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Retail Purchase and Tracking System

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Abstract-Retail Purchase and Tracking System is an application which allows customers to shop and purchase products online. This application will allow customers to view and order products online from any part of the world. This application provides details of different types of products category wise. In this application customers can directly communicate with the dealers about the price and the quality of the product. This application lets customers to communicate with number of providers and allows customers to compare the price and the quality of the product. Customers can order the product and get the track record accordingly with the details of the location. Apart from the customer, the dealer can get sales analysis of each product and can improve his sales. The application also provides real time tracking of the product shipped.

Keywords- Administrator, Customer, Provider, Products, Real Time GPS Tracking using Google Maps and GCM(Google Cloud Management);

I. INTRODUCTION

The proposed system helps the customers to finalize the products, purchase and to track the location of the purchased product it also provides an easy accesses interface to the users. The customers can send a request to the provider directly which enables efficient interaction between customer and providers. The Users can view the complete specification of the product along with various images. Users can get different prices for the same product and can directly communicate with different product providers. Once the product has been purchased, users can track the location of the purchased product in real time.

II. LITERATURE SURVEY

A. "Ubiquitous GPS Vehicle Tracking and Management System" (Shreenivas Jog et al., 2012)

In this paper GPS based Vehicle Tracking System is proposed. The main purpose of this paper is two types of end user applications; web and mobile application. This system uses GPS, GSM, GPRS and the Internet or the World Wide Web. The system allows the user to track their vehicles position, speed, stops and movements through web application (Internet) and by receiving SMS (GPRS), by providing ubiquitous access anytime anywhere. According to the setting speed and geographical limits this system can monitor the vehicle by receiving SMS alerts when exceeds these predefined limits. This system is applied in fleet operators in monitoring driving behaviour, parents monitoring their teen drivers and car theft by combining device with the car alarm.

B. "Design and Development of GPS-GSM based Tracking System with Google Map Based Monitoring"

(P.Verma et al.,2013): In this research paper the author has illustrates how we can make our vehicles safe and secure by using GPS – GSM technology and web application. The vehicle can be spotted utilizing GPS reception apparatus and GSM gives transmission and accepting of information. Web application in Google Map gave the complete yield of the framework and figures the separation between two focuses gave by the GPS framework. This research is based on literature review and case studies. This system is easy to install, easy to use and access and it works in any weather condition. This system can be used to track animals in zoo, in delivery services, in cop department and fire services and to look after the children. The most important aspect of this system is its scalability as this system provide platform to make further enhancements.

III. EXISTING SYSTEM

The Existing system or the traditional e-commerce companies have a lot of disadvantages such as

A. In the existing system customers can purchase products in an application without having any idea about the details of various prices of the product and available dealers.

B. No proper communication between the application and the customer.

C. There is a risk of mismanagement of data, application is less secured. Application is not in reach of distant customer.

D. Customer is not able to get the track record of the ordered product.

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IV.   PROPOSED SYSTEM

As said above, our proposed system will show user the real time location of the vehicle on the Google Map by using GPS (Global Positioning System) & GCM (Google Cloud Messaging). The proposed system of vehicle tracking includes the tracking of the vehicle by using GPS and web server for showing the location on the Google Map whereas, our proposed system will show the position of the vehicle to the user who requests the location.

A. Advantages

1) The proposed system is a user friendly and most secured system.
2) There is no risk of data mismanagement.
3) The system provides easy and flexible way to access the application. This system provides direct communication with various dealers
4)   The system allows customers to compare various prices and quality of the selected produc
5) This system provides the track record of the ordered product. This system will provide accurate result in ordering a product.

B. Implementation

Following are the Use case diagrams and DFD's which define how the system works

1) Use Case Diagram: A use case can be described as a specific way of using the system from a user's (actor's) perspective. In our Proposed system, there are 3 actors i.e Customer, Admin & Provider. The following diagram shows the actors interacting with different components of the system.
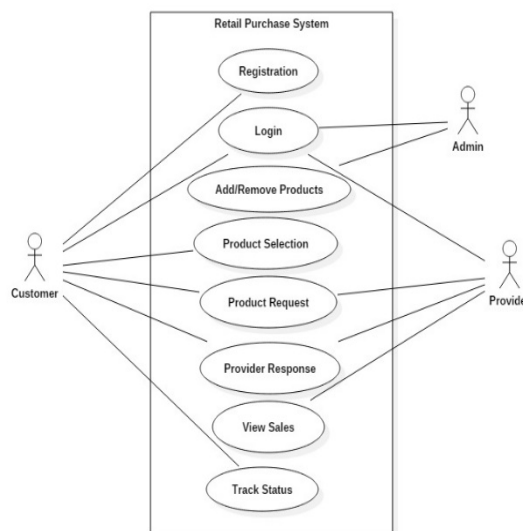

Fig1: Use case Diagram for Proposed System

2) Context level Diagram and DFD's: Context level is used to define the system and showing the entities that interact with it. The following figures show the system entities and how they interact with the system. Level 0 and Level 1 DFD's show in-depth of how the system interacts with each of the entities
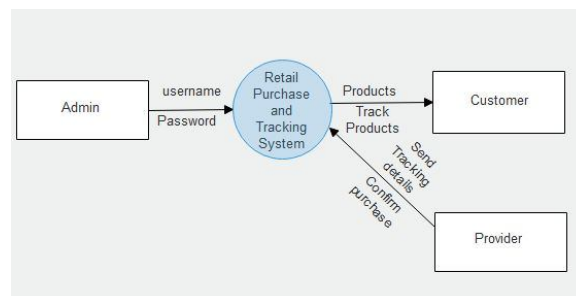

Fig2: Context Level Diagram for Proposed System

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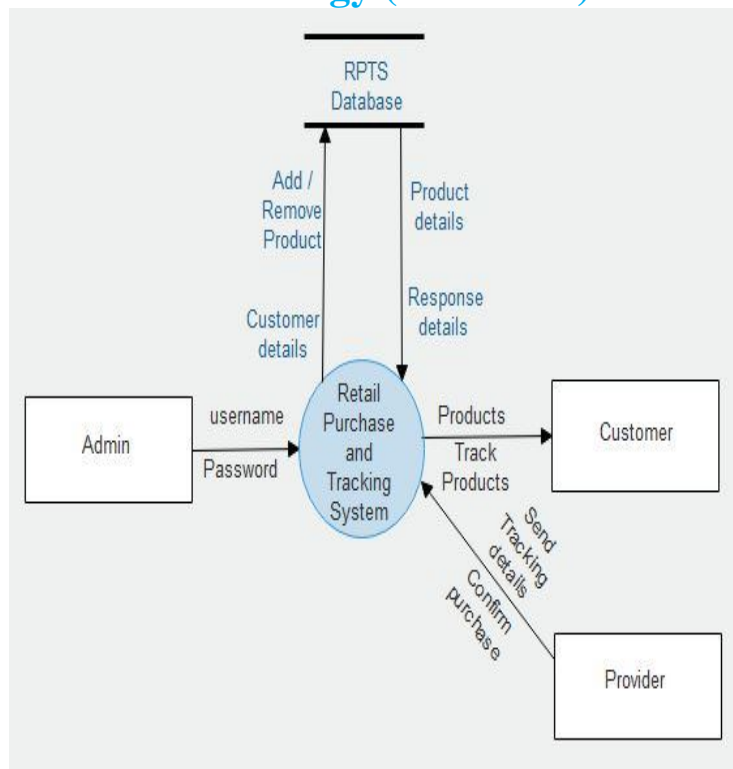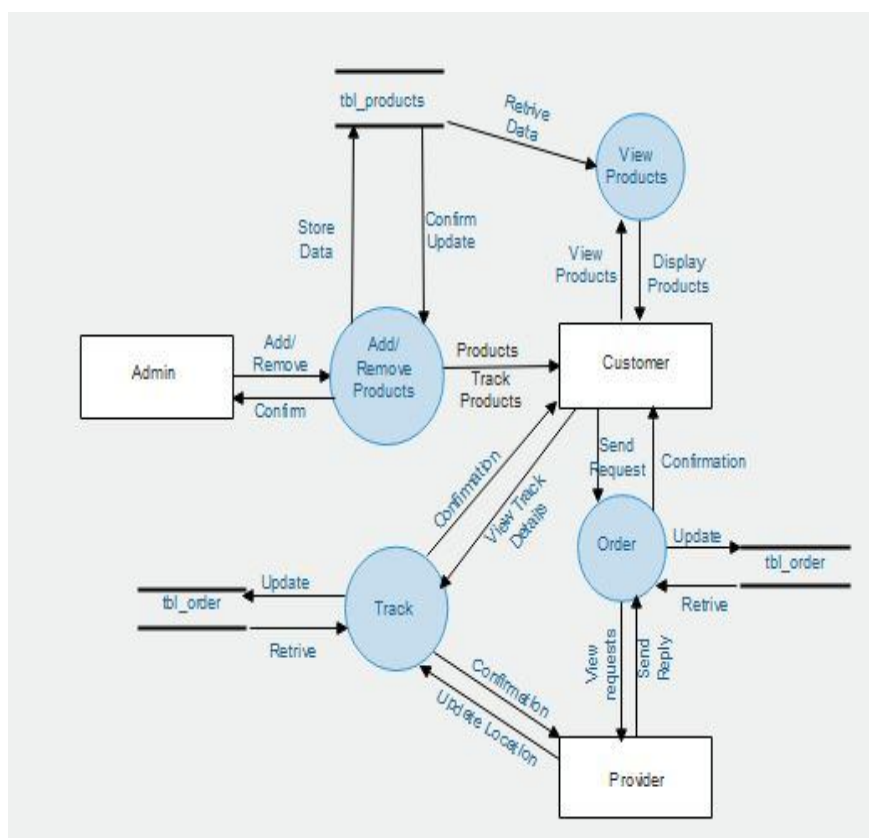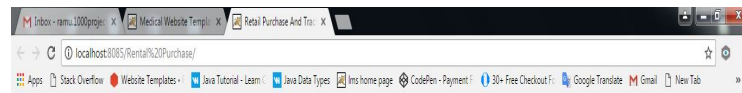

Fig3: Level 0 DFD for Proposed System
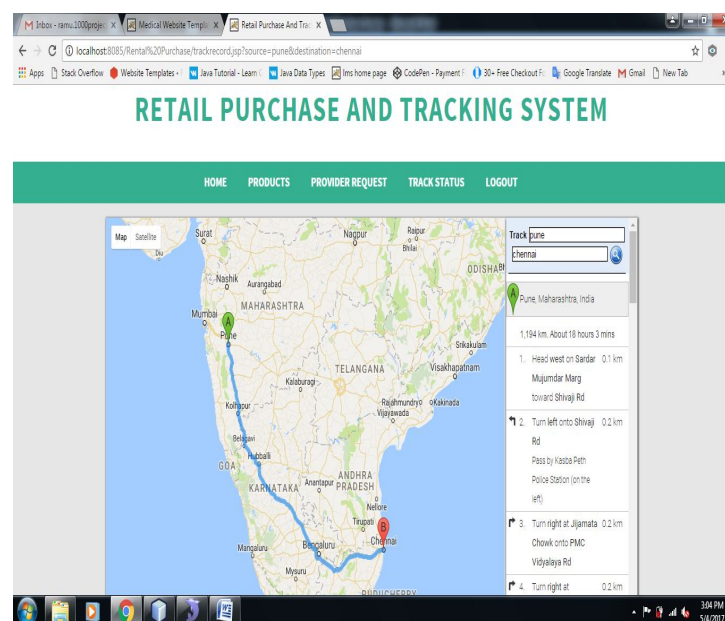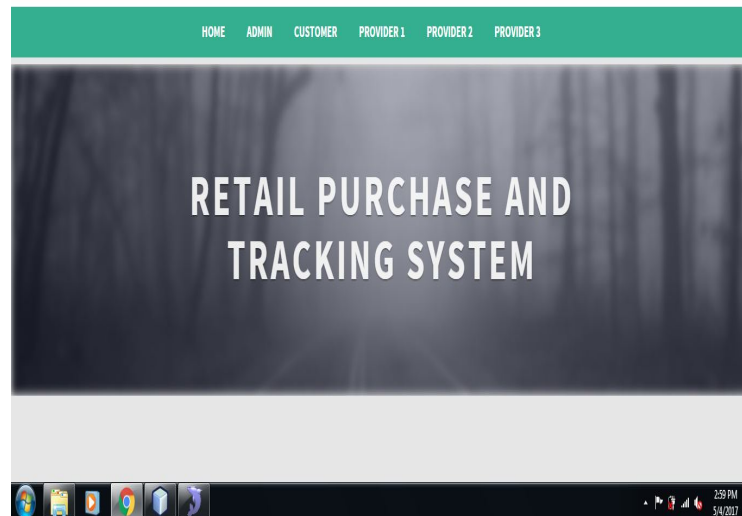

Fig4: Level 1 DFD for Proposed System

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3)   Screenshots

V.   CONCLUSION

Retail purchase and tracking system is an application which provides a smart way for purchasing various products online. Customers can be provided with various details about the price and quality of the product directly with dealers. Customers can compare the selected product with various dealers. This allows customers to know the best price and quality of the product. This system provides user-friendly access to the customers by providing the track report of the purchased product.

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