SMART SOLUTIONS FOR RAILWAYS

We wanted to be apart of our surrounding with some change and advancement sothat it can bring the better life of the middle class and lowerclass people to travel in high secutity and advanced locomotions .the train is one and only most widely used transportion,and not only for this they are used for goods transportion also.Indian railways are not able to facilate the customer properly due to crowded amount of people.

Smart Solutions for railways is designed to reduced the work load of the user and also the use of paper.

- A Web page is designed for the public where they can book tickets by seeing the available seats.
- After booking the train, the person will get a QR code which has to be shown to the Ticket Collector while boarding the train.
- The ticket collectors can scan the QR code to identify the personal details.
- A GPS module is present in the train to track it. The live status of the journey is updated in the Web app continuously
- All the booking details of the customers will be stored in the database with a unique ID and they can be retrieved back when the Ticket Collector scans the QR Code.

SI NO	YEAR	AUTHOR	PAPER NAME	CONCEPT	ADVANTAGES	DISADVANTAGES
1.	2009	Roman khoeblal,Roungsan chaisricharoen	Passenger Monitoring Model for Easily Accessible Public City Trams/Trains	public transportation, train, tram, passenger monitoring, passenger control, RFID distance Reading, ticket control, RFID ticket inspection	It's possible to travel cross country with a single public transportation card, using Transport systems of several transport operators.	Applicable only for passenger monitoring
2.	2013	Chaoyong peng,Yufei	Way-side wheel crack detecting using arrayed ultrasonic probes	It will detect the wheel crack by using ultrasonic rays	It will eliminate the failure risks of wheels,	No cost effective
3	2011	M.Hassan, S.Bruni	Crack Detection in Railway Axle Using Horizontal and Vertical Vibration Measurements	Investigations are carried out to assess the possible use of vibration measurements to identify the presence of a fatigue crack in railway axles	effect of various sources of disturbance, namely wheel out-of roundness, can be more easily dealt	High harmonic distortion
4.	2012	Gourav Saha,V.Vaidehi	Robust Railway Crack Detection Scheme (RRCDS) Using LED-LDR ASSEMBLY	robust solution to the problem of railway crack detection utilizing	cost effective	In this the range IR sensor is very less
5.	2015	Abbas,P.Sh	Automatic	addressing the	crack is	It is not fully

		arma and N,Singh	Railway Track Crack Detection System	issue by developing an automatic railway track crack detection system integrating an infrared red (IR) crack sensing module.	detected	automatic
6.	2015	V.Muralidharan,V.Dinesh,P.Manikandan	An Enhanced Crack Detection System for Railway track	To detect the railway crack	Obstacle detection	This process take a more time
7.	2016	Sengudu	Review on railway track crack detection using ir transmitter and receiver	The defect information can be wirelessly transferred to railway safety management centre using a GSM module.	Cost of the unit is less when compared to other , No fire hazard problem due over loading	It cost is very high, sometimes signal receive not properly
8.	2017	Sopanharith Sam,Jobytitus	Automotive Crack Detection for Railway Track Using Ultrasonic Sensors.	Ultrasonic sensor is used to detect the crack in the railway track by measuring distance from track to sensor.	The auto crack detection method is more efficient in the technical field , Quick response is achieved.	IR Sensor range IS .7 to 300 Micrometers.
9.	2017	Kazaz	Localization of an Unmanned Aerial	Localization of a UAV and how it can be	It find exact location of the crack.	Technique used has a long process were the time

			Vehicle for Crack Detection in Railway Tracks.	applied for detecting cracks in a railway track using the concepts of image processing.		interval is not sufficient.
10.	2006	M.singh,J. Hempshall	Autonomous Rail Track Inspection using Vision Based System.	Image processing, rail track inspection .	automatically find clips in video sequences and thereafter recognize.	Disconnected pixels which are impossible to link together as a cohesive clip.