

PROJECT OBJECTIVES

By the end of this project you willll:

- # Gain knowledge of Watson IoT Platform.**
- # Connecting IoT devices to the Watson IoT platform and exchanging the sensor.**
- # 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 on web application development.**
- # Gain knowledge of storing the data in Cloudant DB**
- # Generating QR codes with the required data**

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**

PROJECT FLOW

- * Using the Web application, a user books a ticket based on the availability of the seats by giving the general required information.**
- * Once a user clicks on the submit button, a QR code is generated with a Unique ID and the data is stored in the Cloudant DB with that uniqueID.**

- * Users can save the QR code for further process.**
- * In python code, a Ticket collector can scan the QR code and extract the information from the QR Code i.e., Unique ID with that UniqueID, data is fetched from the Cloudant DB, if it is not found, then it displays Not a Valid Ticket.**
- * The train location can be tracked from a Web Application.**