Pet L.O.V.E (Life of virtual Entrust).

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Abstract

Pet L.O.V.E (Life of virtual Entrust) is a technology that is designed for pet to solve human problems with pet manure and litter. Trust no one but technology to take care of pet. Pet L.O.V.E (Life of virtual Entrust) is giving hope to everyone to eliminate the burden of cat litter disposal and at the same time save the nature from the harmful kitty litter killer, Toxoplasma gondii (1). Pet L.O.V.E is a semi-automatic toilet which uses an Arduinouno as a microcontroller and Arduino GSM Shield to send Short Message Service (SMS) to the owner. This project uses several sensors to check the moisture of cat litter and level of sand in the tank. Temperature sensor is also used to detect the change of temperature for worm. Worm is used in this project to convert the pet faeces into the useful worm casting and a liquid fertilizer that can be used for the garden. Using worm is one of the ways to eliminate toxoplasma gondii in pet litter and reduce the risk of contracting this disease.

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1.1 **BACKGROUND**

Everyone loves having a pet and some of them are simply crazy about their pet until they are willing to do anything to make their pet happy. Having a pet is a pleasure but their litter and waste smell bad, unpleasant to handle,generated nonstop throughout the day and the most important part it is having a parasites named toxoplasma gondii.

There are many ways to take care of their waste and eliminate toxoplasma gondii. Instead of having an automatic toilet that need to flush down the waste and harmful to the nature, Pet L.O.V.E (Life virtual Entrust) is a semi-automatic toilet system and nature friendly. Combination of the automatic toilet and worm compost bin can make the user life easier and help to eliminate the most harmful parasite, toxoplasma gondii in the easiest and cheapest way.

This project uses an Arduino uno as a microcontroller that is used to connect the sensor in this project and cable as an interface between the Arduino microcontroller and Arduino software. These sensors function when programming is uploadedfrom the Arduino software to the Arduino microcontroller and function based on the software programming. Arduino microcontroller is used to control the component in this project. GSM shield is usedto give the notification to the users when the sand is out of supply and the temperature is too high for worm condition because worm is very sensitive to temperature.