

# QR BASED CAR PARKING

Anjali Singh<sup>1</sup>, Komal Singh<sup>2</sup>, Sheetal Singh<sup>3</sup>, Yash Prajapati<sup>4</sup>

<sup>1,2,3,4</sup> Thakur Polytechnic, Mumbai 400-101

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**Abstract** - Our daily lives in City have become faster with Wider roadways and Faster Vehicles. Things that come along is maintenance, traffic and parking. With rise in number of vehicles parking is getting a bigger pain point for every driver. Due to rush hour, peak work time and tasks running mind, People park anywhere and vaguely. Be it in Malls, Cinemas, Nearby Shops people tend to forget their parked vehicle. We propose an idea which can help solve the problem of parking allotment and searching the allocated parking area of the vehicle.

**Key Words:** QR-code, Parking Allotment, Authenticated Users, User Login.

## 1. INTRODUCTION

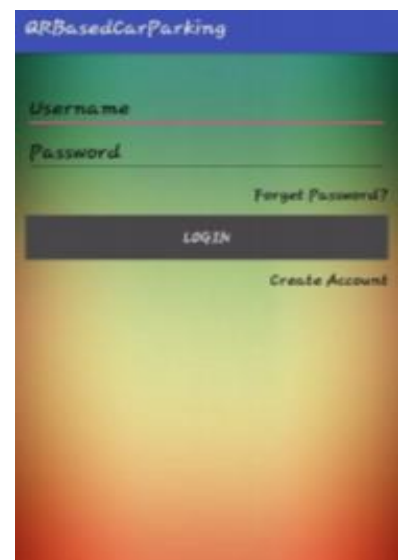
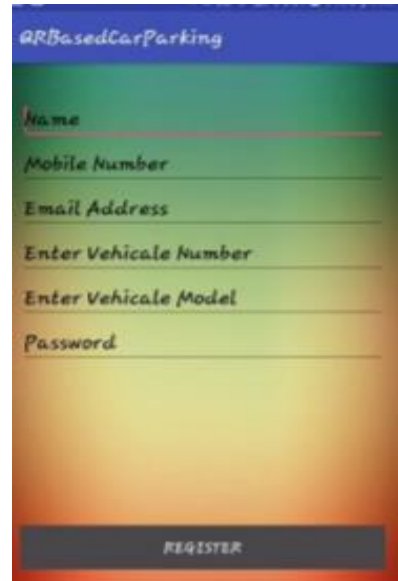
In busy run of urban life, parking is a huge pain point. More over the location of an individual's parked vehicle sometimes is a great pain since there are multiple things going in Human brain. Hence, we stand to solve problem using Technology that is by using Shared QR code mechanism for user.

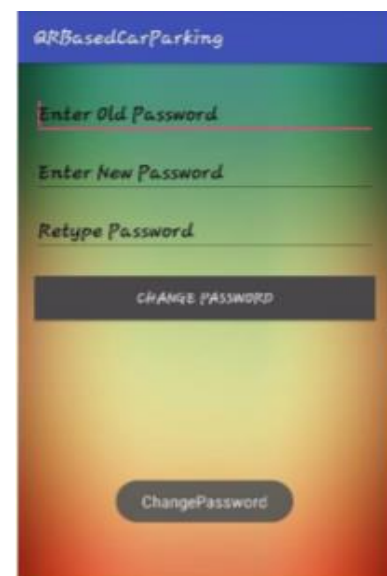
## 2. PROPOSED ARCHITECTURE

In Proposed system we are developing QR-code based car parking locator system in this admin manages application by web portal using web services over internet. In this Android Application, user all has to do is Register –Login – Book a slot & Car parking is allotted with QR Code. To elaborate, User Register on application by providing info as Car number, person name, phone number, Car model, Email ID, Password. After the registration, the User logs in and then the User books a slot for parking from the available slots. After registration all data is entered in the database and using this email is send the registered user's email id and the security checker. And then the slot is booked for the User. The user enters the parking area and shows the email to security checker. The security checker verifies the User and then allows him to park his car. While leaving User has to show his QR code to security checker and then scans it. After the scanning has done amount to be paid is shown to the User and he needs to pay it before leaving.

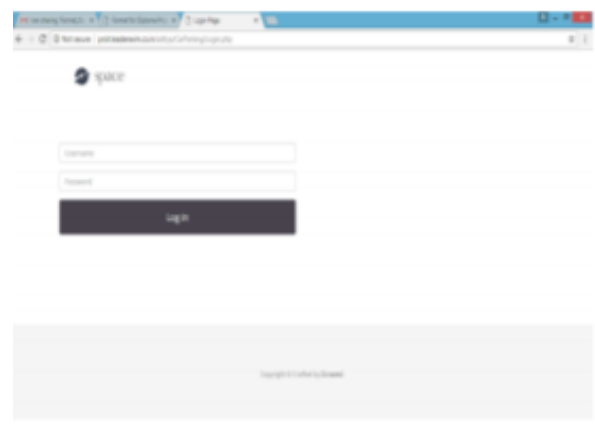
## 3. SIMULATION RESULT

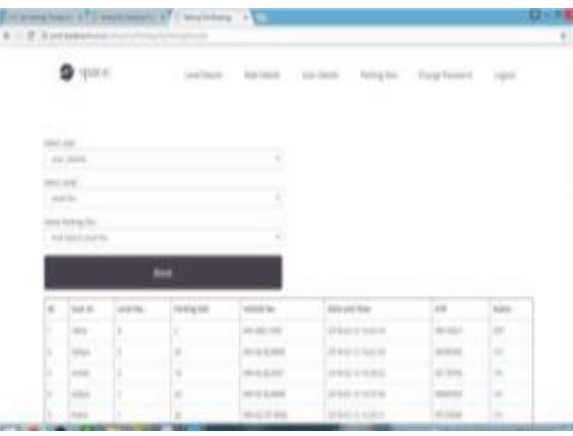
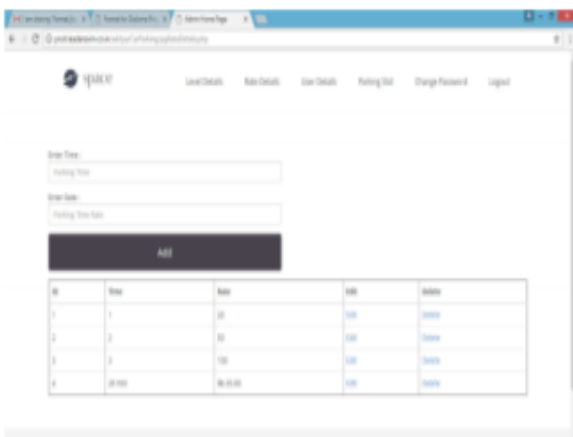
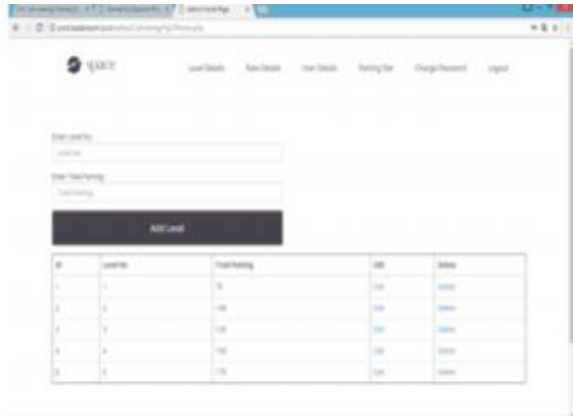
### 3.1 USER PANEL





### 3.2 ADMIN PANEL





#### 4. FUTURE SCOPE

For making this system more user friendly we can add the electronic payment wallet for ease of use.

#### 5. CONCLUSION

The goal of QR based Car Parking systems is to know whether parking is available and to let the driver know well, making it easier for cars to find their way into parking slots.

#### REFERENCES

- [1] A. Rai, K. K. Chintalapudi, V. N. Padmanabhan, and R. Sen, "Zee: zero- effort crowdsourcing for indoor localization," in Proceedings of the 18th annual international conference on Mobile computing and networking. ACM, 2012, pp. 293–304.
- [2] W. Y. Chen and J. W. Wang, "Nested image steganography scheme using QR-barcode technique," Opt. Eng., vol. 48, no. 5, pp. 057004-01– 057004-10, 2009.
- [3] J. C. Chuang, Y. C. Hu, and H. J. Ko, "A novel secret sharing technique using QR code," Int. J. Image Process., vol. 4, pp. 468–475, 2010
- [4] Distributed Secret Sharing Approach with Cheater Prevention Based on QR Code Pei-Yu Lin, Member, IEEE.