FLOOD O'TECHTOR

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INTRODUCTION

Flood O' Techtor is made to detect floods in order to prevent massive destruction due to floods such as residential ruins, vehicles damage and loss of properties. The project will be able to detect the water level in order to foresee the ability of floods to occur. Our product's aim is to help the homeowners to inform them about the prediction of weather that could lead to flood in order for them to prepare so that less damage could occur.

PROBLEM STATEMENT

- No information about the current water level during flood.
- Flood will lead to personal and public damage

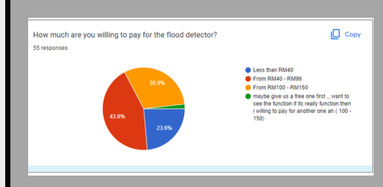
OBJECTIVES

- Ensure societies are alert and informed about flood disaster.
- Reduce damage of personal and public properties.
- Promote the understanding of environmental issues.

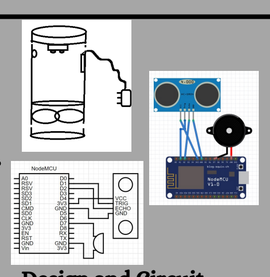
BENEFITS

- Easy installation
- Reduce the impact of flood disasters
- Convenient
- Provide immediate warning to users

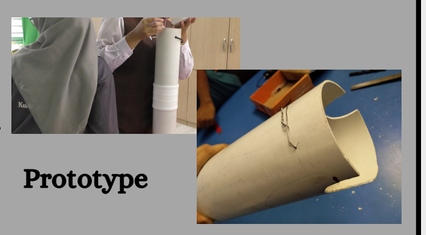
METHODOLOGY



Collecting data

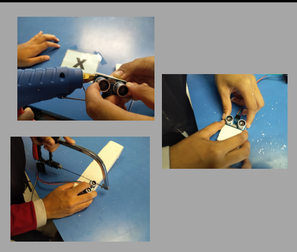


Design and Circuit Diagram



Prototype

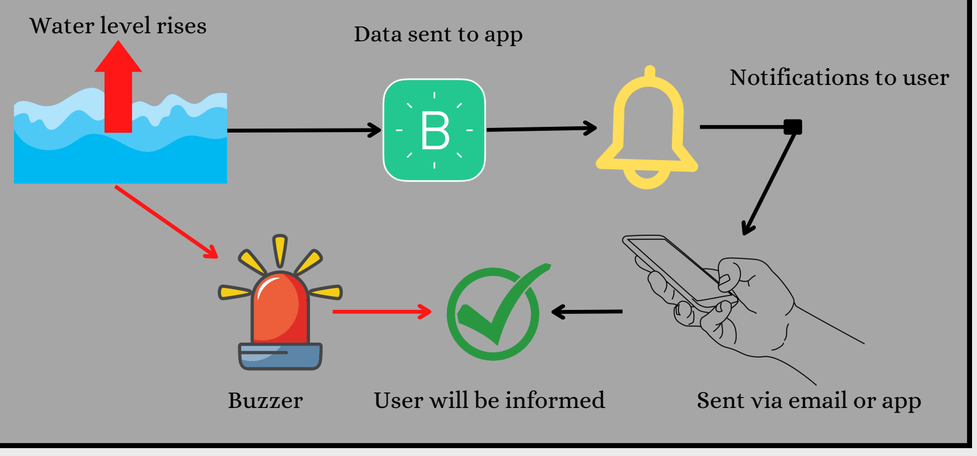
Testing the product



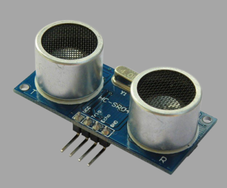
Modification

End product

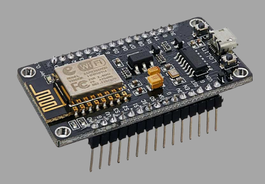
HOW DOES IT WORK?



MATERIALS



HC-SR04 Ultrasonic Distance Sensor



NodeMCU ESP8266

Jumper Wire

Adapter

5M Cable Wire

PVC Pipe

Electromagnetic Buzzer

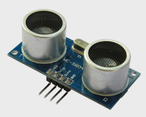
NOVELTY ELEMENT

- Highly beneficial
- Can be monitored from anywhere at anytime
- Reasonable price
- Implementation of Internet of Things (IoT)
- Directly inform our users
- Innovative Designing

MARKET POTENTIAL

- IoT product which prioritizes monitoring of water level that will lead to flood
- User friendly for everyone since they will be notified as soon as the water level started to rise

SUMMARY

Features	Observation	Results
	Water level : Below than 50 cm / More than 50 cm	water level hits 50 cm: buzzing sound produced
	Connect objects and allow data transfer	The data produced by ultrasonic sensor will be send to Blynk app
B	 Show the water level	Users will be able to received the data stored by the Blynk app

REFERENCES

S Mohamed, I Y Ebenehi, A Adaji, T W Seow, N W Chan, K C Goh and M H I Abd Rahim, (2017). Impacts of flood on children and adults' health and ways to sustainable development,
Ramli Adnan, Fazlina Ahmat Ruslan, Abd Manan Samad, Zainazlan Md Zain, (2012). Flood Water Level Medelling and Prediction Using Artificial Neutral Network: Case Study of Sungai Batu Pahat in Johor, 978-1-4673-2036-8/12/.
S Musa, M S Adnan, N A Ahmad, S Ayob, (2016). Flood Water Level Mapping and Prediction Due to Dam Failures, 136 012084