

# INDOOR ENVIRONMENTAL MONITORING SYSTEM

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## ABSTRACT

The purpose of the independent study is to create an indoor environmental monitoring system. The system is designed and developed to collect and process environmental data from wireless sensor e.g. temperature and relative humidity information. The sensor is set up and configured to continuously submit data to the server. The monitoring server monitor the incoming data with predefined environment configuration. The system will alert when monitored data is not comply with the configuration. The indoor environmental monitoring system is comprise with 3 main points: First, as an arduino environmental monitoring sensor, Second RESTful Web API using NodeJS an monitoring server and finally Cassandra as transactional database system.

## INTRODUCTION

The Indoor environmental monitoring system is following and process environmental data from wireless sensor. So important that to create Web API for registration and management. The system is important including continuously of data from sensor to database. Therefore should planning , design and analysis for support lots of data.

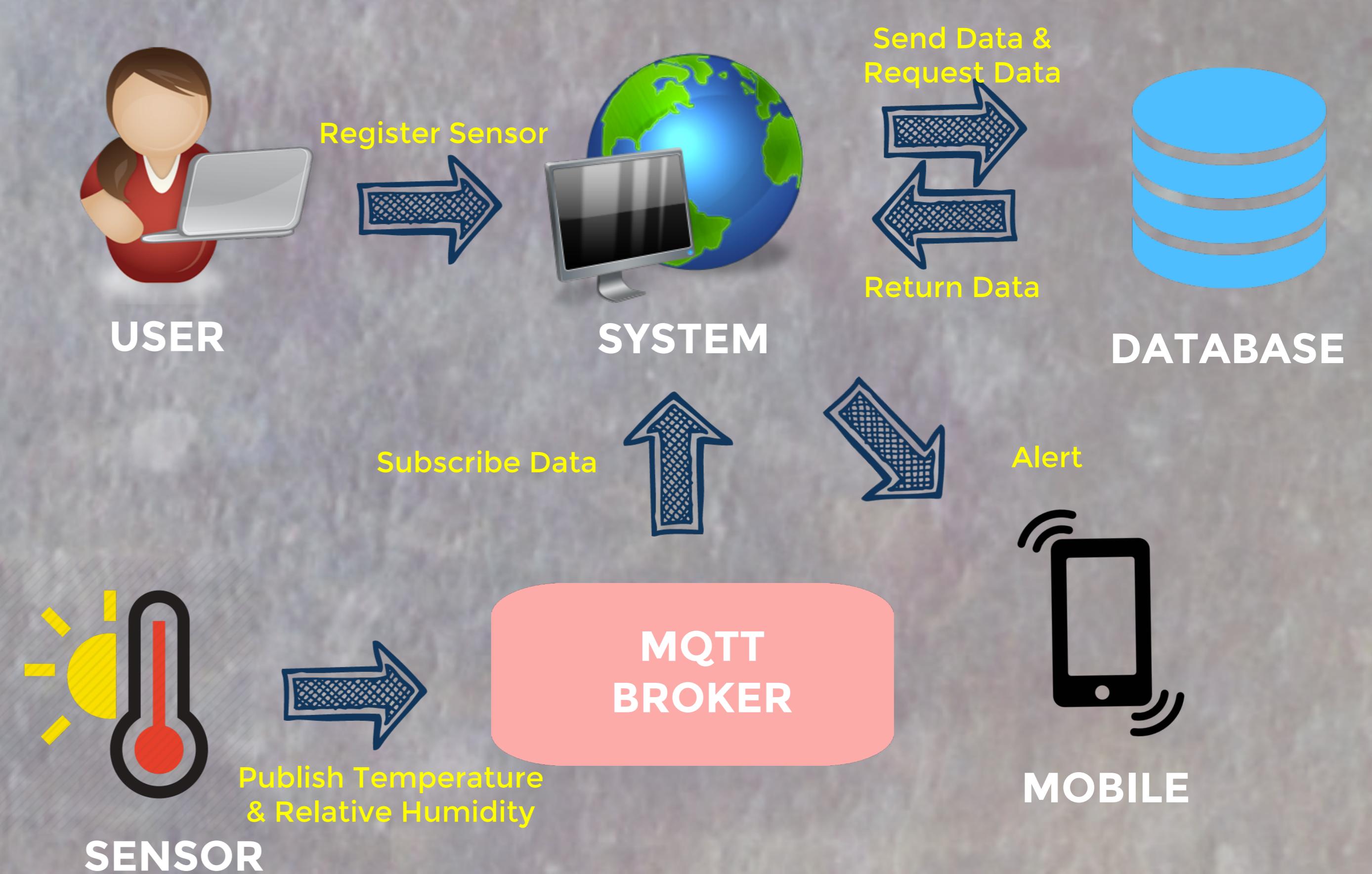
## RESULT

The indoor environmental monitoring system is composed of sensor registration. The sensor will be measure temperature and relative humidity to send data to Web API. After the sensor will detect error when the environment does not follow the requirements to user with Line application.

## REFERENCES

- NoSQL Database.[Online]. Available: <http://www.somkiat.cc/types-of-nosql-database/>.(Accessed: September 7, 2016)
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- Node.Js.[Online]. Available: <https://www.arnondora.in.th/what-is-node-js/>. (Accessed: March 27, 2017)

## DESIGN



## TECHNOLOGY



## CONCLUSION

The Indoor environmental monitoring system is to test including of the following with 3 main points First, as an arduino environmental monitoring sensor, Second RESTful Web API using NodeJS an monitoring server and finally Cassandra as transactional database system. Moreover NoSQL has many different types of uses and does not appropriate with all system so the system will be design and analysis with carefully.