**Cover page**

Project title: Home automation system Academic Year: 2018/2019

Group Members: Azza Abdul Ghani & Raghad AlSayeh Department Name: Computer Engineering

Supervisor Name: Dr. Raed AlQadi

**Format:**

* Single space, Times New Roman.
* 12 pt,
* Maximum 1 page.

**Abstract Body:**

**Items must be provided in the Abstract:**

* Why do you think this project is important?  Please explain the significance of this

Project in brief.

* In your point of view what are the important aspects that should be covered in the project?
* Objective(s): In your view, please explain the main objectives of the project.
* Methodology:  Give a brief outline of the application development process.
* Had this project been done before? Are there any similar applications available today?
* **Note:** Please deliver this abstract early to ensure that your Project has been approved by the department’s projects committee. **Registration will not be done without this approval.**

**Project’s Abstract:**

Home automation in general designed for controlling devices and appliances in home remotely and automatically from a mobile phone or any PC. Home automation systems become so popular in recent years due to many reasons like indoor and outdoor security, energy efficiency and it is considered as cost effective way.

It is used for controlling and managing lights, heat, gas, ventilation ,garage doors , leaking and so on. In our project we will implement the major functions only that are lights, heat , garage doors and gas.

This will be easier by applied internet of things (IoT) principle. In our case, a power consumption and network bandwidth become a major things we must take it with considerations. With the availability of Wi-Fi, all the devices in the home can be connected through a gateway.

All of this will be done with the help of Message Queue Telemetry Transport (MQTT) protocol, a reason behind using this protocol for faster communication, safe, secure, works on top of TCP/IP protocol and it is used to control and access the data from the sensors and appliances from anywhere, and we will use with it Raspberry pi as a gateway between mobile phone or web dashboard and system devices.