

VEHICLE THEFT DETECTION USING QR CODE

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Abstract

In today's developing quantity of way of transport, car protection has end up a essential trouble. It is essential to beautify the way of protection to cut back the quantity of car theft and forestall them. Thus, to conquer this ubiquitous trouble we're featuring a gadget wherein a car is regularly without difficulty recognized using a QR code irrespective of non-public or public location consisting of visitors mild or public parking structures or public regions like marketplace places, railway stations or bus stands. Here at some point of this gadget, car attending is going to be without difficulty recognized through its functions which can be going to be saved in the utility being constructed on foundation of QR code. We might be requiring a real time database in which all car associated information might be saved and used. By the use of this technique, car monitoring and tracing are regularly without difficulty and easily completed therefore imparting help to technically incompetent human beings also.

Keywords: Vehicle Stolen, QR code, Cost efficient, Vehicle Tracking.

Introduction

In today's international with growing numbers of vehicles and automobiles, car robbery has end up one of the maximum clean and not unusual place forms of theft. To record any theft or robbery we observe the conventional technique of registering whinge in police station. Police hotel an FIR then successively begins the investigation. But it's very clean in our gadget to control the stolen car and alternate its unique identity. Thus, its turns into tough to become aware of the stolen car. Moreover, we do not have ant tool or sensors in our vehicles which may also assist us song the stay region simply in case car is stolen. Thus, it turns into very clean to keep out this form of robbery. Hence, we have got give you concept of the use of QR code that's recently well-known and enables uniquely become aware of any product or vehicle or car. We can use styles of QR code i.e., both matrix or dimensional relying upon the need. QR codes have validated accuracy and until date we have got only some failure charge or we can say negligible. The important aim to apply QR code is for particular car identity. This is attending to assist in conditions in which burglar has fabricated or changed car quantity plate or GPS monitoring gadget if gift any.

Objectives

- To digitize all files and report of the citizens and cause them to be had on actual time foundation.
- Minimize the usage of bodily files and it's so difficult to hold the unique files in any respect time.
- It reduces the management overhead of Government departments through minimizing the usage of papers.
- Ensure genuineness of files and do away with the usage of faux files.
- Enhance the authenticity of the QR code
- Notify the human beings to resume the expired files on accurate time.
- Only the proprietor and car inspector have the proper to look the files.
- One of the maximum person-pleasant applications, coping with a humongous database.
- It enables the visitors law enforcement officials to discover speedy stolen automobiles.
- Police officials can't rate the prevailing fines and bribe greater.

Statement of the Problem

The important trouble entails human beings preventing their automobiles on the street or toll sales space to factor out their files for their automobiles then preserve their journey. This isn't always simplest waste of treasured time for the driving force and the police who take time in checking the files and go back them back. Sometimes the using pressure fails to keep the files way to a few motives and for that reason has were given to place up with a fine. The modern-day visitors rule and guidelines are not very most powerful and consequently the implementation techniques are critically flawed. Due to these, bribery has end up rampant. Lack of right control of each employees' drivers and assets (the automobiles and consequently the products they carry) is some other trouble going through the gadget

Review of Literature

[1]. Ms. Ankita V. Ghodke, Prof. Rahul V. Dagade "Electronic Secure Vehicle Verification gadget the use of Advanced Digi-Locker gadget"(I2CT) 06-08, 2018.

The Digital Locker is garage facility keep away from to keep the bodily files it digitalizes the files. This Application Contains Sub Application - User utility and car verification utility. Improving Transparency in gadget and lots of a while must be saved. The proposed gadget can shop the quantity of time of person and police officer. This RTO Digi-locker mechanism targets to do away with the bodily file's paintings. This painting offers with the advent of an android utility in which all info of the car are saved.

[2]. Mr. Nilesh R. Patil, Prof. Rajesh Dharmik, "Secured Cloud Architecture for Cloud Service Provider", WCFTTR, 2016s

Today's international is of cloud computing, cloud provider company gives exceptional sources and offerings to the person each time everywhere over the web. Due to this option of cloud, it keeps protection over information is complex. Cloud computing protection problems are authentication of person, non-repudiation, authority, confidentiality, privacy, availability, get entry to manage and checking the integrity of knowledge

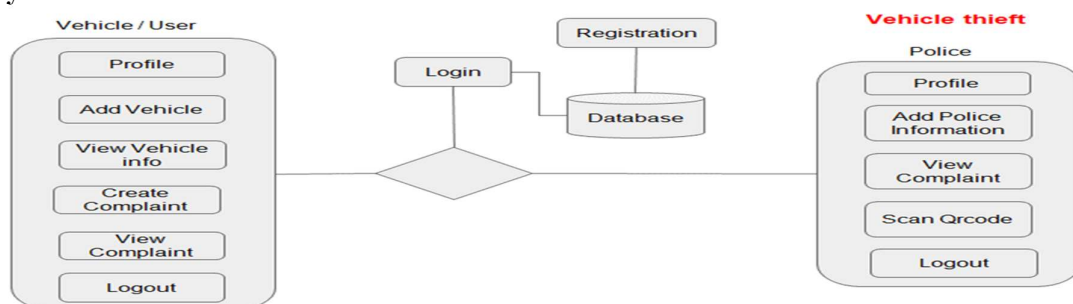
[3]. Lokesh S. Khedekar Prajakta S. Kale, "Strength of QR code over layout and implementation of verification gadget", IEEE(ICCSP), 2016, pp .2190- 2193.

It is associated with new proposed set of rules for authentication gadget for any organization. Authentication is system at some point of which the credential supplied are as in comparison to the ones on a input a database of legal person. Information on nearby OS or inside authentication server, if the credential healthy the technique is finished and consequently the person is generated authorization for access.

Proposed system:

In proposed system our aim is to define, design and implement such a system which helps in easy identification of stolen vehicle. It helps and reduces manual mundane work and guarantees more success rate as compared to current existing system. This system goes to be implemented using QR code. QR code use unique identification method. Each and every vehicle will be associated with unique QR code. The data behind QR code is in encrypted format using encryption algorithm. Data behind this QR code are going to be user's vehicle related documents digitally. Thus, users will not face unnecessary questions during inquiry to detect stolen vehicle.

System architecture:



Advantages of proposed system:

- It reduces the manual work and time consumption
- It is efficient system.
- Find stolen vehicle in easy way using QR code.
- Need not to carry hard copy of documents.
- Data would be stored in encrypted format.
- More accurate as compared to current method being used.

Modules

1. Vehicle User: In this module, vehicle user can register and login to the application. After successful login, he can perform operations like, view profile, add vehicle details, view vehicle details, add complaint and view complaint status.

2. Police: In this module, police can register and login to the application. After successful login, he can perform operations like view profile details, add police details, view complaints, scan QR code on the vehicle and update the complaint if the theft vehicle detected and send SMS with Location to vehicle user.

3. QR Scan: In this module, police officer can use the QR scanner in our application to read the data from the QR code on vehicle and verify the complaint data. If the verification success, then police officer update complaint status and send SMS with location information.

4. SMS Module: In this module, police officer using SMS service to send SMS to vehicle user about vehicle found with location information. This location information gets from the officer mobile GPS.

Results and Discussion:

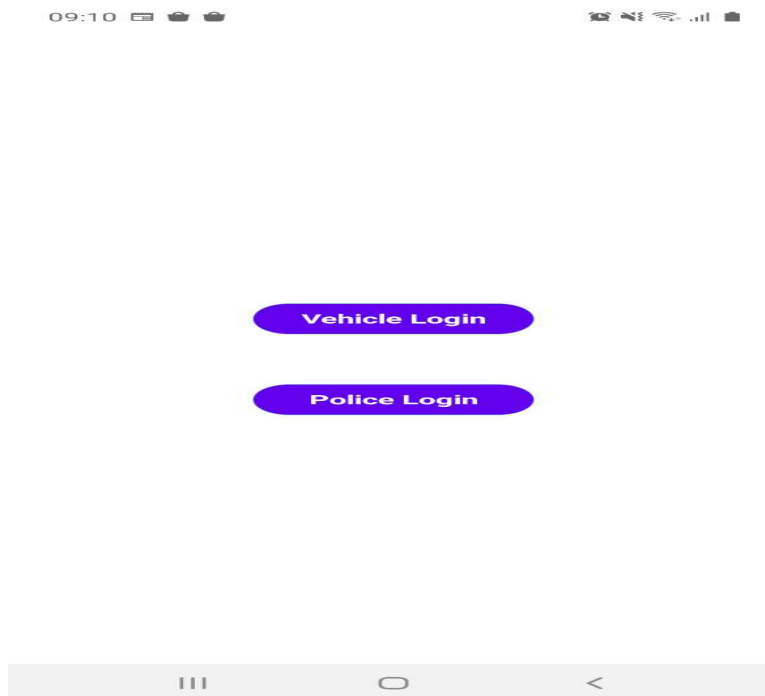


FIG-1:LOGIN



FIG-2: VIEW COMPLAINT

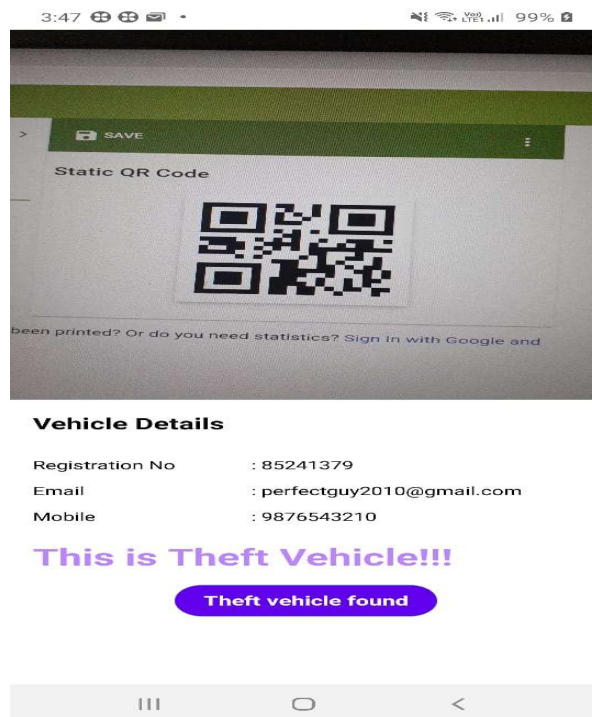


FIG-3: THEFT VEHICLE FOUND PAGE

The result analysis describes that the entire project was executed successfully and also having quality and performance by analysing the flow of data and output screens. In my project the modules like User, Police, Scan QR and Send SMS are independent modules. Because my project follows the top-down approach and bottom-up approach.

Future Scope

Road accidents in India take more lives than natural disasters and diseases and these figures are on the increase, with the aim of addressing this problem, we are suggesting some methods like electronic monitoring etc. Electronic monitoring has a provision that the government to ensure proper electronic surveillance on natural and state highways and urban roads.

The tracking technology of most of the people we conversant in the worldwide positioning system, or GPS, satellite technology owned by the U.S government and operated by the air force but now a commercial part of our everyday lives. GPS is employed for the needs starting from locating lost pets to planning road trips. We can use a live vehicle tracking which helps to seek out the stolen vehicle and also with the assistance of this live location tracking we control the traffic and avoiding of traffic blocks are possible by tracking the live location of vehicles and if we use the GPS in every vehicle, then it's easy to navigate, because every navigation system maintains a log of previous couple of places the driving force routed. This is a handy feature if you would like to return to an equivalent place but can't remember how you bought these. So, if we set a GPS tracking in every vehicle, we will make the entire automobile department a sensible. Also, GPS technology ensures drivers safety by checking driving behaviour. A constant tracking keeps theses faraway from over speeding and brash driving, so with the assistance of GPS technology, you'll identify drivers who exhibits good driving skills and can offer rewards or incentives accordingly.

The application can be enhanced with the concept of number plate recognition through image/camera. This paper can enhance the appliance by linking it to the Aadhar Card database so as to retrieve more details of the license/vehicle owner.

Conclusion:

Unique QR code for vehicle verification system is employed for solving the real-time problem which takes safe custody of the important documents like driver's license, PUC, Insurance, RC Book etc. which verify the vehicle documents digitally, so end in far more transparency, authenticity, and also reduce corruption of faux documents and also reduces the administration overhead of RTO Admin by minimizing the use of papers. This application will notify the owner with location when his/her vehicle is undertaken for an inspection which helps the vehicle inspectors to find the stolen vehicles quickly. Vehicle inspectors cannot charge existing fines and bribes more because this application includes all the types of fines and amount to be paid. Owner will get notified at the correct time when the papers are expired, also at the time of app updating and if any fines are charged. Considering the positive aspects of the QR Code, the proposed method is brought into actual practice will certainly convince be a boon. The proposed project analyses the vehicle document tracking supported QR code. By using our system, the driver will go through the verification process through a reliable and efficient manner by a traffic inspector. QR code is being widely used for implanting messages such people can easily use their Smartphone's to capture the QR code and gain relevant data from QR code reader. User can get QR code from the RTO administration.

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