CHAPTER 1

INTRODUCTION

Tracking all vehicles entering an organization area is a cumbersome process. That means counting number of vehicles, recording vehicle number plate details, entry and exit time etc. is impossible in heavy traffic. Parking slow is another issue. Now a days everyone has their own vehicles. All these vehicles have to be parked efficiently and effectively so as to avoid traffic jam with in the organization like shopping malls, colleges hospitals etc.

The search for an empty parking spot can become an agonizing experience for the city's urban drivers. A recent article claims that drivers cruising for a parking spot in SF generate 30% of all downtown congestion. These wasted miles not only increase traffic congestion, but also lead to more pollution and driver anxiety. In order to alleviate this problem, the city armed 7000 metered parking spaces and 12,250 garages spots (total of 593 parking lots) with sensors and introduced a mobile application called SFpark, which provides real time information about availability of a parking lot to drivers.

However, safety experts worry that drivers looking for parking may focus too much on their phone and not enough on the road. Furthermore, the current solution does not allow drivers to plan ahead of a trip. We wish to tackle the parking problem by (i) predicting the occupancy rate, defined as number of occupied parking spots over total number of spots, of parking lots in a given future time (ii) working on aggregated parking lots to explore if there is estimation error reduction pattern in occupancy prediction, (iii) classifying daily parking occupancy patterns to investigate different travel behavior at different time.

CHAPTER 2

TEST CASE

A test case, in software engineering, is a set of conditions under which a tester will determine whether an application, software system or one of its features is working as it was originally established for it to do. Test case document is also a part of test deliverables, by reading test case document stakeholders get an idea about the quality of test cases written and the effectiveness of those test cases. Stakeholder can also provide inputs about the current set of test cases as well as suggest some more missing test cases.

The ANPRS and POP system can be tested by placing the camera and the system in front of the entry gate of organization. When a vehicle enters the organization area through the entry gate, the system starts detection and processing.

TC_ ID	Reference to requirement	Feature Tested	Test Procedure	Test Data	Test Case Type	Expected Result
TC_ 1	Use Case 1	Camera Test	Run the test module command	-	Basic	Camera is working properly
TC_ 2	Use Case 1	System Test	Run the system test module command	-	Basic	System is working properly

TC_3	Use case 1	Admin Login Test	Admin Dashboard	• Admin name: admin • Password: admin123	Basic	Admin login Success
				•		
TC_4	Use Case 2	Admin Login Test	Admin Dashboard	• Admin name: raju • Password: raju@123	Basic	Admin login success
TC_5	Use Case 3	Admin Login Test	Admin Dashboard	• Admin name: ramu • Password: ramu@123	Basic	Admin login Success
TC_6	Use Case 1	Register new admin	Admin Dashboard	• Admin name: manu • Password: manu@123 • Name: Manu • Mail Id: manu123@gmail.com • Organization ID: 173	Basic	New admin Added
TC_6	Use case 2	Register new admin	Admin Dashboard	• Admin Name: radha • Password: radha@123 • Name:Radha • Mail id: radha123@gmail.com • Organization ID : 225	Basic	New admin added
TC_7	Use case 3	Register new admin	Admin Dashboard	• Admin name: rema • Password: rema@123 • Name: Rema • Mail Id: rema123@gmail.com • Organization ID: 073	Basic	New admin Added

TC_	Use Case	Entry or Exit of vehicle	In front of camera	• 	Basic	New vehicle Entry
TC_	Use Case	Entry or Exit of vehicle	In front of camera	• 	Basic	New vehicle Entry
TC_	Use Case	Entry or Exit of vehicle	In front of camera	• 	Basic	New vehicle Entry
TC_	Use Case	Entry or Exit of vehicle	In front of camera	• 	Basic	New vehicle Entry
TC_	Use Case	Entry or Exit of vehicle	In front of camera	• 	Basic	New vehicle Entry

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TC_	Use Case	Entry or Exit of vehicle	In front of camera	•		Basic	New vehicle Entry
TC_	Use Case	Entry or Exit of vehicle	In front of camera	•		Basic	New vehicle Entry
TC_	Use Case	Entry or Exit of vehicle	In front of camera	•		Basic	New vehicle Entry
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TC_	Use Case	Entry or exit of vehicle	In front of camera	• 	Basic	New vehicle Entry
TC_	Use Case	Entry or exit of vehicle	In front of camera	• 	Basic	New vehicle Entry

CHAPTER 3

CONCLUSION

Test case document is a part of test deliverables, by reading test case document stakeholders get an idea about the quality of test cases written and the effectiveness of those test cases. Stakeholder can also provide inputs about the current set of test cases as well as suggest some more missing test cases. The test cases for Smart city parking are created or identified carefully. With this project, an effective method of identification of vehicle number plate is proposed which is less time consuming and applied to various types of pictures. Edges could be recognized here through the use of the SOBEL edge detection method, and also the holes are filled but with far less than 8 pixels. To retrieve the vehicle's number plate, we delete attached parts / pieces and under 1000 pixels. Our proposed set of computer instructions is mainly based on Indian car number plate scheme, the accuracy of extracting the number plate for low quiet mood can be increased, as well as we can detect the number plate that has different font size and also different font type.