



Project title: **Broadcasting House**

Academic Year: 2022/2023

Group Members: Fathi Fathallah & Ezz Addin H. Kukhun

Department Name: **Computer Engineering**

Project Type: Hardware

Supervisor Name: **Suleiman Naeem Abu Kharmeh**

Project's Abstract:

Home security systems are an essential part of keeping our homes and families safe. They provide the peace of mind that comes with knowing that our homes are protected from intruders, fire, floods and other disasters. Home security systems come in various forms, ranging from basic alarms to sophisticated surveillance cameras. Depending on our budget and needs, we can choose a system that will best suit our lifestyle and give us the protection needed. With the right system in place, we can rest assured knowing that no matter what happens outside our door, inside remains secure. With that being in mind, our hardware project idea is a smart home system that has the following features:

1. Motion detection inside the house connected with alarm system that notifies the owner of the house when motion occurs.
2. Remote viewing and visualizing capabilities via smartphone or computer (Live Broadcast).
3. Direct Audio transmitting to the house via a smartphone or computer.

Additionally, at our university, An Najah National University, we have a manual system to lock and unlock the lecture room door locks. Depending on whether there will be lectures in that particular room on that particular day, some of the locks will be open, some will be closed. Based on that idea, our system would have the following feature:

4. Controlling the door locks via a smartphone or a computer, with the capability of doing some door locks combination in terms of doors having different statues (Opened/Closed).

While some of the project's aspects have been performed in the past on some other hardware projects. Broadcasting and live audio transmission, along with the fact that the owner can control every single door lock in the house, make this project a unique one. Additionally, it has a great collection of features that set it apart from other hardware projects.