

# Online Home Automation Control System

## 2019-2020 Graduation Project I

ريم علي الغامدي  
437004875

ساره خالد آل حسين  
436006939

ضحى نضال الزعبي  
436200063

عير أحمد عزت  
436200058

منى سعود الحثلان  
437004005

نوف عبد الله الدعجاني  
437004100

# Contents

<b>Acknowledgement</b>	<b>1</b>
<b>Table of Contents</b>	<b>1</b>
<b>List of Tables</b>	<b>3</b>
<b>List of Figures</b>	<b>3</b>
<b>List of Symbols&amp; Abbreviations</b>	<b>3</b>
<b>Abstract &amp; Keywords</b>	<b>3</b>
<b>1 Introduction</b>	<b>3</b>
1.1 Problem statement & Significance . . . . .	3
1.2 Proposed Solution . . . . .	3
1.3 Aims & Objectives . . . . .	3
1.4 Project Domain & Limitation . . . . .	3
<b>2 Background Information &amp; Related Work</b>	<b>4</b>
2.1 Background Information . . . . .	4
2.2 Related Work . . . . .	4
2.3 Proposed & Similar System Comparison . . . . .	4
<b>3 Requirement Determination &amp; Analysis</b>	<b>5</b>
3.1 System Analysis . . . . .	5
3.2 Gathering Information . . . . .	5
3.3 Requirement Specification . . . . .	5
3.3.1 Functional Requirements . . . . .	5
3.3.2 Non-Functional Requirements . . . . .	5
3.4 Requirement Analysis . . . . .	5
<b>4 System Design</b>	<b>6</b>
4.1 System Architecture . . . . .	6
4.2 User Interface Design . . . . .	6
<b>5 Implementation</b>	<b>7</b>
5.1 Implementation . . . . .	7
5.2 Implementation Requirements . . . . .	7
5.2.1 Software Requirements . . . . .	7
5.2.2 Hardware Requirements . . . . .	7
5.3 Implementation Detailed . . . . .	7
5.4 I/O Screens . . . . .	7

<b>6</b>	<b>Testing</b>	<b>8</b>
6.1	Testing . . . . .	8
6.2	Test Plan . . . . .	8
6.2.1	Unit Test . . . . .	8
6.2.2	Functional Test . . . . .	8
6.2.3	Acceptance Test . . . . .	8
6.3	Test Items . . . . .	8
6.3.1	Features to Be Tested . . . . .	8
6.3.2	Schedule of Test Actions . . . . .	8
6.3.3	Test Tasks . . . . .	8
6.4	Test Case . . . . .	8
6.5	Test Result . . . . .	8
<b>7</b>	<b>Conclusion</b>	<b>9</b>
7.1	Conclusion . . . . .	9
7.2	Evaluation . . . . .	9
7.3	Future Work . . . . .	9
	<b>References</b>	<b>10</b>
	<b>Appendices</b>	<b>10</b>

# **1 Introduction**

## **1.1 Problem statement & Significance**

## **1.2 Proposed Solution**

## **1.3 Aims & Objectives**

## **1.4 Project Domain & Limitation**

## **2 Background Information & Related Work**

### **2.1 Background Information**

### **2.2 Related Work**

### **2.3 Proposed & Similar System Comparison**

## **3 Requirement Determination & Analysis**

### **3.1 System Analysis**

### **3.2 Gathering Information**

### **3.3 Requirement Specification**

#### **3.3.1 Functional Requirements**

#### **3.3.2 Non-Functional Requirements**

### **3.4 Requirement Analysis**

## 4 System Design

### 4.1 System Architecture

### 4.2 User Interface Design

## 5 Implementation

### 5.1 Implementation

### 5.2 Implementation Requirements

#### 5.2.1 Software Requirements

#### 5.2.2 Hardware Requirements

### 5.3 Implementation Detailed

### 5.4 I/O Screens



## **6 Testing**

### **6.1 Testing**

### **6.2 Test Plan**

#### **6.2.1 Unit Test**

#### **6.2.2 Functional Test**

#### **6.2.3 Acceptance Test**

### **6.3 Test Items**

#### **6.3.1 Features to Be Tested**

#### **6.3.2 Schedule of Test Actions**

#### **6.3.3 Test Tasks**

### **6.4 Test Case**

### **6.5 Test Result**

## **7 Conclusion**

### **7.1 Conclusion**

### **7.2 Evaluation**

### **7.3 Future Work**

## References