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**SMART GUARD: ADVANCED HOME SECURITY WITH FIRE ALERT SYSTEM**

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# INSTABRIGHT e-GAZETTE

ISSN: 2704-3010

Volume V, Issue IV

May 2024

Available online at <https://www.instabrightgazette.com>



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In the Philippines, home security remains a critical concern due to the ongoing risks of theft, break-ins, and fire hazards. However, technological advancements offer promising solutions to heighten security measures. These advancements enable the creation of systems capable of detecting and preventing accidents in real-time, providing timely alerts to users. Through careful coding and programming, these security systems emerge as cost-effective solutions offering robust protection. What distinguishes these systems is their simplicity; built on straightforward components and advanced features, they offer easy installation and user-friendly interfaces. This practical approach not only meets the varied needs of households but also empowers users to take control of their security. By embracing these concepts, the potential for achieving comprehensive home security becomes achievable. In collaborated effort, the researchers employed a descriptive research design, using tailored survey questionnaires to gather valuable insights. These surveys delved into the security measures adopted by Filipino households, their experiences with security incidents, perceptions of advanced security technologies, and socio-demographic characteristics. Through purposive sampling, the researchers selected participants who could offer diverse perspectives on home security. The primary aim of this study is to develop and evaluate a holistic home security and fire hazard measure system, leveraging cutting-edge technologies. By integrating features such as vibration, proximity, and smoke sensors, solenoid locking mechanisms, PIN code authentication, buzzer alarms, and GSM notifications, the study aims to address various security concerns. From preventing forgotten locks to detecting

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unauthorized access attempts and fire hazards, the proposed system seeks to keep homeowners informed about the state of their home's security and safety. This study, as a whole, aims to make a significant contribution to the field of smart home security and safety, targeting families within the middle-income bracket who seek to enhance and modernize their existing basic and manual security processes. By harnessing the potential of technology, it endeavors to create a more dependable and user-friendly system, enhancing overall safety and instilling peace of mind among homeowners.



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