

**Universiti Teknologi MARA**

**Pet Water Dispenser With Water Level  
Monitoring System Using GSM  
Technology**

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**Thesis submitted in fulfillment of the requirements for  
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## **STUDENT DECLARATION**

I certify 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**

A pet brings joyfulness and companionship along with physical and mental health benefits to everyone. However, the pet owner may forget their responsibilities to give the right amount of water to the pet whenever they are not at home. The most automatic water dispenser system used timer to release the water and it does not have the water level monitoring system. Thus, it may cause some mess because the water will spill over the water bowl since it does not measure the existing water in the bowl while it refilled. In order to overcome the problem, a pet water dispenser monitoring system using Arduino and GSM technology is develop. The pet water dispenser systems is evalute based on the functionality test, ultrasonic sensor sensitivity test and GSM network performance test. Hence, this project proposes a pet water dispenser that can measure the current water level in the bowl using the Ultrasonic sensor and refill it accordingly while it keep the owner updated about the current water level in the bowl by sending SMS and when the water level reaches its lower level, it will place a call once the water tank is empty to keep the owner alert. The data captured and will be evaluated based on the functionality testing and the network performances test. The system ensures the pet is well-fed with a sufficient amount of water and reduce the number of sick pet due to water loss. It also increases and maintains owner productivity. The pre-alpha testing process showed a positive result and its potential to be further enhanced and commercialized.

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