

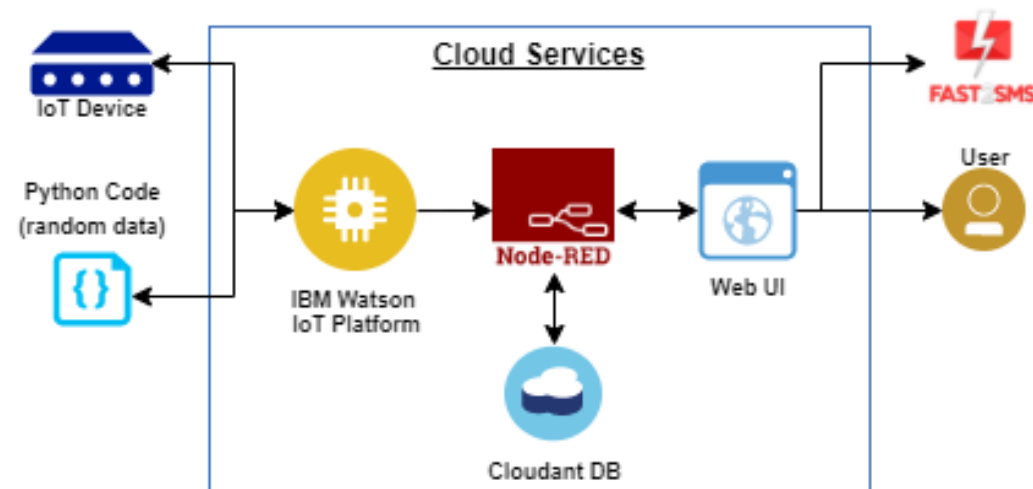
Project Design Phase-II Technology Stack (Architecture & Stack)

Date	14 October 2022
Team ID	PNT2022TMID52749
Project Name	Project - SMART SLOUTION FOR RAILWAYS
Maximum Marks	4 Marks

Technical Architecture:

The architectural diagram of the model is as below and the technology used is shown in table1 & table 2

Reference: https://www.researchgate.net/publication/320252621_Smart_ticketing_system_for_railways_in_smart_cities_using_software_as_a_service_architecture



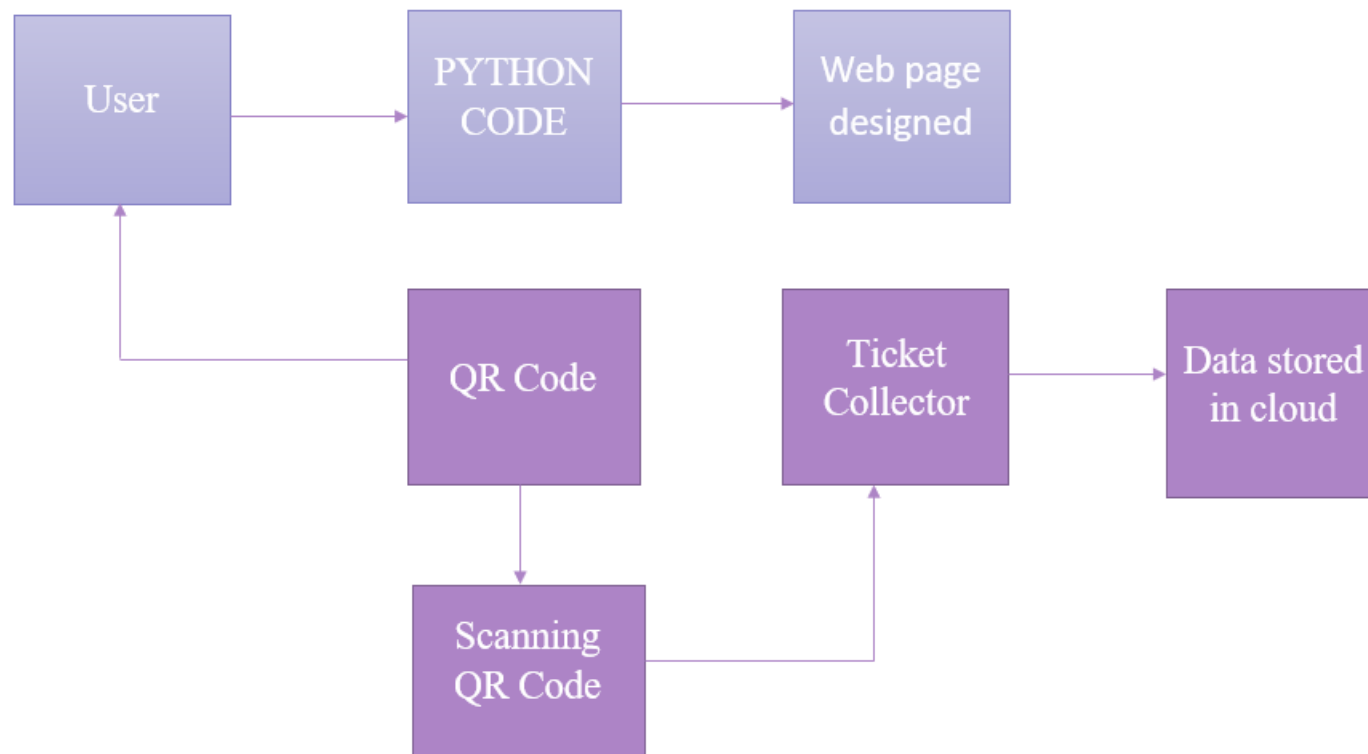


FIG. 1. BLOCK DIAGRA

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Mobile App	HTML, CSS, JavaScript / Angular Js / React Js Node Red.
2.	Application Logic-1	Logic for a process in the application	Java / Python
3.	Application Logic-2	Logic for a process in the application	IBM Watson STT service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Purpose of External API used in the application	IBM Weather API, etc.
9.	IoTModel	Purpose of IoT Model is for integrating the QR Code with the user interface	IBM IoT Platform
10.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

References:

https://cdn2.hubspot.net/hubfs/5724847/FY_19_Revamp_Assets_Website/Industries/Rail%20Transportation/Flyer/DDOPE-IoT-Rail-Solution-Flyer.pdf

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3169034

<https://www.geeksforgeeks.org/online-railway-ticket-reservation-system/>