Team ID	PNT2022TMID48646
Project Name	Smart Solutions For Railways

Project Objective By the end of this project you will:

- ✓ Learn about Watson IoT Platform.
- ✓ Sharing sensor data while connecting IoT devices to the Watson IoT platform.
- ✓ Learn about IBM Cloudant DB.
- ✓ Examine the Watson IoT Platform's Python client libraries.
- ✓ Investigate the Python library for OpenCV integration to get the Live Camera Input.
- ✓ Scan the QR code while watching a live feed to get the details.
- ✓ Learn about creating web applications.
- ✓ Learn about storing data with Cloudant DB.
- ✓ Creating QR codes with the necessary information.

Project Flow:

- ✓ By providing the basic necessary information using the Web application, a user books a ticket depending on the availability of the seats.
- ✓ The data is stored in the Cloudant DB with that Unique ID after a user clicks the submit button, and a QR code is generated with that Unique ID.
- ✓ The QR code can be saved by users for later use.
- ✓ A ticket collector can scan a QR code using Python code to extract its unique ID, which is then used to request data from the Cloudant DB and display the message "Not a Valid Ticket" if it cannot be located.
- ✓ Additionally, IBM IoT will be updated with the train's real-time location.

  Python-based platform.

- ✓ A web application allows users to track the location of the train.
- ✓ We need to finish all the activities and duties to achieve this listed beneath.
- ✓ Design and set up IBM Cloud Services.
- ✓ IBM Watson IoT Platform and Device Creation.
- ✓ Establish a Node-RED service.
- ✓ Develop the Python Script.
- ✓ Utilizing the Node-RED Service, create a web application.
- ✓ Use Node-RED to build the web application.
- ✓ Giving the necessary inputs will test the Web UI.