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VehicleSpot Application Based on Android

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ABSTRACT Today, if we want to get details of accessories shop, service center address, training center details, we have to go personally in any shop to get details. To know which offers are running in showroom, we get this information after going to the showroom. If users go in another city and if their fuel finished on the way so the users get problem in finding nearest pumps in that current city. The purpose of this paper is to learn the most important attributes needed to remind the due date of license and insurance of vehicle and also to remind the upcoming festival wise offers on showrooms, etc. VehicleSpot is the application which help the user to give one direction to give the information related to vehicles and also give the nearby location of garage and pumps.

KEYWORDS: Map, Reminder System, Registered Events, Push Notification, SMS and Email Integration

1. INTRODUCTION

Today, if we want to get details of accessories shop, service center address, training center details, we have to go personally in any shop to get details. To know which offers are running in showroom, we get this information after going to the showroom. If users go in another city and if their fuel finished on the way so the users get problem in finding nearest pumps in that current city. Similarly, if in the users vehicles any problem arise on the way, the user get trouble in finding nearest garage center. Today, if we want to go for travelling, we need driver and to find drivers we have to get the number of the drivers to contact them and there may be possibility that drivers are available or not on that day. So, we get problem in finding drivers available on that day. Today, if we want to compare two vehicles with same prices, to know their features or which is the best we will visit the showroom and get details of that vehicles. So this procedure is time consuming.

So, There are many problems in existing system and it is also time consuming. So to reduce time we proposed new system that is VehicleSpot. In this system, we tried to overcome the problems arise in the existing system. If users want to get the details of accessories, they do not personally visit the multiple accessories shop. They get the details through this app and then directly go to that particular shop to buy the accessories. To get the details of showroom or offers that are running in the showroom or upcoming offers, users can use this app and reduce their time. If users want to know the list of training center, service center and their details with their address, map etc. users can use this app. If user's fuel will finish on the way in any city then this app helps on that time. It gives users the nearest pumps available from the user position through GPS. Similarly, if in user's vehicle, any problem arise on the way then this app helps users to find nearest garage center from the users position. If users want to know where the vehicle fairs are organized, through this app users get details of vehicle fairs. If users want any driver and want to check the status of the driver, users use this app and solve their problem. The users also get details about used car details and if any new vehicle like car, bike and bicycle are upcoming in showroom then through notification modules of this app, users get details about this vehicle. Today, people are so busy and forget to renew their vehicle's license, Insurance etc. so, through this app people get reminder for renewing vehicle's license, Insurance etc.

II. LITERATURE SURVEY

In literature survey we analyze the existing system like:-

(1) Google Map

Paper Name: Informing Online and Mobile Map Design with the Collective Wisdom of

Abstract The goal of this paper is to begin the process of better integrating traditional cartography and modern



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online/mobile maps. The most significant design suggestions introduces the notion of location-aware cartography. They perform the first study of cartography design decisions made in a large corpus of publically displayed local maps. Then they identify a large set of targeted design suggestions for online and mobile maps. To calculate the shortest distance in Google maps use Dijkstra's Algorithm. They decided how their design implemented in the short-term. When selecting a dataset for their analysis, they identified two possible options: (1) Downloading a large number of maps. (2) Locating a suitable corpus of offline maps.

(2) Garage center

Paper Name: Modern automobile vehicle repair practices in micro, small and medium scale garages in Ghana^[2]

Abstract This paper assesses the modern automobile vehicle repair and maintenance practices in the micro, small and medium scale garages in Ghana. Automobile vehicle repair garages help to maintain the vehicles on the roads. The landlords should be willing to allow the garage owners to operate their garages for longer number of years or even eventually sell the lands to the garage owners. This will provide the impetus to enable garage owners to invest more capital resources, grow the garages, operate as profit making establishments and help reduce unemployment rates in the country.

(3) Used Car

Paper Name: The Anatomy and Physiology of the Used Car Business^[3]

Abstract The used vehicle market has grown in size and importance in the past decade and is poised to continue to do so in the future. A successful used vehicle strategy on the part of automakers and dealers is becoming essential to their operations and is increasingly recognized as such. Used sales affect residual values. In short, used car sales have a significant effect on many aspects of an automaker's sales and cannot be ignored.

(4) Service center

Research Paper Name: Automobile Service center Management^[4]

Abstract This paper provides a Mobile application 'Automobile Service center Management system'.

This app is based on android and compatible for tablets and phones. This app provide the search and communicate with any vehicle service center. The user can find the service center gets its location and check and select any of the service provided by the respective service center this app is also provided that the user can request for pick and drop. Appointment for servicing test drive as well as accessories purchase to the dealer. The dealer purchase this request and gives a response back to user through push message.

(5) Showroom

Research Paper Name: Automotive Dealerships' Showrooms and Service centers: The New Digital Media Frontier^[5]

Abstract Digital media continues to make inroads into a wide variety of retail spaces, offering businesses an opportunity to promote the brand, educate customers about products and increase overall customer engagement. This white paper, sponsored by international digital media applications provider YCD Multimedia, discusses the benefits of digital media in automotive dealerships. In the showroom, digital media can be used to create an overall richer buying experience for customers. Digital media is designed to improve the experience so the customer feels comfortable and at ease in the environment. Today, more and more car dealerships are looking at digital Media as an effective medium to communicate their brand and create the right ambiance in their showrooms.

(6) Compare Vehicles

Paper Name: A comparison of car ownership models^[6]

Abstract In this paper, car ownership models that can be found in the literature (with a focus on the recent literature and on models developed for transport planning) are classified into a number of model types. The different model types are compared on a number of criteria: inclusion of demand and supply side of the car market, level of aggregation, dynamic or static model, long-run or short-run forecasts, theoretical background, inclusion of car use, data requirements, treatment of business cars, car type segmentation, inclusion of income, of fixed and/or variable car cost, of car quality aspects, of license holding, of socio-demographic variables and of attitudinal variables, and treatment of scrappage.

(7) Training center

Paper Name: Effects of Defensive Vehicle Handling Training on Novice Driver Safety: Phase 2. Advanced Driver Training^[7]

Abstract

The purpose of this research program was to conduct such a study. This report summarizes Phase 2 of the three-phase project. Phase 1 included (A) identification of potential participants, (B) development of recruiting materials, (C) recruitment and scheduling of participants, (D) preparation of training plans and instructional materials, and (E) coordination with the Montana Office of Public Instruction for use of their facilities and instructors for the training

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workshops. During Phase 2, approximately half of the participants received an intervention that involved a one-day classroom and behind-the-wheel workshop. The training took place 6 - 12 months after they complete high school driver education. During Phase 3, teens will be tracked for 4 years following the project to determine the driving history comparisons of the control group to those who received the intervention. Reported accidents, violations, and driving experience will be compared once per year during this monitoring period.

(8) Reminder

Paper Name: Greeting reminder application Based android ^[8]

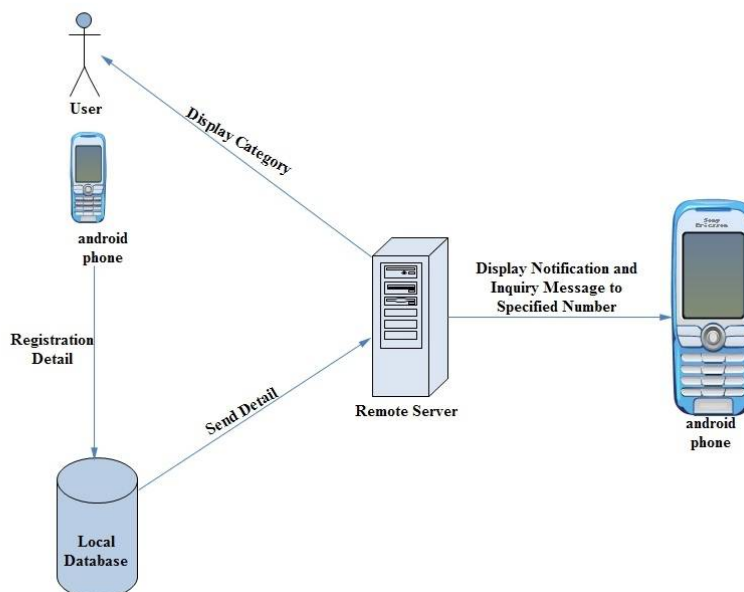
Abstract

The purpose of this paper is to learn the most important attributes needed to remind upcoming Birthdays, Anniversary, Postal Address Information, Important Meetings, etc. Greeting Reminder is an application which helps the user about the registered event reminders on specified date and time and also sends wishes through SMS automatically to the registered contact on specified date and time

III. METHODOLOGY

a. General Flow of VehicleSpot

We developed the application System Flow Architecture as shown below in Fig. 1. The architecture comprises of all the design and development efforts that we investigated. The following sections describe flow of our application:



b. Field Study:

Field studies aim to objectively and relationally uncover the strengths and weakness of an existing business or proposed venture, opportunities and threats as presented by the environment, the resources required to carry through, and ultimately the prospects for success.

Feasibility Study: Our feasibility study is based upon the ,

1. Technical Feasibility: There is no need to use any other hardware or software, because we have SDKs available for Android. And we have enough competence to complete the project because we are a group of four members.

2. Economic Feasibility: As Android is open-source there is no any financial issue in using this application. Only the Main need is that user should have Android mobile Phone. We have our own devices to build the application and also test the application using the Emulator.

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3. Behavioral Feasibility: Smart Phones are widely used in today's world. As our proposed application is user friendly. Also, it has features like no importing, no remembering dates, customizable updating of new showrooms offers and easy to use.

4. Schedule Feasibility: As in our project there are four members in group we got enough time to study and complete our proposed application.

IV. IMPLEMENTATION

Our proposed application consists of three modules which are shown in figure:

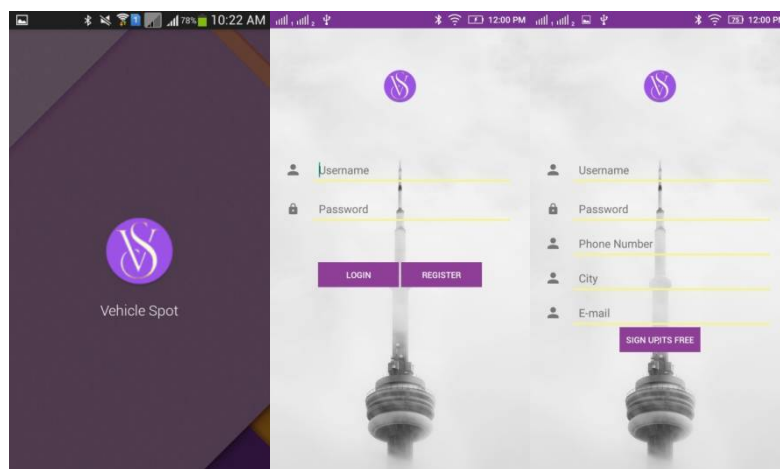


Fig 2 Landing page Fig 3 Login page Fig 4 Registration page

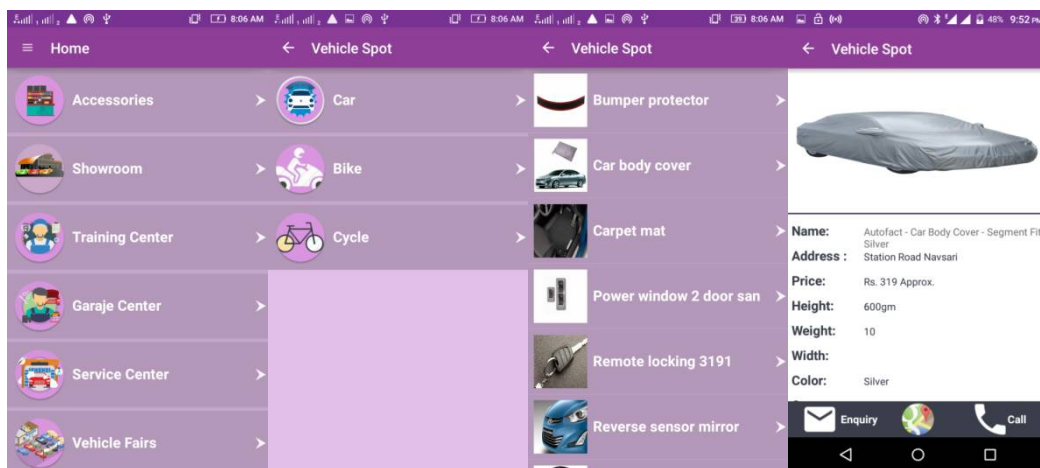


Fig 5 Home and Subcategory page Fig 6 Detail Category and Detail Page of Accessories

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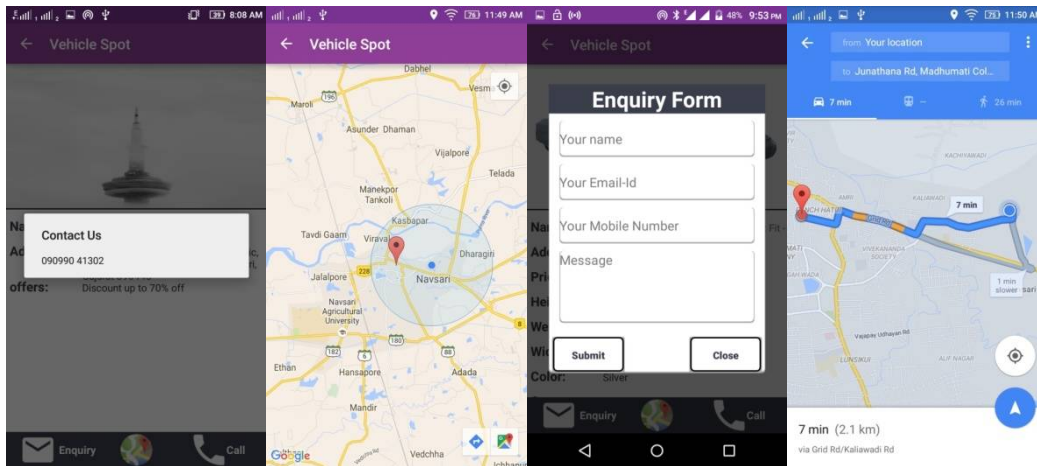


Fig 7 Call and Map

Fig 9 Inquiry Form Fig 10 Map of Nearest Location

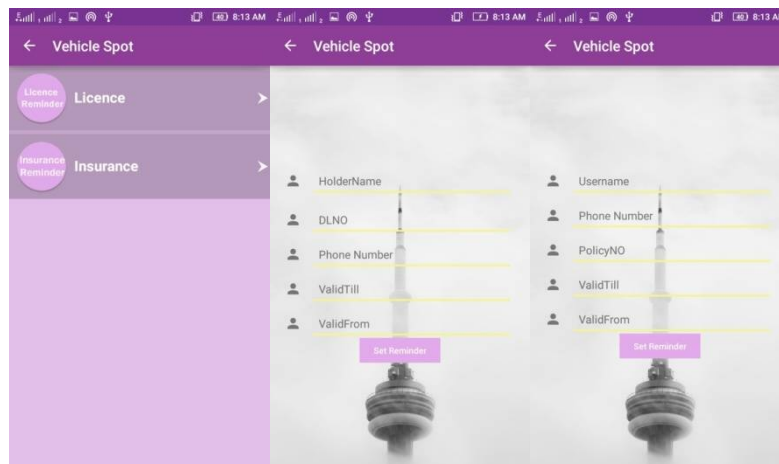


Fig 11 Insurance Reminder and License Reminder

This screen shots are describe the functionalities of VehicleSpot.

V. TOOLS AND TECHNOLOGIES

In this section, we have described the tools and technology that we have utilized in developing our proposed application.

a. Tools:

1. Eclipse: We used Eclipse for development because; it is a multi-language software development environment comprising a base workspace and an extensible plug-in system for customizing the environment.
2. Microsoft word and Latex : We used Microsoft word to write our report.

b. Technologies:

Android SDK: It includes a mobile device emulator, a virtual device emulator that runs directly on computer. With the help of this emulator we prototyped, developed and tested our application without having a physical device (when one was not available).



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VI. CONCLUSION

We can conclude that app will provide ease of solving their basic problem with their fingertips. Basic information related to car, bike and bicycle are easily available. Notification will make people update on discount on deal from nearest showrooms. All in all it is an application that will make day to day problem solving much easier.

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