Project Objectives

By the end of this project you will:

* Gain knowledge of Watson IoT Platform.
* Connecting IoT devices to the Watson IoT platform and exchanging the sensor data.
* Gain knowledge on IBM Cloudant DB
* Explore Python client libraries of Watson IoT Platform.
* Explore Python library for integrating OpenCV for accessing the Live Camera Input
* Scan the QR code in live streaming and retrieve the QR code details
* Gain knowledge of web application development.
* Gain knowledge of storing the data in Cloudant DB
* Generating QR codes with the required data.

Project Flow:

* The parameters like hazardous gas levels, fire, humidity, and temperature data are published to the Watson IoT platform
* The device will subscribe to the commands from the application and take decisions accordingly to switch on the rainwater sprinkler in case of emergencies
* Sensor data is visualized in the Web Application
* To accomplish this, we have to complete all the activities and tasks listed below:
* Create and configure IBM Cloud Services
* Create IBM Watson IoT Platform and Device
* Create Node-RED service
* Develop the Python Script
* Develop the Python Script
* Develop a web Application using Node-RED Service.
* Develop the Web application using Node-RED
* Testing the Web UI by giving the required inputs