POSTPAID ELECTRONIC TOLL COLLECTION SYSTEM

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Abstract*:- In our country, road transportation plays necessary role at intervals the move, sensible transportation, varied import and export sectors. But, of late there's an enormous rush at intervals the toll plazas thus on pay the toll tax. therefore thus on cut back the setback and variant|to avoid wasting} lots of time together to chop back the economical loss of Asian nation upto 300 integer rupees once a year, we have a tendency to ar ready to vogue the advance toll assortment system that accommodates automation in toll tax payment victimization RFID. The system will build the automation of piece of ground victimization combination of tiny controller, RFID, Load cell technology. The implantation of automation in piece of ground that would be a step towards rising the looking at of vehicles, move in predetermine routes. The aim of our thought is to vogue a system, that automatically identifies the approaching vehicles and record vehicles information that features vehicle variety, current time, etc. If the vehicle is allowable, then the system automatically opens the toll gate and bill of planned quantity will automatically fetch on householders net application. This translate to chop back holdup at toll plazas and helps in lower fuel consumption, cut back transportation time.*

***Keywords:-** RFID tag, RFID sensor, Security, Electronic toll.*

I INTRODUCTION

With the increase at intervals the vary of vehicles on road, the task of traffic management becomes plenty of difficult. it's arduous to remain maintain the most points of the every vehicle, that's running on the road. to boot simply just in case of hit and-run or carrying of outlaw merchandise over inter-state cross boarder or road-robbery cases, the police may not trace the culprits very merely, as a result of the vehicle details do not appear to be monitored unendingly. .Suppose The cargo Company wishes to send a message to its On-road vehicle to forestall delivering the product to consumer, lawman got to stop a vehicle that's mercantilism some outlaw merchandise or city transports got to track each buses details like departure and purpose in time on terminal, variety of spherical visits it's undergone throughout one day. All this will be potential by the utilization of automatic toll gates. this system is supposed to help the RTO, Police

Department, conveyance and cargo corporations to trace the vehicles.

Electronic toll assortment (ETC) could also be a regular technology at intervals the intelligent transportation (ITS) house that allows the electronic assortment of toll payments. it has been studied at intervals the last fourty decades, and applied in various contexts, e.g., highways, bridges, tunnels etc. ETC systems square measure usually developed by suggests that of frequency identification (RFID) technology. A RFID-based ETC system consists of two main actors sort of a reader and a electrical device (or tag). Passive tag systems square measure usually most popular because of its main advantage of being cheaper. The reader is placed at an exact height more than the lane and irradiates energy toward the tag (placed on a vehicle) therefore on modify a communication link.

II LITERATURE SURVEY

Paper1:Automatic toll E-ticketing system for transportation system.
In this Paper, the idea of machine-driven toll ticketing victimization MSP430 Launch pad. we've got used Associate in Nursing innovative approach wherever a soul are ready to pay the toll whereas in motion victimization RFID communication technology. Through this method of toll assortment can save time, effort, and man power. what number vehicles passing through the toll gate keep in a very information. we are able to additionally determine a vehicle what number times passing through the toll gate in a very day. the development may be done to develop a multi vehicle quantity subtracted and send a SMS at a time multi vehicle.

Paper2: Automation of Toll Gate and Vehicle Tracking.
This paper explains the implementation of Toll Gate Automation that might be a step towards up the chase of vehicles, traveling in planned routes. throughout this technique, a processed system automatically identifies degree approaching vehicle and records the vehicle vary & Time. If the vehicle belongs to the authorised person/group, it automatically opens the Toll Gate and a planned amount is automatically deducted from its account.

Paper3: Automation of Toll Gate and Vehicle Tracking
Toll gate Automation and Vehicle following is meant to mechanically keep track of the vehicles movement, record the time and also the details like Owner's name, date of registration, vehicle model etc. this technique is incredibly helpful for automatic vehicle following, time management and additionally for automation of Toll gate. This paper explains the implementation of Toll Gate Automation that may be a step towards rising the following \of vehicles, traveling in preset routes.

.**Paper4: GPS Based Automatic Toll Collection System.**
Has emerged as a dominant a part of Bharat. Toll plazas play an important role in maintaining the road transportation. At present, manual toll assortment is most generally used assortment technique in Bharat. It considerably needs a employee or attendant. thanks to manual intervention, the interval at toll plazas is highest. The paper proposes a style for the automation in toll tax payment mistreatment GPS and GSM Technology. Automation of piece of ground has been experimented mistreatment combination of Microcontroller, RFID, world positioning system, world system for Mobile..

Paper5: Intelligent Toll Path System Using GPS and GSM
Transportation has emerged as a dominant a part of Asian country. Toll plazas play an important role in maintaining the road transportation. At present, manual toll assortment is most generally used assortment technique in Asian country. It considerably needs a toller or attendant. because of manual intervention, the time interval at toll plazas is highest. The project has been designed for the automation in toll tax payment victimisation GPS and GSM Technology. Automation of parcel of land has been experimented victimisation combination of PIC Microcontroller, IR transmitter and receiver, world positioning system, world system for Mobile. Implementation of automation in parcel of land enhances the observation of vehicles that ar movement in predestinate routes.

III EXISTING SYSTEM

The sensible tolling systems support toll collect, no overladen vehicles, speed enforcements then aboard on wireless communication systems. In our system we tend to develop a golem application during which driver when reached at toll plazas five hundred m vary victimization GPS, driver gets locations of parcel. In our system, driver can add cash in golem application and it get all info regarding toll and driver pays toll quantity. thus driver no got to wait in queue for pay toll quantity. In toll counter , admin person can check all details regarding vehicle and examine payment details .using our system, we are able to simply resolve road traffic downside..

IV OBJECTIVE

1. Lower fuel consumption of vehicle. Data
2. Decrease is transportation time.
3. Reduce the traffic jams at toll plaza.
4. Don't need to pay the toll tax at the same location of toll plaza at same time.

V PROPOSED SYSTEM

The system will produce the automation of parcel exploitation combination of little controller, RFID, Load cell technology and Payment golem Application. The implantation of automation in parcel which will be a step towards up the observance of vehicles, move in predetermine routes. The aim of our thought is to vogue a system, that automatically identifies the approaching vehicles and record vehicles information that has vehicle number, current time, etc. If the vehicle is allowed,

then the system automatically opens the toll gate and bill of planned quantity will automatically fetch on homeowners mobile application. This translate to reduce waiting at toll plazas and helps in lower fuel consumption, crop transportation time.

Architecture Diagram
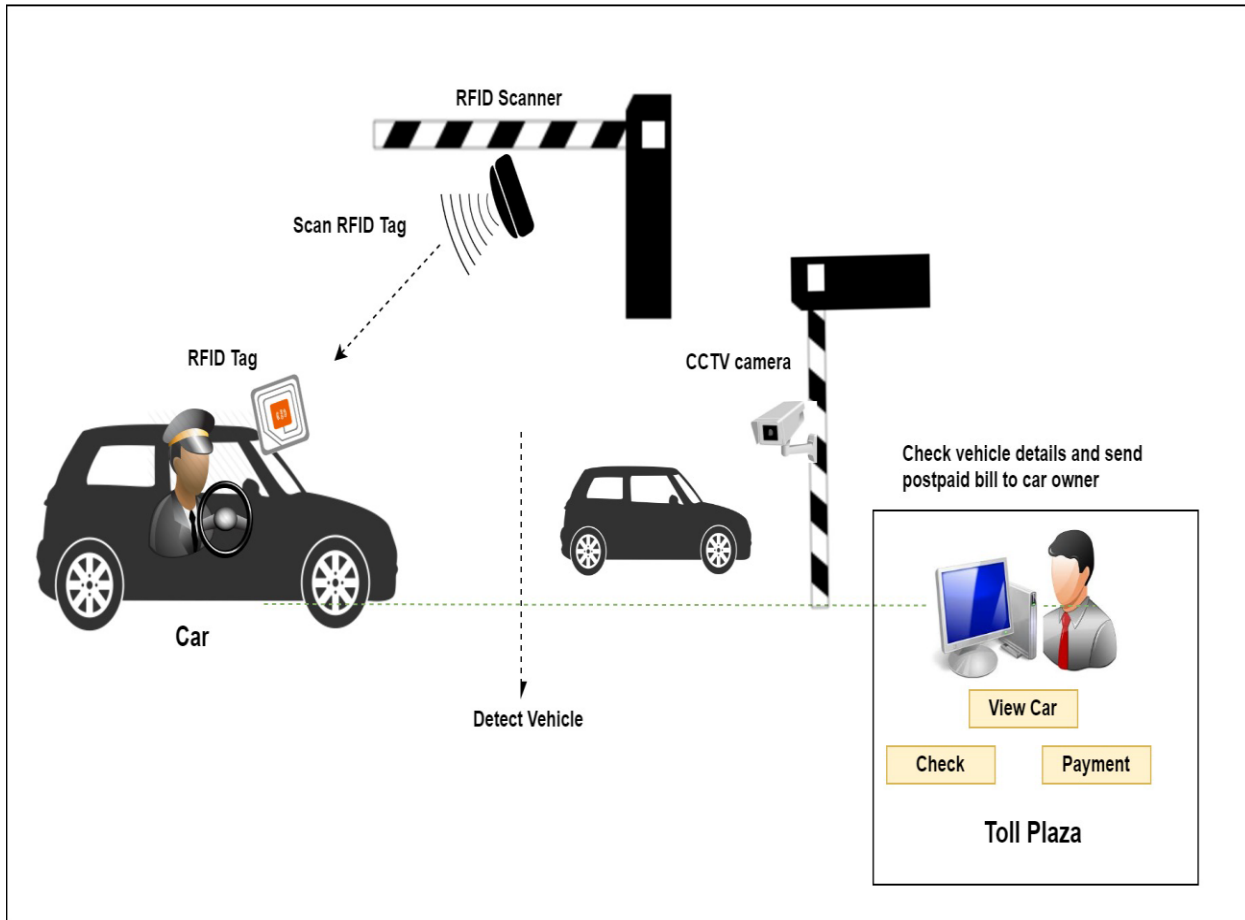

**System Requirement and Specification**

Hardware resources required

1.	Processor	:	Pentium –IV
2.	Speed	:	1.1 GHz
3.	RAM	:	256 MB(min)
4.	Hard Disk	:	20 GB
5.	Key Board	:	Standard Windows Keyboard
6.	Mouse	:	Two or Three Button Mouse
7.	Monitor	:	SVGA
8.	Scanner	:	RFID Scanner.

Software resources required

1.	Operating System	: Windows 07/08/Above
2.	Programming Language	: JAVA/J2EE/XML
3.	Database	: MY SQL

RESULT:
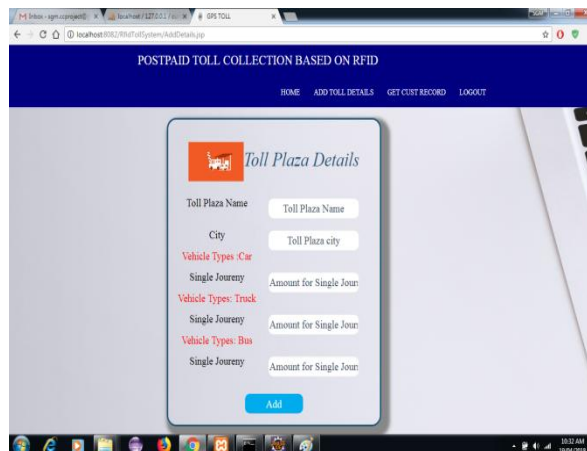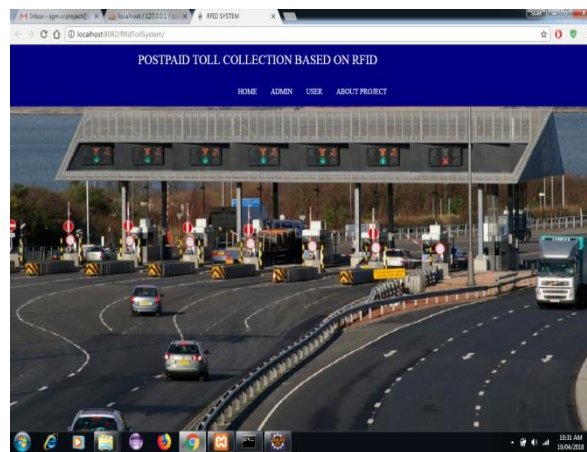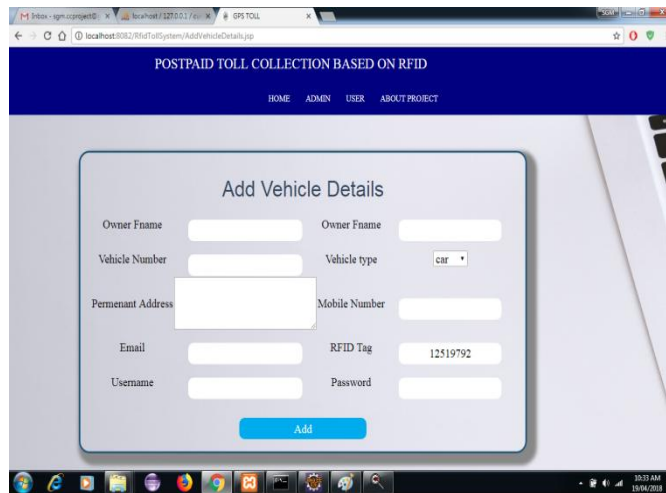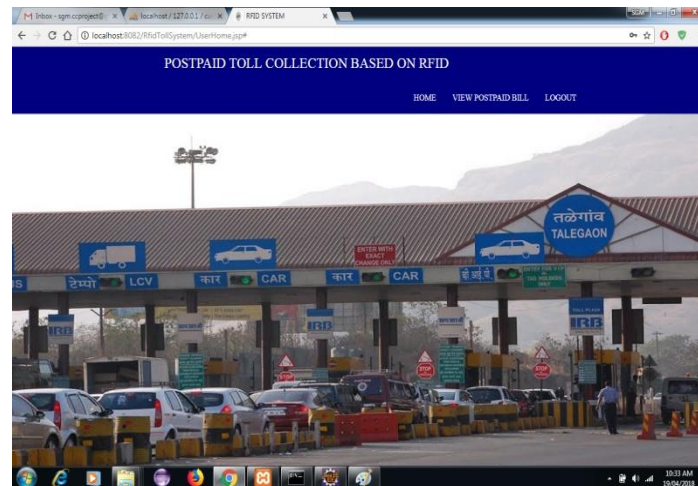
VI CONCLUSION AND FUTURE SCOPE

The system will produce the automation of tract exploitation combination of tiny controller, RFID, Load cell technology and Payment golem Application. The implantation of automation in tract that might be a step towards up the observance of vehicles, traveling in predetermine routes. The aim of our thought is to vogue a system, that automatically identifies the approaching vehicles and record vehicles knowledge. which has vehicle number, current time, etc. If the vehicle is allowed.

VII ACKNOWLEDGEMENTS

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