UNIVERSITI TEKNOLOGI MARA

SMART SECURITY USING RASPBERRY PI 3 AND IOT SOLUTION IN AGRICULTURE

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ABSTRACT

Normal greenhouse usually invented to shield crops from excess cold or heat and unwanted pests. A greenhouse makes it possible to grow certain types of crops year round, and fruits, tobacco plants, vegetables, and flowers are what a greenhouse most commonly grows. The new kind of greenhouse can be designed more effective and efficient which can be called smart agriculture house. It will improve the purpose of greenhouse such as a sensor will be built in the greenhouse to detect thief or big unwanted pests such as bird or monkeys based on motion sensor. Security systems which are being used nowadays are not smart enough to provide real time notification after sensing the problems[1]. There are a lot of complaints that been told about their farm or greenhouse had been broke by the intruders include humans and animals. This system will allow users to detect thief or animal that broke into their smart agriculture house by only alerted on their device such as smartphones using internet of thing (IoT) technology. The transmission of information and data has been solved by internet of thing by using cloud computing provider with Raspberry Pi 3 as the microcontroller of the system. Motion sensor and camera module will be placed around the corner of the smart agriculture house while the buzzer and Light Emitting Diode(LED) will be placed outside at the side of the smart agriculture house. The android application that used in this system is designed by using Blynk. This phone application is used to control output component in this system which are LED and buzzer.

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