**Disaster Alert Box: Portable home device for disaster detection interfaced with alert messaging system**

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Images:

Ideation:

According to the United Nations University’s Institute for Environment and Human Security 2017 World Risk Report, the Philippines ranks 3rd among 171 countries around the world. Although the country has government action plans designed for disaster risk reduction, a gap still exists with regards to civic interaction. But with the adept of modernization and the disaster risk reduction technologies made available today, the innovation was ideated for the purpose of filling this gap through means of integrating such technologies in the homes of people.

Top Features and Technical Specifications

Features and Objectives

* corresponds to the Strategic National Action Plan (SNAP) for disaster risk reduction in the Philippines (particularly on disaster mitigation);
* monitors the onset of various naturally occurring disasters i.e. earthquakes, floods;
* detects potential intruders in the absence of the owner or a guardian;
* utilizes SMS and buzzer alert system to contact owner and/or emergency hotlines

Technical Instruments

* DHT11 Humidity and Temperature Sensor
* Arduino Water Level Sensor
* PIR Motion Sensor
* MQ-2 Gas Sensor
* SW-420 Vibration Sensor
* SIM800L GSM Module