SMART SOLUTIONS FOR RAILWAYS

(Smart Solutions for railways is designed to reduce the work load of the user and also the use of paper**)**

19BEC4195(SINDUJA G), 19BEC4204(SRIMATHI M),

19BEC4219(TAMILMATHI VM),19BEC4239(YOGALAKSHMI K)

LITERATURE REVIEW

TOPIC: EFFECTIVENESS OF THE E-TICKET SYSTEM USING QR CODES FOR SMART TRANSPORTATION (2021).

AUTHOR: Tommy Kuncara, Arman Syah Putra, NurulAisyah, VH. Valentino

DESCRIPTION: Tommy Kuncara et al presents the hardest tickets to purchase using the QR e-ticket technology. Only a smartphone can be used to purchase this bus pass ticket, and users can carry their smart phone bus pass tickets as QR (Quick Response). Customers who want to purchase the pass can do so by indicating the source and destination. Based on the data given by the user, this programme will generate a QR code that the conductor or other authorised person can use to scan the ticket. A SQLite database is used to store each user's data for security reasons. The ticket checker also has an examiner application that allows users' tickets to be searched for and checked for inspection purposes. The majority of SQL standards are implemented by SQLite, which employs a weak, dynamically typed SQL syntax.Although writing can only be done sequentially, SQLite operations can be carried out concurrently. SQLite's source code is available to everyone. For many programming languages, SQLite supports numerous builds. Both the database and database engine are the most popular ones.

TOPIC: ONLINE RESERVATION SYSTEM USING QR CODE BASED ANDROID APPLICATION SYSTEM (2020).

AUTHOR: Mrs. OmprakashYadav , Ryan Fernandes, Rohit Tiwari, SheenamKaul

DESCRIPTION : Mrs. OmprakashYadav et al presents that today PRS is available at 8000 counters more than 2380 locations throughout the countries, including all major stations, and important non-railhead locations such as tourist centres and district headquarters. The PRS services are available to passengers for 23 hours in a day. Passengers can reserve a berth for any train 120 days in advSance. In addition to the railway counters, multiple delivery channels have been provided to Rail passengers to access the PRS services. I-Ticketing and E-ticketing and through Internet was launched in year 2002 and 2005respectively. Booking through Post offices was launched in year 2007. Besides all these facilities provided by Indian Railway one attempt that was tried to make is to reduce the usage of paper as much as possible.

TOPIC: ANDROID SUBURBAN RAILWAY TICKETING WITH GPS AS TICKET CHECKER (2012).

AUTHOR: Karthick. S ,Velmurugan. A

DESCRIPITION: Karthick et al presents Using Java, SQLite, MySQL, and PHP on the server side, we designed a mobile ticket application for Android 1.5 that could alter how users purchase tickets in the future. Any type of transportation system can use this form of ticketing programme. Our Android software is unique in its class and has become a very popular way to purchase tickets for suburban trains using an Android smartphone. Additionally, our app helps our ticket checkers save a tonne of time by using GPS to validate tickets and switching from a manual to a digital ticket checking procedure by just scanning the ticket with his own Android smartphone. Consequently, a major issue with issuing local railway tickets has been resolved. Knowing at what time trains will be available will also ease the user to allot his time accordingly to reach the station, so in our project we will be using GPS here to find the location of the user and nearby train station to display the train arrival timings. Still more advance modification can be a Dynamic display of Train locations by fitting GPS devices in trains to show its location in the Google map display which is available in our application. Also as a station level security we can have Hardware devices to validate the QR codes before the user enters or leaves the station, where the user can have access towards platform after being validated by the hardware device.

TOPIC: A QR CODE BASED PROCESSING FOR DYNAMIC AND TRANSPARENT SELF ALLOCATION IN INDIAN RAILWAYS (2012)

AUTHOR: Man Mohan Swarup, Abhiram Dwivedi, ChanchalSonkar, Rajendra Prasad, Monark Bag, Vrijendra Singh

DESCRIPTION: Man Mohan Swarup et al presents that in addition to all of these services offered by Indian Railway, an effort was made to cut down on paper use as much as possible. Passengers are requested to use their Mobile Phones as journey tickets, because the ticket is stored in Mobile Phone either as an SMS sent by IRCTC or in the PDF format store in memory card in the case of e-ticket.In addition to all of these services offered by Indian Railway, an effort was made to cut down on paper use as much as possible. The ticket is stored in mobile phones either as an SMS issued by IRCTC or in the PDF format stored on memory card in the event of an e- ticket, therefore passengers are urged to use their mobile devices as travel tickets. In an effort with the Indian Railway, our proposed model recommends the usage of QR codes in both paper tickets and electronic tickets that contain URLs, such as http://xyz.in/nr/c4Lj9gM. This is passenger-specific and provides information about the traveller whose data was used to create the QR-Code.

TOPIC: ANDROID RAILWAY TICKETING WITH GPS AS TICKET CHECKER AND USING QR CODE(2016).

AUTHOR: AnkitaBhandekar, MadhuriChougle ,prajaktaGade

DESCRIPTION: AnkitaBhander et al presents the A QR code is any code that users find on most of any items that they buy from the store. QR codes have come a long way and now that they are integrated into the online world it's a true phenomenon. It makes searching for online products, shopping and buying much easier. Now, users are going to use it for buying tickets. Creates an image in real world and acts like a web link for the smart phones. It actually grabs the code scans the item and goes online searches for the item which then give users so many details about the product. The user gets specific details as per user choice and reviews about the product you have just scanned from the scanner. When user scans a QR code a magazine, a newspaper or wherever the iPhone or Android will to go to a website where the user will find much of promos, coupons, maps and many more information. QR codes now are used in a much broader context, including both business tracking applications and convenience-oriented applications aimed at mobile phone users, to open a Uniform Resource Identifier (URI), or to compose an e-mail or text message. Users can generate and print their own QR codes for others to scan and use by visiting one of several paid and free QR code generating websites or applications. It has then become one of the most-used types of two-dimensional barcode.

PROBLEM STATEMENT:

The project is used to book tickets from the railway website and to display the location of the train. We can use this type of ticket booking websites to book our train tickets. To make easy and comfort way of booking tickets for our destination and also for identifying the fake tickets and not ticket booked passengers easily by the unique QR code. This is to find the location of the train from the destination. It is also used to get database from the customers about their destination. Our Indian Airways using this type of QR code for their Flight Tickets to find the originality of the ticket and Airways displays the location of the flight from the starting point to destination. This type of QR code method of ticket booking and checking improves the timing and reduces the loss of financial requirement for the department. It also improves the atmosphere of the Indian railways into modernized technology.

PROPOSED METHODOLOGY

In this project prototype is used to book tickets from the web UI of the railways with some customized feature for users by booking tickets for them. By booking ticket from the web UI users can get special ID for their specific purpose and also creates QR code for the checking purpose and to be easier in checking the originality of the tickets. After booking they get unique ID and QR code.

From the ticket checker point they may get a special login from the web ui and they get a QR code scanner to check the tickets, By scanning the QR code they get the details of the passenger directly from the cloud IoT server. This is very useful in checking the ticket riginality and to confirm the passenger's details for future and security purpose.