UNIVERSITI TEKNIKAL MALAYSIA MELAKA

FAKULTI KEJURUTERAAN ELEKTRONIK DAN KEJURUTERAAN KOMPUTER

Environment Monitoring Kit

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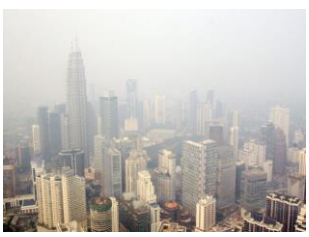
PROJECT DESCRIPTION

- The project is dedicated to detect air quality, temperature and humidity for environment.
- The collection of data stored to the cloud server to make further analysis.
- The project can be used to prevent air pollution and predict forecast weather.

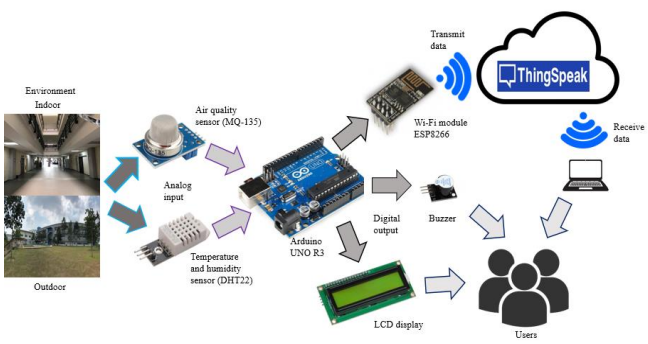


Air pollution and El Nino phenomenon affect our daily life. People are suffer in bad environment.

OBJECTIVES

- To develop a system that can monitor air quality, temperature and humidity of the environment.
- To log the data to a cloud platform (ThingSpeak) using Wi-Fi module and analysis them.

TECHNICAL DESIGN



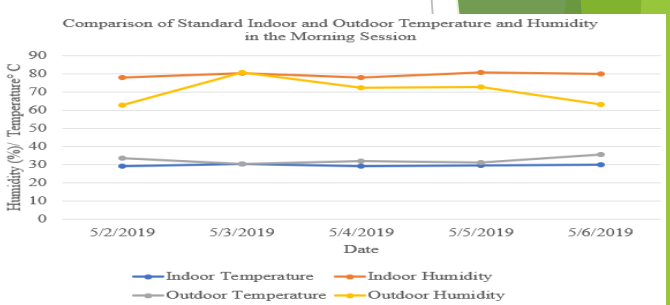
Input/Output Diagram

PRODUCT FEATURES

- Able to capture data for every 10 seconds of delay time.
- Able to show the result with the LCD display.
- Able to send data via Wi-Fi module ESP8266.

RESULTS

Days	Air Quality			
	Indoor		Outdoor	
	Morning	Afternoon	Morning	Afternoon
2/5/2019	38.9	46.4	28.7	27.4
3/5/2019	39.7	31.6	27.5	26.7
4/5/2019	42.1	39.7	28.9	23.0
5/5/2019	46.2	37.6	26.9	21.0
6/5/2019	39.6	47.1	26.4	19.8
Average	**41.3**	**40.5**	**27.7**	**23.6**



Data captured at indoor and outdoor from 2rd May 2019 to 6th May 2019 for morning and afternoon session.

SUSTAINABILITY

CONCLUSION

- Two objectives for this project had been achieved.
- The collection of data compared to other resource data to get better result.
- For future improvement, the system can be upgraded by implementing more sensors.

REFERENCES

[10]Dr.R.Sasikumar, Anitha.M, Fathima beebi, Abinaya.D, " Environmental Monitoring System Using IOT ", International Journal of Current Engineering And Scientific Research (IJCESR), vol 5-4, pp. 64-68, 2018.

[11]P. Pal, R. Gupta, S. Tiwari, A. Sharma, " IOT Based Air Pollution Monitoring System Using Arduino ". International Research Journal of Engineering and Technology (IRJET) vol 4-10, pp. 1137-1140, October 2017.