

A Literature Review on Quick Services – A Logistic based Web Application

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Abstract— We are so dependent on too many things like our specs, keys, mobile, chargers, watch, band, headphones, Accessories, books, different devices, etc. there are too many things we keep depending on. Many times, we keep forgetting our things at various places. Forgetting things is a natural mistake made by human beings. But if this problem can have a digital solution! Yes! It definitely has one, which is to create a logistics app. The app aims to help customers with reliable courier services, which could deliver things in a few hours. Let's consider the scenario- you have forgotten to bring your specs at the office. Wouldn't it be great if there were a reliable courier service that could help grab the specs for you from your home and bring it to your workplace? We decided to choose a solution, which is simple, easy to implement, and has a low implementation cost. Designing an app for the mobile workforce with the intention of solving problems. It will be a simple yet meaningful user experience for ordering a courier delivery on mobile devices.

Keywords: Web Development, Mobile App development, Logistic, Supply Chain, Location Based Engine (GPS), Digital Payment, Cryptography

I. INTRODUCTION

Communication plays an important role in integrating the activities along the logistics value chain. Information technologies such as electronic data interchange (EDI), the Internet, World Wide Web (WWW) and e-commerce have contributed greatly to improving communication with partners in the logistics chain. In particular, real-time information systems such as web-based logistics information systems help to improve 3PL services. In this paper, a case study of e-logistics is used to illustrate the implications of information technology, in particular the Internet, WWW and EDI, on the performance of the logistics value chain. Today in the current faster and efficient world people want every single thing to be digitalized which helps them in their everyday life. The application is also one of its kind which enhances and saves the time of the people. The app aims to bring out a solution where the customers don't need to go out for his parcel which he forgot to bring with him to his respective place. The application allows the customer to find a nearby courier boy through the app who can accept the requested service. After accepting the client's request, the delivery guy will go to the place where the parcel is mean to be, so the sender will be waiting for the delivery guy to take or accept the parcel but here first proper authentication and confirmation shall happen. OTP shall be asked by the system from both side delivery guy and sender, also with the details provided by the receiver or customer. After the confirmation, the delivery guy will ready for delivery. The parcel shall be delivered as soon as possible. This application saves the time of the potential customer.

II. LITERATURE SURVEY

Research on the changing market for the Logistics sector indicates that online penetration of the total market broke 30 percent in 2016. We believe penetration rates will grow further as the market matures, eventually reaching 65 percent per year. At first, I started searching the internet to find if there is an app out there to solve this problem, and I left with none. I decided to choose a solution which is simple, easy to implement and has a low implementation cost. After having an interactive workshop with stakeholders, we prioritize our main goal to be increasing operational efficiency through: Designing an app for the mobile workforce with the intention of solving problems. It will be a simple yet meaningful user experience for ordering a courier delivery on mobile devices. At our market demand and trend analysis, we will be looking at Google trend, Keyword Evaluation, content competition for validation. We interviewed stakeholders from each department to fully understand their day-to-day operations, requirements, goals, and pain points within their current system. We mapped out the current user journey for each role as a guide for the design. Additionally, user interviews and tastings were held throughout the design process, with real users, to ensure that our design met their needs.

A. Paper Name: Literature Review on Service Delivery in India.

Author Name: Suraj Saigal

Description: This paper is meant as reference material for World Development Report 2004: Making Services Work for Poor People. It looks at India's experience with a number of human development-oriented social services, such as water and sanitation, primary health and primary education, as well as such amenities as roads and social-protection services. Compiling a variety of published and unpublished literature on India's experience with providing these services, it covers a number of aspects:

- 1) Reviews of the experience with contracting out services;
- 2) Performance-based approaches;
- 3) Decentralizing to lower tiers of government, etc. This review works within a triangular framework, looking at the interaction between policymakers (including governments at the state and central levels, international agencies etc.), service providers (public and private sectors and NGOs), and citizens.

B. Paper Name: Global Positioning System for Object Tracking

Author name: Abha Damani, Hardik Shah, Krishna Shah.

Description: Global Positioning System is globally used for the tracking and navigation purpose. GPS is mainly used in the military, farming, civil, transportation and commercial users around the world. Here in this review paper, we describe how GPS Tracking System works and where it is

useful in real world environment. We compare different algorithms like Localization algorithm, kalman filter algorithm and methodologies like GPS, GPRS, GSM, GIS, GSM and RFID. We have identified some problems of GPS.

C. Paper name: Reverse logistics.

Author name: Shipper (medium)

Description: The set of activities carried out after the sale of a product to recover its value and end the life cycle of the product. Yes, that's right, that's reverse logistics. Sometimes referred to as the after-sales supply chain, after-sales logistics or demotion. It usually involves returning a product to the manufacturer or distributor or returning it for maintenance, refurbishment or recycling.

D. Paper name: Cab Aggregators in India: a case study.

Author name: Bisnoi Vinod Kumar, Bhardwaj Reetika.

Description: Over the past few years, there has been an unprecedented growth in the Indian taxi industry. The demand for taxis in India is on the rise owing to the hassle-free travelling experience offered to the passengers. Taxi is giving a stiff competition to both public transit and private car in the current times. India currently is witnessing a revolution in Indian taxi market. There is a downward trend in the usage of traditional taxis by the customers. With the growing smartphone penetration and active internet users, there is a surging demand for app-based taxis. The objective of this paper is to gain insights about the present scenario of taxi industry in India and to compare desi and videsi taxi rivals i.e., ola and uber. The present study uses existing literature to explore the data extracted from databases of extensive reputes such as Emerald, Science Direct and Taylor and Francis amongst others. Through the study, it is found that in India, as of now, ola is racing ahead of the global leader uber on different fronts.

E. Blog Name: Create a GPS tracking application with Firebase Real-time Database.

Author Name: Jessica Thornsby

Description: The Firebase Real-time Database is a NoSQL, cloud-hosted database that uses data synchronization to automatically receive new information in real-time from every connected client, without requiring you to setup your own application server.

Since real-time Database is a Firebase service, the first step is creating a connection between our project and the Firebase Console. I'm also going to register a user account in the Firebase Console, which we'll eventually use to test our project.

F. Blog Name: The Next Big Thing in School Bus Tracking Mobile App.

Author name: Sayantani Neogi

Description: One of the latest additions to the on-demand apps is the school bus tracking mobile App. School bus tracking mobile app has become one of the most utility apps, when it comes to the safety of school children. Owing to many recent accidents and mishaps with the school children, while they were travelling in their school buses and vehicles, the urgent need of such mobile apps have been increased all

over the world. The school bus tracking system offers a number of advantages to the schools as well as to the parents.

III. PROPOSED SYSTEM

A. Problem Definition

The objective of the proposed system is to solve daily life problems with the help of technology. The user and delivery guy have a common application connected to a central database which is managed by the admin. The application is linked to the central server which continuously checks the security of the users and delivery person consistently. The project makes sure that our product effectively completes the tasks assigned in consumption of lesser time. Secondly Safe & secure delivery of products will also play crucial role with respect to cost-efficient methods to the customer with variety of services.

B. System Architecture

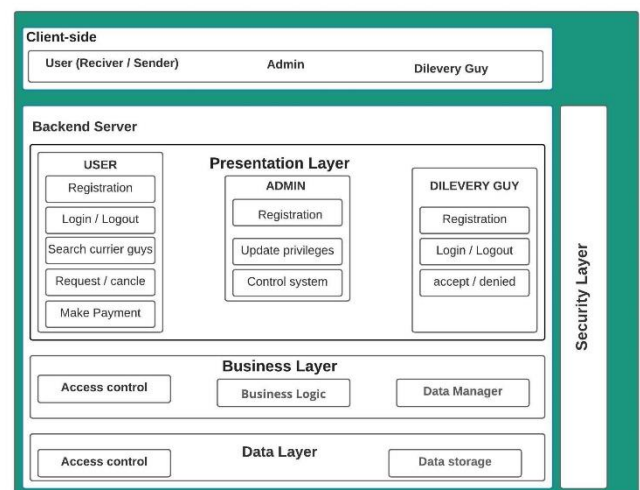


Fig. 1: System Architecture

C. Explanation of System Architecture:

A common layered architecture has been developed based on the client-server model as shown in Fig. 1. On the client side, user agents are used for the presentation layer, business layer, and data layer. The security layer is shown as cross cutting because security issues are mandatory and common to all layers. The security cross-cutting layer of the purpose system. Supports operations like authorization, authentication, exception management, and validation.

1) Presentation layer

The presentation layer facilitates user interaction and consists of user interface components and presentation logic. This layer consists of three main components, i.e. user, delivery guy, and admin. The user activity module provides basic facilities like user registration, login / logout, search courier guy nearby his/her current location and make payment. all these component uses the services of access control, business logic and data manager from lower layer.

2) Business layer

The business layer works as a mediator between the presentation layer and data layer and implements the core functionality of our system. The business logic layer

commonly consists of components like access control, business logic, data manager.

3) Data layer

A data layer essentially is a specific layer in our system that is used for reporting and collecting data. This data will be used for analyzing later to help make business decisions.

IV. USE CASE DIAGRAM OF PROPOSE SYSTEM

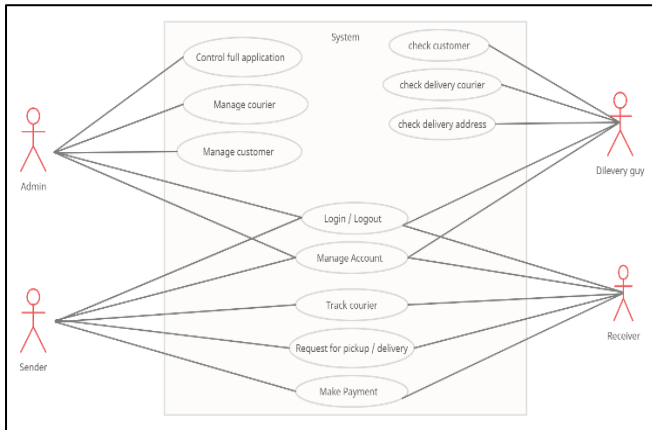


Fig. 2: Use Case Diagram

V. FUTURE SCOPE

The future of this industry lies with mobile applications. It's favorable for both business and customers as apps really make a difference in terms of cost cuts, helping to be competitive in the market of transportation and logistics, providing the best service, controlling and efficiently managing processes, saving time and effort by reducing paperwork. In logistics, sooner or later you will conduct affairs globally having your footprint across the borders. So, it is high time to invest in logistics application development, which can be perfectly tailored for your needs

VI. CONCLUSION

Our aim is to build a brand-new successful business in logistics or to breathe new life into such businesses. The use of technology in logistics has solved a lot of issues at multiple levels by making it possible to manage every little detail of your business without spending enormous time and effort.

REFERENCES

- [1] OTP-Based Two-Factor Authentication Using Mobile Phones
- [2] App with Geolocation Tracking for Android Devices
- [3] GPS tracking application with Firebase real-time Database
- [4] Global Positioning System for Object Tracking
- [5] Cab Aggregators in India: A Case Study of Ola and Uber
- [6] A Survey of the Third-Party Logistics (3PL) Service Providers in India
- [7] The Next Big Thing in School Bus Tracking Mobile App
- [8] <https://thelorry.com/sg>
- [9] Literature Review on Service Delivery in India
- [10] Detailed documentation and references that makes building any payments system a breeze

- [11] A Study on Impact of Online Food delivery app on Restaurant Business special reference to zomato and swiggy.
- [12] Reverse logistics is becoming an integral part of operations. But what is it?
- [13] Trukky: Online Load, Truck Booking, Transporters, Logistics