

Truck Load and Monitoring Analysis for Vehicle Routing System

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Abstract -- the purpose of this project is to provide an effective vehicle tracking, real time online monitoring, dedicated remote server for fleet data storage and security features in a single system. People can using app or web site book online truck facility. Nowadays the number of vehicles such as vans and trucks with empty space travelling a long distance are increasing on the roads by bringing people luggage which are travelling to the same destination in a single vehicle can decrease the number of vehicles on the road and thereby reduce the pollution to a large extent. Using new BIDDING concept to service provider transportation cost will be low. The location tracking is included as a security feature implemented using Google Map, SP Provide track id to user to proper track luggage and its full path information.

Index Terms— SP – service provider, User – the person who book a truck with their luggage information, BIDDING – is term where SP can bid on product rate with limited time duration.

I. INTRODUCTION

Nowadays most of the public and commercial transportation organizations are using the vehicle tracking system to track the vehicles in real time. The purpose of this project is to provide the effective location tracking of vehicles is included as a security feature which enables the service provider to share current location with the users using Google Map. Sharing of transport can reduce the number of vehicles on the road which in turn reduces the problems like environmental pollution, traffic congestion, costs of the transportation and fuel needed for separate vehicles. Both user and service provider have to fill up the form to login the page. User provides the luggage photos and dimension of product for deal with service provider. In this paper new concept is bidding used for dealing at minimum cost of transportation, service provider Provide track id to user to proper track

luggage and its full path information until the luggage not reach at the user side.

Our project is an online commercial freight marketplace, which facilitates transactions between Shippers and Transporters Pan any metro places or city. Through this platform, transportation and logistics service providers get access to new markets placeless, whilst shippers can make transport booking (includes truck booking, tempo booking, lorry booking and cargo booking) at an economical truck freight. With shipping services, we also provide other services like online cargo tracing and tracking, rating and reviews, insurance, fleet management, business finance and many more. By the means of reviews and ratings, we aim to find the best online transporters in India for our shippers, whilst, the transporters too can review the shippers, so that the former can prioritize who to work with and share their experiences. Our truck booking website uses a reverse bidding pricing technique to ascertain competitive freight in India. It makes the process of goods transportation efficient and effortless as the formalities are reduced to half. Through us, transporters can get their trucks booked online, and shippers can get easy and convenient transportation of goods. Allow service provider bid on luggage (goods) material.

In our projects involves the administration of motor vehicles such as vans and trucks etc. The Vehicle tracking system is a total security protection and fleet management solution. By using the latest GSM & GPS (smart phone) technology to protect and monitor our truck (moveable asset) virtually anywhere and then locate it to within a few minute.

User makes sure know what he / she delivering. And user want to make best way to find out the size, weight, and any special accommodations of their luggage delivery might need. Buying online vehicle? Get as

much information as possible from the user about its future delivery and the pick-up location. This will help you list the item(s) accurately and provide information to prospective couriers.

If people thinking about listing your household move on, keep in mind that people almost always underestimate the amount of stuff they have. Making a detailed inventory list is important and can come in handy if anything goes wrong during the move. The device incorporates a covertly installed module (which work and communicate independently) but as the ability to run in conjunction with your local smart phone network (GPS location). It provides effective real time location. If someone vehicle tracking system by using tracking ID we can get accurate location of that vehicle tracking unit.

It is a device that uses the Global Positioning System to determine the precise location of a vehicle, person, or other asset to which it is attached and to record the position of the asset at regular intervals. The recorded location data can be stored within the tracking unit, or it may be transmitted to a central location data base. It the whole controlling of the device is done by the mobile phone the user can use its tracking Id. Which provide by software to user for monitoring its shipping vehicle?

We can divide the whole working in the two parts-

1. Tracking the location of vehicle.
2. To provide protection of vehicle.

II. LITERATURE SURVEY

Karim EL BOUYAHYIOUY (March 2016 IEEE) an ant colony optimization algorithm for solving the full truckload vehicle routing problem with profit. In the traditional optimization algorithms, they are solving problem of one individual. This algorithm is uses for solving the full truckload vehicle routing problem with profit .Using the model to handle cases with multiple decision owners does not work well .

Thanh Nam Pham (jan 2016 IEEE) Novel Vehicle Booking System Using IOT An algorithm of parking planning for smart parking system. The android

applications used to stop the vehicle framework are interfacing of microcontroller with LCD, interfacing of microcontroller with GSM, Interfacing of microcontroller with RF module, Android Application.

Athul Sai (VOL .10, NO.1, March 2016 IEEE) Android Based Application for Efficient Carpooling with User Tracking Facility the Recursive EM algorithm commonly applied to find such outliers from a data set [1]. In this research work, we plan to integrate the anomaly detection for traffic obstructions, truth analysis to make it foolproof .This android based application consist of a user friendly interface through which user can create and manage trips , track location, report an anomaly

Muhammed Mas-ud Hussain, (VOL. 32, NO.2, 2016 IEEE) Incorporating Weather Updates for Public Transportation Users of Recommendation Systems An efficient k-means clustering algorithm: Analysis and Implementation. The mode of transportation (car-rider or not) is either determined by our proposed prediction model, or provided by the user explicitly. One of the consequences of using public transit is that people can only board/exit at fixed stations and might need to walk to/from a given station.

III. WORKING DIAGRAM

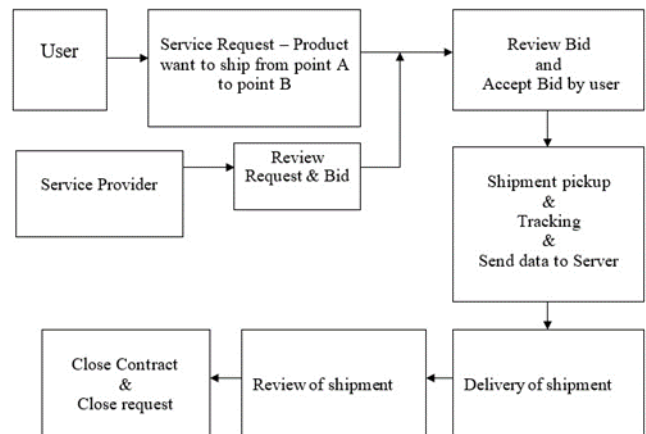


Fig (a) working diagram

User must fill full information about luggage like, User personal information, product height, weight, length, pickup point from source to destination. Service Provider must want to fill their vehicle

information like vehicle owner details, vehicle storage capacity (height, width, weight, length of container) after filling above information SP having an ability to bid on product (luggage) prices. As a user can accept the bidding value by SP, and study about vehicle reviews. Shipment pickup their luggage from source place and start shipment delivery. As well as user can get a tracking ID from server side. As a delivery of shipment user give reviews about shipment and close contract & request.

IV. SYSTEM ARCHITECTURE

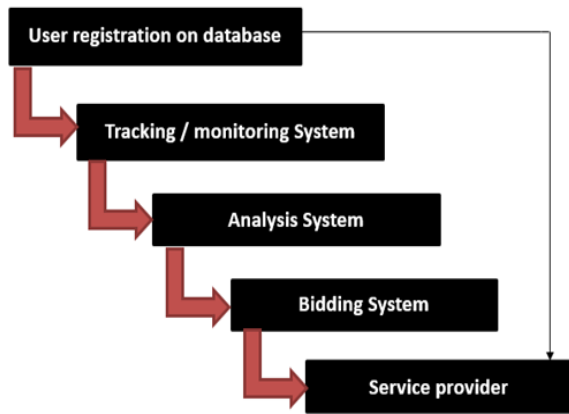


Fig. (b) System architecture of modules.

User registration Here mainly user can register its own information on database. By the helping tracking id user can track and monitor the vehicle path and current address location on MAP in mobile or website. User can analysis or study on luggage information. Bidding system: The helping of bidding the SP having an ability bid on luggage price. Service provider: SP is nothing but owner of vehicle or vehicle driver.

V. FLOWCHART

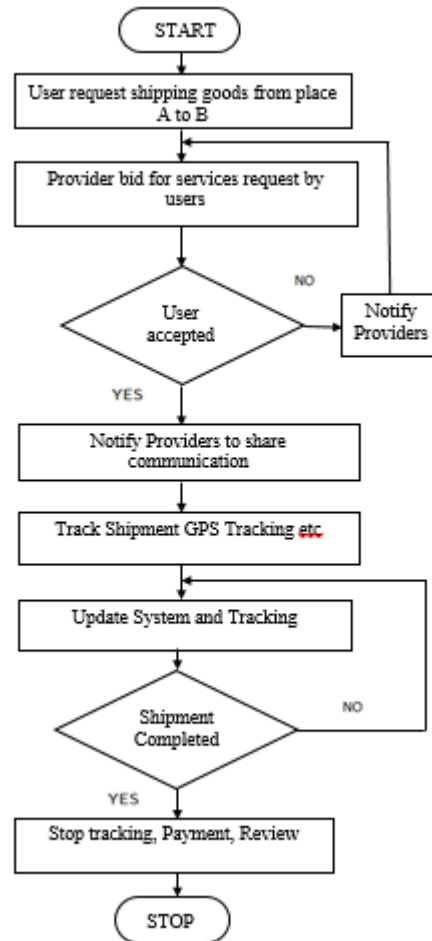


Fig. (c) Flowchart of flow diagram

VI. MODULES

- 1) User registration
- 2) Tracking / monitoring system
- 3) Analysis system.
- 4) Bidding system
- 5) Service provider.
- 6) Mobile application

6.1 USER REGISTRATION:

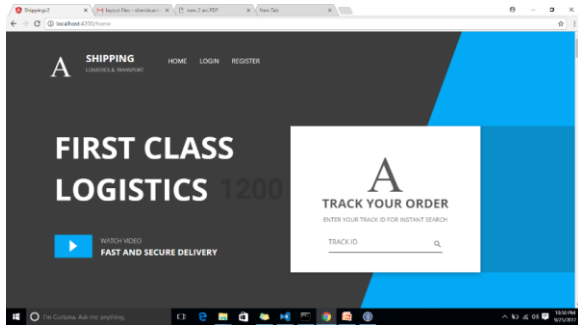


Fig (d.) Home page.

It is having ability to new user or service provider new account registration on data base for user and service provider. In login page there is an authentication information filing form for user & SP. User can track his/her request via track id. Users get tracking id through email, sms or push messages in app

6.2 Login & register page.

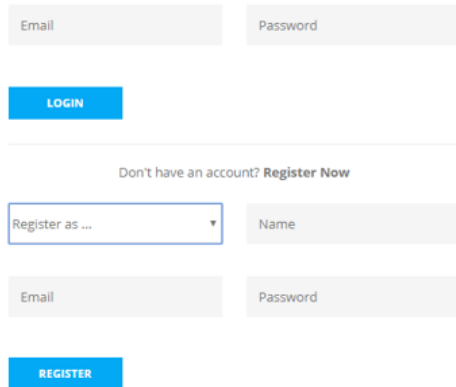
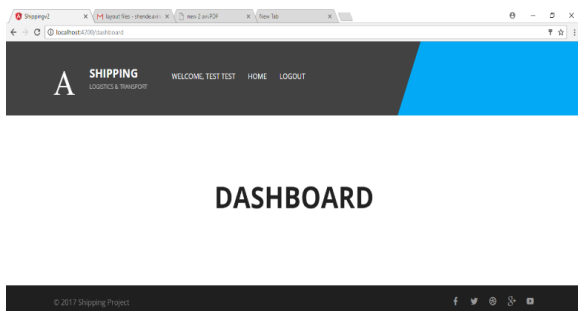


Fig (e) login registration page for user as well as SP

6.3 DASHBOARD PAGE AFTER LOGIN



DASHBOARD

Fig (f.) dashboard page after user or SP login.

6.4 CUSTOMER REQUEST FOR NEW JOB.

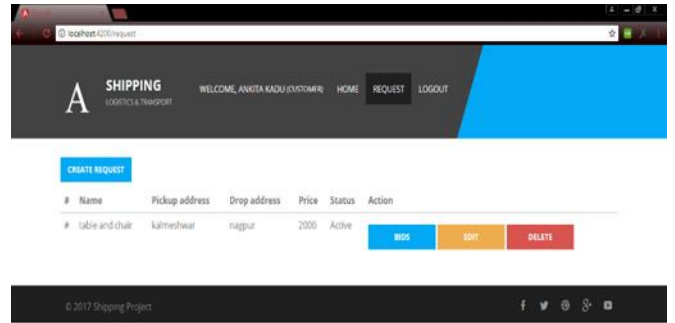


Fig (g.) customer request.

6.5 Create Request for shipping

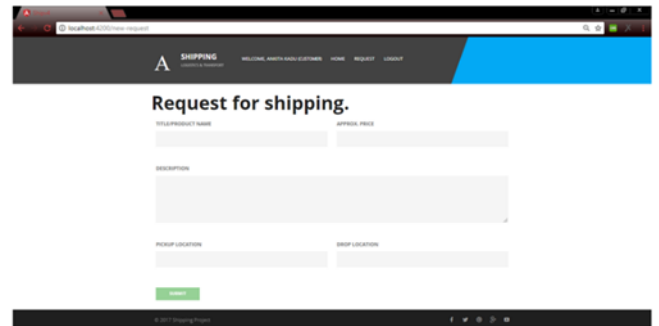


Fig (h.) customer fill information on DB

6.6 Bid by Service Provider

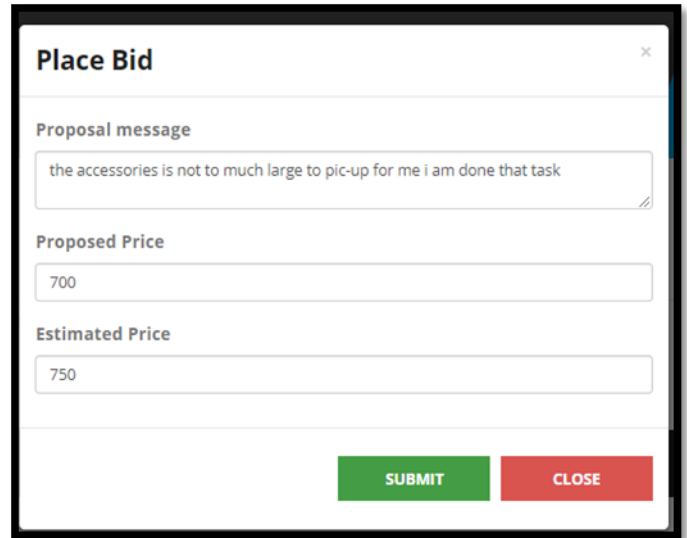


Fig (i.) bidding by sp

6.7 customer accept any one bid given by sp and get process of shipment

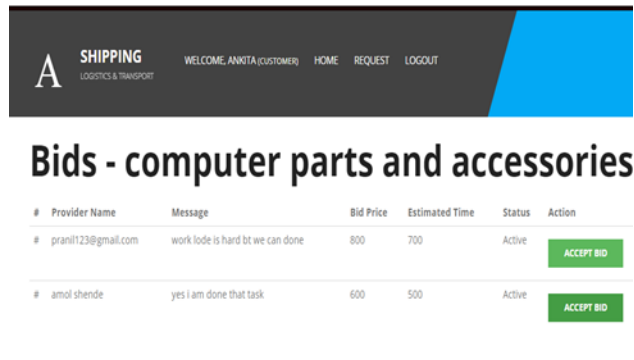


Fig (j.) at the end of project customer accept any one bidding request given by sp

VII. CONCLUSION

This project will provide the tracking, security and online monitoring in a single system. Tracking system is nowadays very useful to our project companies due to its security features/easy for the school bus monitoring, cargo carrying, trucks, cabs, etc.

VIII. RESULT AND ANALYSIS

In this research, we developed an android application with user interface provides users to manage several activities like transportation of product, user management, luggage management, location tracking, product security and user rating feature

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