# Architectures for the internet of things

## Introduction

In this assignment I have been asked to produce an and IoT device that connected up to the cloud using Node-RED, IBM Bluemix and IBM Watson. The core functionality that I will be implementing are devices that are connected together and connected to the cloud. The data that is sent to the cloud will be analysed and displayed on the IBM Bluemix platform. On top of these core system attributes I will be implementing some desired functionality.

## Literature

* Discuss the IBM Bluemix platform and the Node-Red platform
* Discuss the use of the Raspberry Pi and the Arduino Uno Board.

IBM Bluemix is a cloud-based data analytics service that is scalable up to an industrial size

## Methodology

Firstly, I setup the Raspberry Pi 3 the first thing after logging in was to expand the file system to take up the full size of the SD card. Following this any needed new software was installed this was the Node Red programming software and the Arduino software. The Arduino software was installed on the Raspberry Pi in order to keep the flow of work moving quickly. Following this I setup an account on the IBM Bluemix platform selecting the student account type free for 6 months I then setup an

The first thing that I started on was the initial code in the Node-Red software that could take the CPU temperature data in from the Raspberry Pi and send it to the IBM Bluemix cloud platform using the IBM Watson core. To do this I connected an injection input block to

* Talk about connecting the Arduino to the raspberry pi and node red
* Talk about connecting node red to the IBM Bluemix cloud platform
* Talk about the additional feature implemented

## Conclusions

## References

IBM (2019). *IBM Cloud* <https://www.ibm.com/cloud/> Accessed 08/05/2019

Node-Red (2019). *Node-Red* <https://nodered.org/> Accessed 08/05/2019