: Android application 45

Phase 4.1. User interface Designing 45

Phase 4.2. Backend Logic 45

Phase 5: Connect application with Arduino. 45

System Testing and Evaluation **46**

6.1. Testing *46*

6.2. Interface testing *46*

6.2.1. Testcase for login 46
6.2.2. Testcase for Detect thief: 47
6.2.3. Testcase for smoke: 48
6.2.4. Testcase for Switch light: 49
6.3. Usability testing *49*
6.3.1. Usability test case for the login screen 49
6.3.2. Usability test case for Dashboard screen 50
6.3.3. Usability test case for switch on/off appliance 50
6.4. Software performance testing *51*
6.4.1. Test case for Software Performance testing 51
6.5. Compatibility testing *51*
6.5.1. Test Case of Compatibility testing 52
7.1. Conclusion *53*
7.2. Future enhancement *53*
7.2.1. Alert on parallel use of appliances 53
7.2.2. Check usage of electricity 53
User Manual **54**
A.1. Welcome Screens *54*
A.2. Login *55*
A.3. Dashboard or Main Page *56*
A.4. Bedroom User manual *57*
A.5. Kitchen User manual *58*
Referencess **59**

Table of figures

Figure 3.1: Login Use Case 23
Figure 3.2: Switch on/off Use Case 25
Figure 3.3: smoke Detection 27
Figure 3.4: intruder detection 29
Figure 3.5: Temperature and Humidity 31
Figure 4.1: Architectural Diagram 33
Figure 4.2: Sequence Diagram 34
Figure 4.3: Login Sub Sequence 35
Figure 4.4: Temperature Sub Sequence 35
Figure 4.5: Smoke detection Sub Sequence 36
Figure 4.6: Appliance Sub Sequence 36
Figure 4.7: Class diagram 37
Figure 4.7: Activity Diagram 38

Figure A.1: Welcome pages 54
Figure A.2: Login User Manual 55
Figure A.3: Dashboard User Manual 56
Figure A.4: Bedroom User Manual 57
Figure A.5: Kitchen User Manual 58

List of tables

Table 1. 1: Limitation and Drawbacks 16

Table 3. 1*: Login Use Case* 24

Table 3. 2: Switch On/Off Fully dressed 26

Table 3. 3: Detect Smoke Fully dressed 28

Table 3. 4: Detect Thief Fully dressed 30

Table 3. 5: Temperature and humidity Fully dressed. 31

Table 6.1 : Testcase for Login 46

Table 6.2: Testcase for Detect Thief 47

Table 6.3.: Testcase for smoke detection 48

Table 6.4: Testcase for switch light 49

Table 6.5: Testcase for Login Screen 50

Table 6.6: Testcase for Dashboard Screen 50

Table 6.7: Testcase for switch on/off appliance 50

Table 6.8: Testcase for Performance Testing 51

Table 6.9: Testcase for Compatibility testing 52

Acronyms and abbreviations

DHT11	digital humidity and temperature sensor
MQ2	name of smoke sensor
IR	Infrared radiations
IDE	Integrated Development Environment
TCP	Transmission Control Protocol
IP	Internet Protocol
XML	Extensible Markup Protocol
HTTP	Hypertext Transfer protocol