

E-auction for Courier Service

Rohan Kiran¹, Mohd Tajammul²

¹*School of CS & IT, Jain University, Bangalore, Karnataka, India*

²*School of CS & IT, Jain University, Bangalore, Karnataka, India*

Abstract: Auctions have been around for a long time, but with technological advancements, everything from food to clothing can now be bought and sold from the comfort of your own home; similarly, auctions have transitioned to an electronic medium. E-auctions are conducted on sites such as eBay. Because auctions are typically used to sell commodities or things, this initiative intends to do so for courier services. The problem we're attempting to solve is to create a hassle-free system for both customers and service providers in which both are genuine, the customer's privacy is protected (which is currently lacking in the current system), and new and individual courier services have an equal opportunity to compete.

Key Words: e-auction, courier.

1. INTRODUCTION

E-auctions and online courier services have existed for a long time; what we're attempting to do is combine the two to create a solution that may alter how we send courier and how we're now charged.

As customers, we must conduct extensive research in order to identify the most reputable and cost-effective courier service for the transportation of our goods. During this procedure, we may come across a variety of bogus websites, where we are required to disclose personal information, and online courier numbers may be fake. We do have an application via which we may transport our items, but these apps are typically only available in major cities. So, the programme will allow the customer to submit an ad on the internet.

So, the application will allow a customer to post an ad in the web app that contains all of the information about the package as well as the pick-up and drop-off locations; later, the service provider, i.e., the courier company, will be able to place bids on the ad, and the customer will be able to choose and share additional contact information with the courier service.

We'll build the system as a web application with the .NET framework and SQL as the backend, and we'll host it in the cloud.

RELATED WORKS

The author of [1] wants to draw attention to the expansion of courier firms in the Philippines during the epidemic. Because the majority of people are still unvaccinated, the growth of courier services will continue, and even after that, people will become more accustomed to using these services. An online survey with a total of 120 participants was used to perform this study. The assessment was based on the respondents' favorite courier services and the frequency of delivery for different age groups. It also looked at how many times customers used courier services before and during the pandemic, as well as their preferred payment methods.

The author of [2] wants to identify and classify the key factors that influence customer perceptions of courier service quality when they shop online, such as increasing competition in the courier market and meeting client expectations. One of the

goals of courier services is to provide high quality service. Despite the study's limitations, the study's goal was to construct a scale of courier service quality. To verify the scale, the author will utilise CFA in the future.

The author of [3] wishes to emphasize and improve upon the current courier system. As a result, the system provides a service that is less efficient in terms of comfort, cost assessment from the perspective of consumers, tracking dispatch, and cost calculation. The goal of the author's project is to create a mobile application that a user may use to access services from the comfort of their own home and that includes all of the capabilities that the current/existing system lacks. This tool was created with Nigeria in mind, and it makes it easier to deliver packages with less delay and hassle.

The author of [4] wishes to see how bidding behaviour changes when a new auction format is introduced to the market. The author examines a data set on online display ad auctions that takes use of a staggered adoption of first auction price (FPAs) in place for traditional second price auctions by different sellers (publishers). Immediately following the format, the average price rises.

SPAs are being replaced with FPAs.

Due to a lack of real and extensive transaction data, the author used eBay as a subject in [5] to evaluate and discover patterns and behaviour of online auctions. To do so, the author used eBay as a subject and investigated how eBay auctions work and various factors such as consumer surplus, bidding strategy, and so on. The fundamental issue here is the incorrect assumption that bidders' quotations are independent of one another, resulting in an inefficient auction. To address the inefficiencies of the present online format, the author introduced a decreasing price auction model that is tailored for online transactions.

2. RESEARCH GAP AND PROBLEM FORMULATION

After reviewing the related works, we came to a conclusion that the existing system has some or other flaws like lack of data privacy and the market dominance of existing big companies. The existing available system available are not efficient in terms of the area coverage it covers major cities and there're are lot of fake website and people get scammed. The solutions we provided require users in-depth knowledge of coding and terminal commands.

3. OVERVIEW OF THE PROPOSED APPLICATION

A. SYSTEM ARCHITECTURE

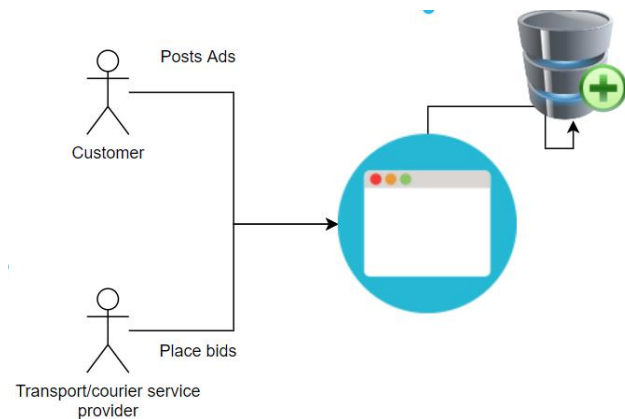


Figure 1: System Architecture

There are four components that show how our processing system will work.

A. Database Development

The information below is required by our system from both users. 1. Your name 2. Your user name 3. Your email 4. Your password 5. Confirm that the database tables for clients and service providers are separate. The database will then include information on users, such as ads submitted and bids for transporters. All of this data will be stored in a SQL database housed on a cloud platform.

We analysed two of the most popular cloud service providers on their security and privacy connected to the storage services they offer in [6], and found that they have nearly identical characteristics like encryption and network security. In [7], we learned about the differences in performance between on-prem and cloud databases, and how the cloud outperformed the on-prem in specific scenarios that we could encounter, leading us to choose cloud storage.

B. Login & Registration

The user will be directed to a login and signup page, where they must provide personal information such as their email address, proof of identity, username, and password in order to register. At the time of registration, you will also be given the option to select whether you are a customer or a service provider, and then login with their username and password.

C. Posting Ads This section is for customers to submit ads that will be displayed to bidders and the ad will be displayed. contain details like no. of package the pickup and drop location and weight and size and date till which this ad is valid. We saw in [5] how bidders wait until the last minute to enter their bids in order to make more money, thus to combat this, I eliminated the automation. Regardless of the bids that have been put, the user can choose his own price.

D. Advertising Bidding

This is for service providers, who will be able to bid on the advertising submitted by customers and target specific interests.

amount that will be displayed to the buyer as well as other bidders so that they can do comparative bidding. This will assist the consumer in determining the best price.

obtain a better bargain because everyone will be putting up their lowest price in order to win the bid. We witnessed how the FPA and SPA effect bidding in [4], so we decided to go with the SPA model, but with a twist: because customers will pay the service provider, they would be paid for the amount they chose plus 2% of the second lowest bid.

B. SYSTEM WORKFLOW

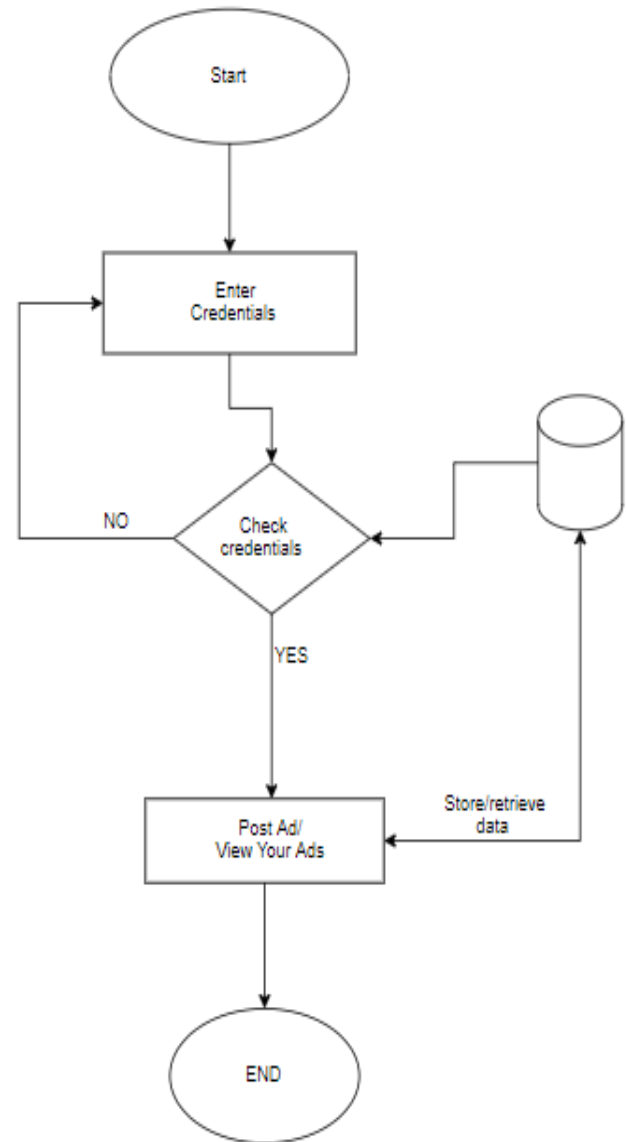


Figure 2: Client Workflow

Figure 2 shows when the user is logged in as client how workflow occurs. As soon as user login he is welcomed with home page where in his details are visible which can be edited and on the top there are menu form which he/she can view the ads posted, Post the new advertisement delete the posted advertisement which has no bids place on it.

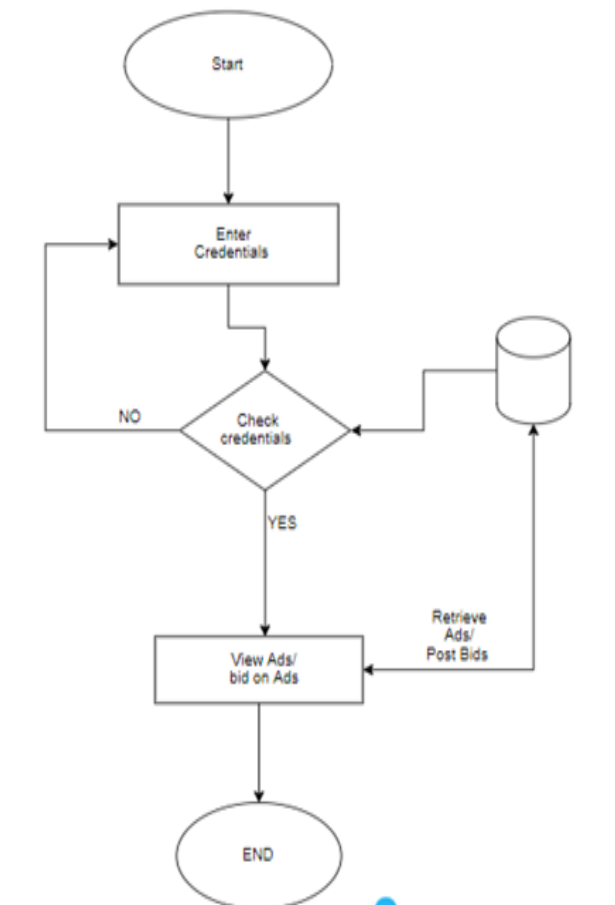
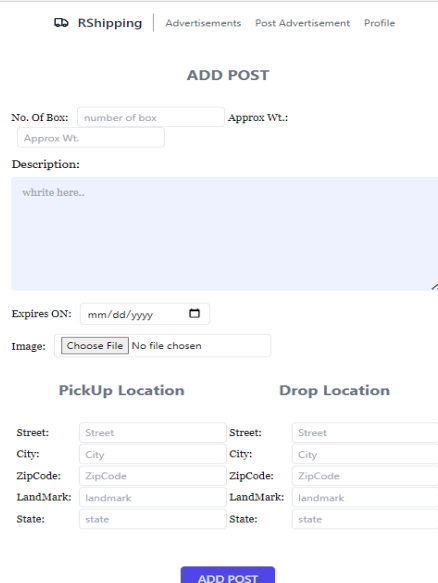


Figure 3: Transporter Work Flow

Figure 3 Shows the transporter workflow, user has to provide credentials and once logged in as transporter will have different layout of the homepage from that of a client, here transporter can view Advertisement posted by all the user filter it based on drop location, place bids on the advertisement, delete the advertisement and generate monthly report.

C. APPLICATION USER INTERFACE



ADD POST

No. Of Box: number of box Approx Wt.:

Approx Wt.:

Description:
 write here...

Expires ON: mm/dd/yyyy

Image: No file chosen

PickUp Location

Street: Street:

City: City:

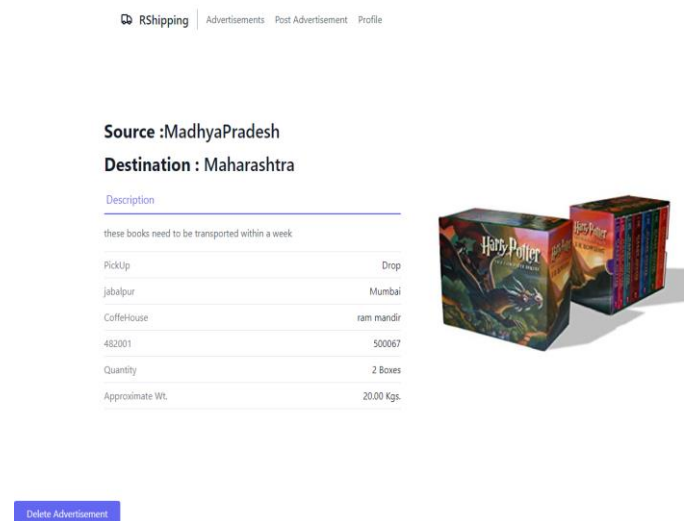
ZipCode: ZipCode:

LandMark: LandMark:

State: State:

Figure 4: Client view Posting Ad

Figure 4 Shows the fields that user needs to fill before posting the advertisement.



RShipping | Advertisements | Post Advertisement | Profile

Source :MadhyaPradesh

Destination : Maharashtra

Description

these books need to be transported within a week

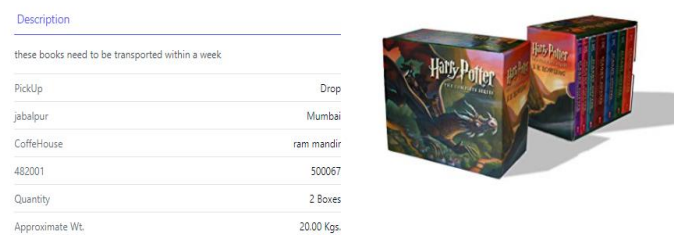
PickUp	Drop
jabalpur	Mumbai
CoffeHouse	ram mandir
482001	500067
Quantity	2 Boxes
Approximate Wt.	20.00 Kgs.

Figure 5: Advertisement View Of customer

Figure 5 shows the interface of the after the user has successfully posted the advertisement and since no bids has been placed user can delete the advertisement.

Source :MadhyaPradesh

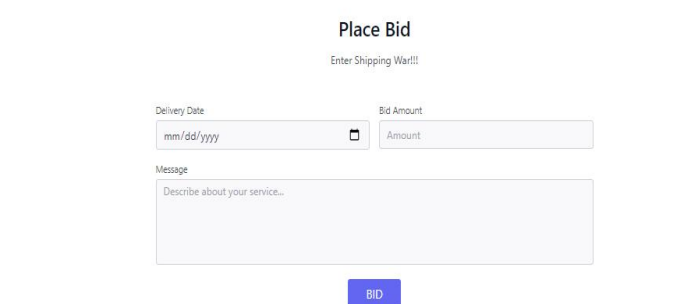
Destination : Maharashtra



Description

these books need to be transported within a week

PickUp	Drop
jabalpur	Mumbai
CoffeHouse	ram mandir
482001	500067
Quantity	2 Boxes
Approximate Wt.	20.00 Kgs.



Place Bid

Enter Shipping War!!!

Delivery Date: mm/dd/yyyy

Bid Amount: Amount:

Message:
 Describe about your service...

S.

Figure 6: Transporter Placing Bid

Figure 6 shows when transporter will view a new advertisement which he has never placed a bid on.

Source :MadhyaPradesh

Destination : Maharashtra

Description

something to test

PickUp	Drop
jabalpur	Mumbai
CoffeHouse	ram mandir
482001	500067
Quantity	1 Boxes
Approximate Wt.	45.00 Kgs.



Bids Placed

Make Your Choice

Advertisement Details	Advertisement EndDate	Bid Placed Date	Bid Amount	Status
Company Details: dtsk23@gmail.com 8989234518 Service Details: something to test Visit Profile	03/31/2022	03/17/2022	1500.00	<input type="radio"/>

Accept Bid

Figure 7: Transporter view Of Advertisement

Figure 7 shows when transporter will view an advertisement which he has placed a bid on.

4. CONCLUSION

E auction and online Courier services have been there for a long time what we did is to combine both and come up with a solution that might change how we're use to sending our courier or transported goods. The customer can post ads that will contain information about the goods like weight dimensions pick up and drop location depending on this the transport services can place bids on the ad, and the minimum bidding price will be selected. This system helped us overcome the problems that were present in the existing system such as lack in privacy of the consumer. Local transporters / courier service charge as per what the seem to be the minimum amount.

Through this research we could come up with a web-based solution for our problem that was lack of privacy and a platform for upcoming business an equal opportunity to compete. The system will allow the users (customer) to post ads for their requirements and other users (service providers) to bid on those ads

5. FUTURE SCOPE

Additional features that can be added to the proposed solution in the future are as follows:

- Could be developed as android application
- Sharing live location of the goods customer
- Sharing the details of the delivery guy

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