COPMS LOGISTICS: A TRUCK RESERVATION WEB APPLICATION THAT ALLOWS USERS TO BOOK TRUCKS IN ADVANCE AND PROVIDES REAL TIME UPDATES AND TRACKING OF USERS CARGO

A Capstone Presented to the
Faculty of the College of Science
Technological University of the Philippines
Manila

In Partial Fulfilment of the
Requirements for the Degree
Bachelor of Science in Information Systems

By:

Cardaño, Joshua L.
Hallig, Christian Daniel D.
Pascua, Matthew Edric B.
Solla, Rico Elijah J.
Taller, John Amiel

June 2024

INTRODUCTION

The system took advantage of technological advancements to overcome the limitations of traditional manual methods. The system helped COPMS acquire a reservation system that improves the operational efficiency of a trucking company and enhances the overall customer experience. The researchers used PHP as the primary language for coding the system and will acquire API for map tracking the delivery routes. The results of this study will assist clients/customers in making more effective reservations through the system created by the researchers. This study will be significant to the logistics field because it can help the field improve their operational efficiency. The system will help truck drivers follow their intended path from the starting to the finishing point. The system uses technology to easily manage their client's reservation records. It also provides map tracking to assure the clients that their requests will be delivered safely. By implementing the reservations system, heavy-lifting service providers and trucking companies enhanced their operations, increased customer satisfaction, improved financial management, and set themselves up for growth and development. The study will contribute to businesses in this field by giving them ideas and knowledge on improving their performance.

METHOD

The system's requirements and design phase requirements were followed during the development process. The researchers conducted tests in the system before they are published and used by the users. The system uses the primary interactions and process of actions involved in the CO.PMS system. Users can check the availability of the trucks and make a reservation. The last process is the client sending the delivery confirmation and the deal is finished. The next step is that the people who are in charge on handling the system of the app will accept your reservation and will proceed to the delivery. The system is used by both employees and clients of the company. The system keeps track of the package from the location that the driver sends. Users can provide appropriate information for the admin to send the appropriate truck for their needs. After the delivery, the app will notify the user that the goods have been delivered safely. The study was evaluated by 20 people, including the clients, drivers, programmers, and admin. The researchers created frameworks and data flow diagrams for them to have a flow diagram for them. Twenty individuals were invited to participate in the evaluation of the system. The researchers used a developmental lifecycle to efficiently create the system and test its functionality and quality. The weighted means for each criterion were determined based on the evaluation results and the system's grand weighted mean. A rating of 4 corresponds to the highest level, labeled as "Highly Acceptable" A rating of 3 is considered "Acceptable," while a rating of 2 is labeled as 'Fairly Acceptable' The lowest rating, denoted as 1, is referred to as "Not Acceptable." The first week of January is the first day of the school year in the U.S. and the start of the new school year is also the first week for the new year. The first week is the time of the year when schools start and the first year of school is the start. The school year starts on January 1 and the year after that the year is the year of choice. The year before the year was the year before last. It's the first time the year has been the year. It was the last year that the school started the year and it was the first that year.

RESULTS

The system is intended to show online reservations and track the status and location of their logistics using an application. The system uses a mobile application named "Traccar" that is downloaded by the drivers to enable the online reservation system. The website allows a tracking feature that can track the trucks with the help of the app. This will help provide real-time updates on the delivery of the trucks. It is intended that the system will be used to make and track deliveries of goods. It was intended to be used for deliveries of food and other supplies. The study developed an online reservation system called CO.PMS which was named from the logistics company itself. The web application also has a filter feature in which the admin can identify, find, and edit the drivers logs as well as organize the clients information. A portable system is one that can be easily transferred to or utilized with other devices or systems without the need for any redevelopment. The study developed a system that was able to track a truck from one location to the next. The information provided by the table is the following: ID number, name, email, phone number, pick-up location, drop-off location, weight, and date. This will help the company to keep track of their deliveries. CO.PMS online reservation system is only compatible with desktops and laptops. It is not compatible with mobile devices. The done button is used to update the delivery status as completed. The system is available in the US and Canada. For more information, visit COPMS.com.

DISCUSSION

The CO.PMS was successfully created using Dart, XAMPP, Android Studio, and Figma. It was developed using Javascript, HTML, CSS, as its frontend and PHP as its backend. Traccar for the tracking and Waze API for the map. The system can be managed by the administrator by accepting, rejecting, checking if the delivery was made. On the driver side, the driver can accept a delivery reservation, and see a grotesquemap for a guide.