

**Universiti Teknologi MARA**

**Home Fire Detection Notification  
via Telegram Bot**

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## **STUDENT DECLARATION**

I certified that this thesis and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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## **ABSTRACT**

Fire outbreak has been known as the major tragedy that could cause destruction, loss of life and property. Currently, many cases involving fire have happened in Malaysia because house owners were unable to detect the initial cause of the fire. The objective of this project is to develop a home fire detection system using Raspberry Pi that detects the fire or smoke and that is integrated with the Telegram Bot to send an alert notification to the house owner's mobile phone and the people nearby. The system utilizes the System Development Life Cycle (SDLC) waterfall model as the methodology. Three experiments were conducted to evaluate the effectiveness of the home fire detection system and 30 participants were told to respond to a questionnaire which was formulated in Google form to voice their opinion on the ease of use of the home fire detection system. The findings indicated that the home fire detection notification system was efficient, effective and easy to use. To conclude, the home fire detection notification system has the potential to help save people's lives and belongings by alerting them of the fire in the house.

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