Faculty of Engineering

GSM / WI-FI Gas Leakage Protection Module

Participated Students:

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7- Youssef Mahmoud Barakat
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Under Supervision of:

- Dr. Heba Raafat

Project Summary:

- **The project's role to serve the community:**

Tackle the problem of detecting gas leakage in domestic and residential buildings. Such problem has a critical effect on human health and may lead to crisis.

- **Goal:**

The community project presents a system that detects gas leakage in homes/factories /offices, closes the valve that responsible of gas leakage and informs the user with the presence of gas leakage using GSM module and WI-FI module.

- **Proposal:**

The project aims training PUA- Electrical Engineering students on hands on experience related to a community problem by implementing a hardware kit that detects gas leakage in a home/office, operates an emergency fan to decrease the gas concentration, closes the valve that responsible of gas leakage and informs the user with the presence of gas leakage using GSM module and WI-FI module.

Steps during the work:

- Selection of areas of interest
- Finding a community problem associated with this area
- Performing a scientific survey on several houses and factories
- Performing questionnaire analysis regarding the proposed problem
- Decisions regarding a preferred solution
- Designing two electronic circuits that fulfill the proposed solution
- Implementing the two circuits
- Evaluating the performance of the two circuits
- Implementing a hardware kit
- Presentation