Review of: "Visualization of Home Security Sensor System Based on IoT Server"

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Potential competing interests: No potential competing interests to declare.

The research objective should be clearly stated in terms of what specific aspects of the home security system will be visualized and how it will improve home security. This will help to provide a focused direction to the study.

While the use of qualitative research methods and an experimental approach is mentioned, it would be beneficial to provide more details about the specific steps involved in the experimental method. Additionally, explain how the data collection methods (literature study, field research, and observation) will be employed and how they will contribute to the research findings.

The authors should provide a stronger justification for using an IoT-based approach in the home security system. How does IoT enhance the effectiveness of the system compared to traditional security systems? This rationale should be clearly articulated.

(PIR sensor) and gas sensors (MQ-2 sensor), but they should provide more detailed explanations regarding the selection criteria for these sensors. What factors make these sensors suitable for detecting human presence, gas leaks, and fires? Additionally, discuss any limitations or potential challenges associated with these sensors.

The description of visualization techniques using LED indicators, text, and an LCD display is provided. However, it would be helpful to elaborate on how these visualization methods enhance the monitoring and usability of the system. How do they effectively convey information to homeowners? Consider discussing potential alternative visualization techniques and their advantages/disadvantages.

The description of hardware connections is provided, but it lacks clarity and details. Include a schematic diagram or a clearer description of the connections between the various components, such as the ESP8266, Arduino UNO, gas sensor, PIR sensor, and buzzer. This will help readers understand the system architecture more effectively.

While the AC-DC converter is mentioned as the power source, it is important to provide information about the power requirements of the entire system and how they are being met. Additionally, discuss any safety considerations or precautions related to the power supply.

Ensure that Table 4 provides comprehensive and accurate information about the hardware I/O connections used in the system. Double-check the connections and verify that they are correctly represented in the table.

It would be valuable to include details about how the developed system will be validated or tested for its effectiveness.

Describe the experimental setup, scenarios, and metrics that will be used to evaluate the system's performance.

Include a section in the research work that summarizes the findings and draws meaningful conclusions based on the results. Additionally, provide suggestions for future work or potential improvements to the system, based on the insights gained from the research.