

SOLUTION ARCHITECTURE

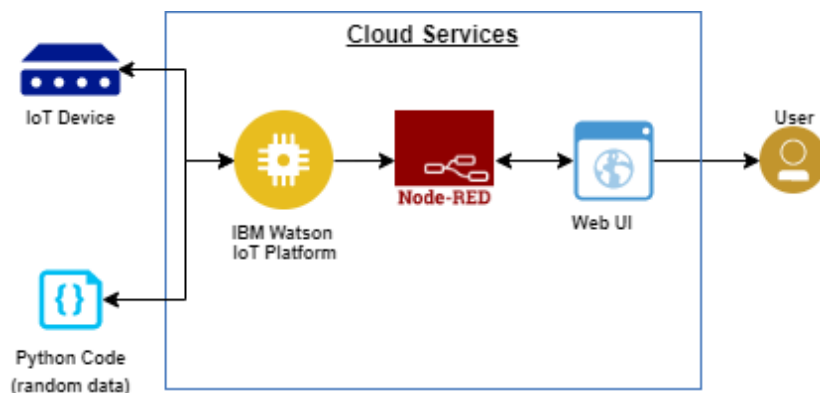
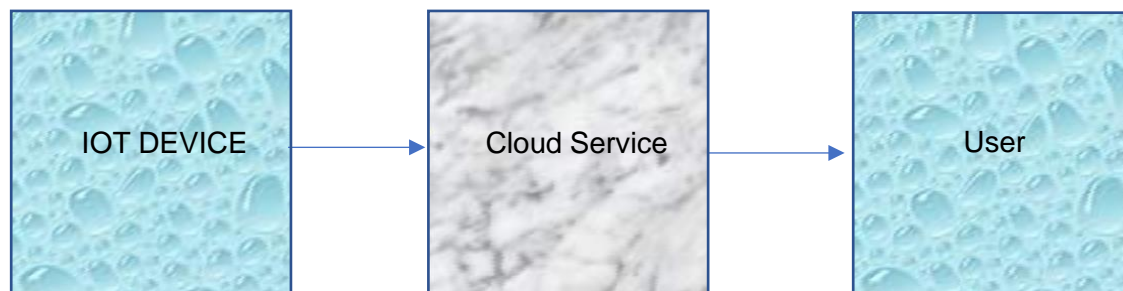
Design:

- Even with the greatest ideas to overcome solutions for railway ticket gathering this time consuming process for checking the tickets generated.
- Even much resource available fraudulent may not be rectified
- This project provides the solution generating the QR code for tickets and verifies easily.
- In this project IOT device is connected and a python random code is generated and cloud services include(IBM Waston Platform, Node RED, WEB UI, Cloudant DB which stores the database of the applied tickets)
- All booking details of customer is stored in the cloud database with an unique ID and they can be retrieved back when the ticket collector scans the QR code.
- Finally architecture connects with user and Fast2SMS application to send message to user.
- A GPS module is present in the train to track.
- The live status of the train is uploaded in the web app continuously

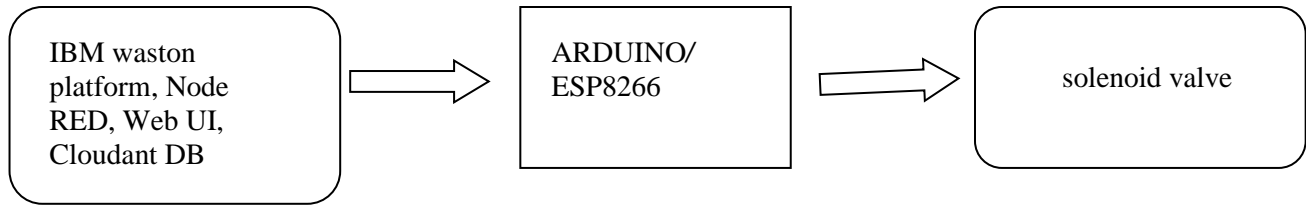
Software and system required:

- Arduino IDE
- Embedded C
- 4GB processor and OS-Windows/Linux/MAC

Block diagram:



IOT Device



Cloud Service

