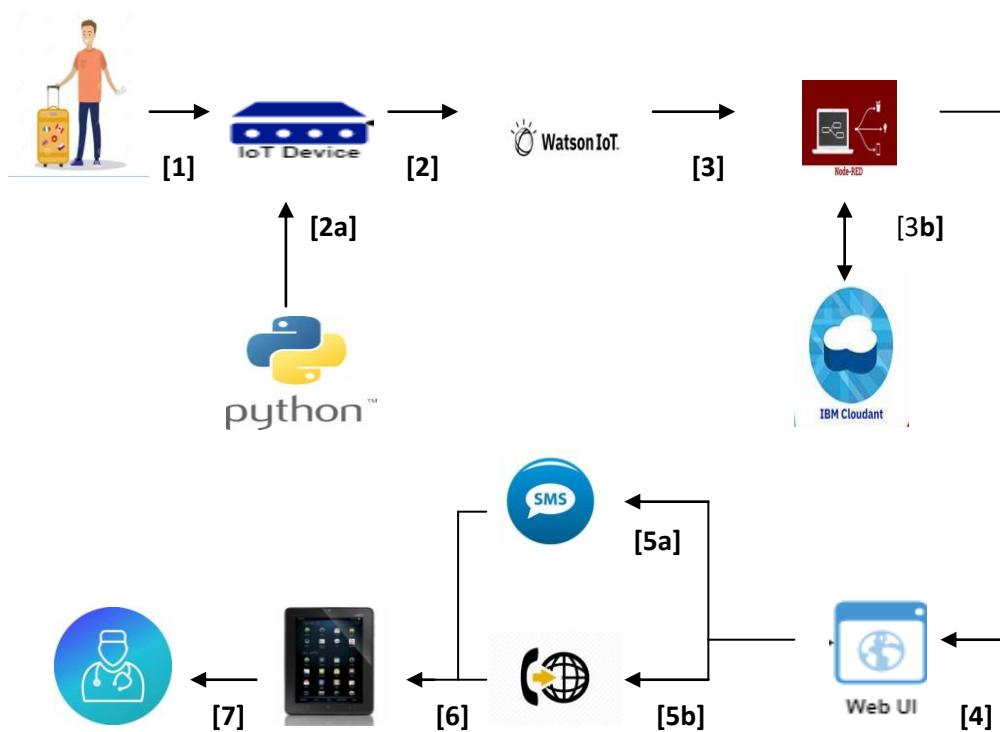# Project Design Phase-II
# Technology Stack (Architecture & Stack)

| Date | 10 October 2022 |
|---|---|
| Project Name | Smart Railway Systems using IOT |
| Maximum Marks | 4 Marks |

## Technology Stack:

**Table-1 : Components & Technologies:**

| S.No | Component | Description | Technology |
|---|---|---|---|
| 1. | User Interface | user interacts with application through Web UI | Python/ IBM Watson |
| 2. | Application Logic-1 | Logic for a process in the application | IBM IOT platform |
| 3. | Cloud Database | Database Service on Cloud | IBM Cloudant |
| 4. | File Storage | File storage requirements | IBM Block Storage or Other Storage Service or Local Filesystem |
| 5. | Infrastructure (Server / Cloud) | Cloud Server Configuration : | Cloud Kubernetes |

**Table-2: Application Characteristics:**

| S.No | Characteristics | Description | Technology |
|---|---|---|---|
| 1. | Open-Source Frameworks | List the open-source frameworks used | IBM IOT platform |
| 2. | Security Implementations | Installed in the Compartment of the Train and doesn't need any Credentials to access | - |
| 3. | Scalable Architecture | Can be increased in no by installing more Iot devices | IOT |
| 4. | Availability | By using a Web UI | IBM Cloud,Node Red app |
| 5. | Performance | By having a cloud Infrastructure | IBM Cloud |