LITRATURE SURVEY ON
SMART SOLUTIONS FOR RAILWAYS

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Abstract:

When it comes to travelling, in our country the cheapest and the most comfortable mode of transport is railway. A lot of people in India travel to other places using railways and some people use Indian Railways to travel even on daily basis. To enhance the ticketing process a web page is used for the passengers to book their tickets and to know about the availability of train. Also the GPS tracking device is used in train to display the live locations of the train in the web page.

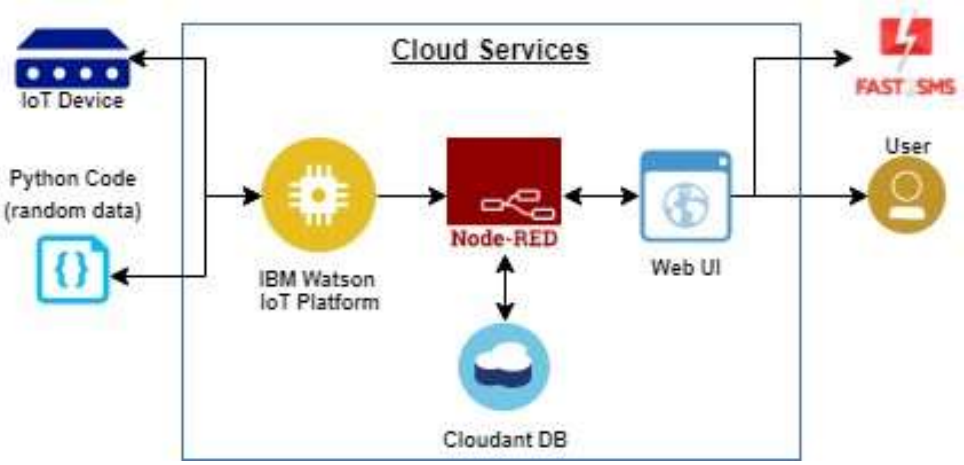
Introduction:

Railways are one of the safest and cheapest modes of transportation preferred over all the other means of transport. It is one of the world's biggest networks under single management. It is the backbone of nation's transport system. Indian Railways has more than 25,000 Wagons, 45,000 different types of coaches and 8000 locomotives. Here, the berth reservation on trains is complex for the Waiting list passengers. Every man since came into existence, the thrust for knowledge and invention has been an unquenchable process, thanks to which man has giant leaps in technology which could not have been ever thought before.

Existing Methodology:

Though the existing method has advantage, there are many SERIOUS problems, some are to book a general class ticket, one has to go to the railway station or book from the authorized agents, but this process is quite time consuming and people don't like to stand in queues because in every important junctions and platforms due to arrival of trains there may be a lot of crowd. Due to this reason, some people are afraid of losing the train. So people travel without ticket. More number of passengers is ready to attempt SUICIDE during their journey. And also more number of waiting list passenger's tickets will not be conformed during their journey. This has become the most serious issue for our country's development.

Experimental setup:



Proposed methodology:

The proposed technique of our project is to design a web page. In this web page we can find the availability of train and it's timings. The passengers can book their tickets directly in this webpage instead of waiting in the queue to get tickets. Once when the passengers had booked the ticket they will be provided with a QR code which will be used for them to board the train. The ticket collectors can scan the QR to identify the personal details. A GPS module will be present in the train. This GPS module is used to track the train and the status will be updated in the webpage. So the live status of the journey can be identified by the passengers.

This proposed system is very much useful for the Waiting list passengers. Here, waiting list passenger's tickets will be conformed during their journey. Reducing the frauds and accidents, Automatic door open and close methodology be followed. The work burden of travelling ticket examiner will reduce and easily identify the missing, vacant and cancelling tickets using the display board**.**

Software Used:

Python, IBM Cloud, Node- RED,IBM IoT Platform,MIT App Inventor,IBM Cloudant DB

Conclusion:

The goal of our project is attained the aim, using this

system the passenger can easily get the train ticket without wasting their time to wait in a long queue. This system is mainly used to get the general tickets and the card can be recharge by yearly basis. Newly smartcard technology is being used in a number of ways around the world. On the other hand, security has become important in information technology especially in those applications involving data sharing and also transactions. These features make this as a real time project with good commercial and social value. This system is mainly used for the waiting list passenger tickets be conformed during their journey.

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