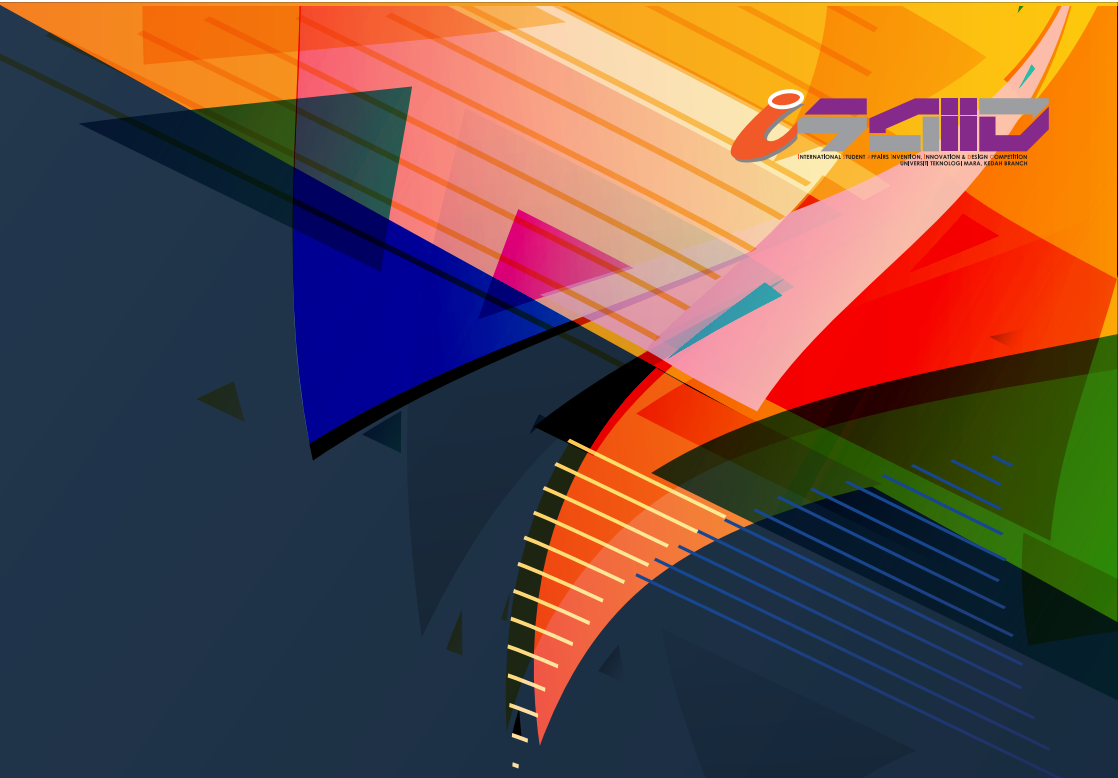

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INNOVATION
CATEGORY

GAS LOAD MONITORING SYSTEM BASED ON IOT TECHNOLOGY

Saiful Hamzah Sopian, Ahmad Dzikri Bin Fazil, Nur Imalin Zaireen Zakaria, Muhammad Asraf Hairuddin and Nur Dalila Khirul Ashar

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A monitoring system of a gas load has always neglected in which manual inspection is conducted to estimate the balance of gas usage in daily application. The IoT based monitoring system of the gas load is revolutionized to measure and monitor the amount of occupied gas in the cylinder. This project works by interfacing the embedded system to the internet which the volume of the gas measured by the load cells will be sent directly through the smartphone. Then retailers could receive the information regarding the necessary location which is required to send a new gas cylinder. The objectives for this project are; to design the IoT system of showing the actual volume of the gas cylinder, to develop a notification system by sending the information to the retailers and finally to analyze the performance of the developed system. The novelty of the works demonstrated that none of the commercial product had yet existed in the market. Moreover, it also benefits both of the consumer and retailer with the utilization of the IoT technology. The usefulness is highly significant to provide a novel platform towards online application, demonstrate a customized and effective system. Therefore, the gas loads monitoring system has high and wide potential to be commercialized among various parties such as house, restaurants, schools' retailers and hospital. The benefit for both parties of consumers and retailers could relieve the kitchen work and at the same improves the ordering system while increasing the profits for the retailers.

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