

# An Android Application for Online Agriculture Auction

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**Abstract:** Agriculture sector plays a major role in India. In India about 70% of the population is leading life based on farming. But issues concerning agriculture have been pulling back development of our country. So, In this Project an Online-Auction is presented, which is a large potential market for farmers or sellers and buyers. The project involves design and implementation of an online auction system. The analysis stage is performed by performing OLTP database model for the online data house. It also defines the layout in the android application. In which many number of bidders bid the auction and finally the auction won will store the result of the winning bidder details. Finally the shipment process is carried out.

**Keywords:** Online Auction, On Line Transaction Process (OLTP), Marketing Technologies, Electronic commerce auction.

this method is that they have to keep track of all paper works until their final settlement. Simply we can define an auction process is buying and selling of products to the highest bidders. Thus action may include one seller many buyers and vice versa.

The basic of this, Android Application is to provide a user-friendly application for buyers, sellers or farmers to auction their product easily. The product will be authenticated and it provides a safe environment for the online users: Secure registration of all the users, which includes a personal profile administrators, who would authorize the product to the auction, set the auction dates and minimize the cost for that product. Administrator can take a backup of the database for every auction that is happening periodically. All users are authorized to the services.

## 1. INTRODUCTION.

Agriculture is considered as the basics of life for the human species as it is the main source of food grains and other raw materials. Farmers basically belong to the rural area and are unaware about the market strategies. Due to lack of studies, they will end up selling their yields in local market. Many times buyers, dealers, sellers are unaware of the productions, quantities, quality and availabilities of different Agriculture products produced in every corner of our country.

The basic idea of this, Android App is to provide a user-friendly application for the buyers and sellers or farmers to auction their products easily. This application is authenticated and hence it will provide a safe environment for the occurrences of the upcoming process. In the basic manual auction there is very limited general public involved. In the manual auction the day of auction, venue, and the items for auction are told to the general public through electronic or print media. The people who wish to take part in these process has to first register first and then come to the venue. This method restricts most of the bidders out of that area to decline that offer. Another disadvantage of

## 2. RELATED WORK.

In case of auction the first thing comes in mind how to sell a product. Simply it means in auction the seller waits for the high number of prices and waits for the bidder who remains active till the last of the auction process. There are various types of bidding a product. To overcome a traditional auction process, this online auction process had been used which is detailed in [1].

Secondly, a various types of auctions had been described such as English auction (ascending bid auction), the Dutch auction (descending-bid auction), the first-price sealed-bid auction, and the Vickrey auction (second-price sealed-bid auction) as explained in [2]. It also described the steps of how auction will be carried out and what information should be carried on. The internet auction is the most simple to use for maintaining the data then the traditional auction which is to be carried on the paper. And most of the auction has been learned by the economists for the understanding purpose to study their properties and how it works.

In [3], it describes how the auction is carried out on the internet and what the information is provided before the auction and after the auction process. It also describes auction such as user agents and mobile agents. User agent mostly done on the user's PC with the help of the some services or some expert advices while mobile agent deals with the execution of program through remote base server. In addition to this the auction time is provided with the help of auction date and the last date of ending the auction. Earlier auction products were like electrical equipments, etc. But now Agricultural Product can also been auctioned.

Now-a-days auctioning process has been became a competitive in the market. The auction can be done from anywhere in the world at any time and anyone can auction the products which is detailed in [4]. In additional to single item auctioning, it also consists of multi-item auctioning where n number of items are auctioned simultaneously as described in [6]. In multi-item auction it provides more opportunities for online auction market in large market over the world with higher efficiency. This multi-item auction has come into existence because now-a-days very small markets do the auctioning of similar items which results into less efficiency.

A multi-attribute auction consists of practical and theoretical problems which have been detailed in [7]. In case of practical problems the users should know the product and market characteristics. With help of this term the auction is also referred as the common value based. Sometimes it becomes difficult to arrange the behavior of the goods which may result in difficult for the analysis of the product. The analysis of the product is also done in case of reverse auction. Because of this the economist's theory and experiments which is used for the developmental test. Along with traditional auction the internet auction has been more popular. For the internet auction there are various security requirements. Firstly the seller should know whether he/she is going to post a product in large scale or not. Then the user who is interested should register first and then access the site. The security requirement is used to know whether the site is used by the registered person. Therefore an administrator is used as a trusted third party to keep the records of all the procedures happening which has been explained in [8]. Auction application is carried with the help of auction rules which defines the auction schedule, templates for creating the auction and the individual auction rules for the individual auction product.

As e-commerce auction is used widely it has featured many security protocols [9]. It has described some security properties such as atomicity of the transaction, weak private keys and weak public keys for the bidders. In case of voting or bidding the product it consists of much work on the verification of the users and the product which is to be handled in the area of privacy.

As auction is defined as mobile agents which deals with the execution of program on the remote server database. The mobile agents in electronic auction are slightly different as described in [10]. The mobile agents in electronic auction first visits the site of auction and then the user may actively participate in auction process. If the user is disconnected for sometime then in behalf of user it can participate for a specific time period. After registering it as server, the mobile agents itself creates its own user profile.

### **3. METHODOLOGY.**

The objective is to develop a user-friendly auctioning site where any kind of product is auctioned and provide value-added services to the bidders and sellers. The products will be authenticated and the site provides a safe environment for online users. The existing system was an automated system. But it was inefficient in meeting the growing the demands of the public. In manual auction the day of auction, venue and the items for auctions are told to the general public through electronic or print media. The people who wish to take part in the auction should first register himself and then arrive at the venue of the auction on the given date and time.

This method restricts most of the interested bidders out of the city or country to decline their offer or interest as they can't be available on the day of auction. Another flaw of this method is the piles of paper work that has to be maintained and then keep it save for the future. They have to keep track of the bidders and the sellers until their final settlement. The problem with this system is always the participants used to carry papers with them during the time of bidding and the sellers has to keep all the information of the participants until and unless the auction process gets finished. Another problem is that the auction is only held at the local market not at the global level.

### **4. EXPERIMENTAL RESULT.**

Our proposed work will be a Mobile Application using which the bidders (buyers) and the sellers (farmers)

have to deal everything from their Mobiles from any continent and they don't need to go anywhere. This app will be available for all the general public, dealers, farmers, and others on Android based mobiles. People from across the continent can participate in this auction. Anyone can access this App and Search/Bid for the products uploaded by farmers, sellers There will be full transparency User validation and checking Our proposed system will be an Android Application where the bidders (buyers) and the sellers (farmers) have to deal everything from their computers from any continent and they don't need to go anywhere. It has made the auction process simple. The users of the system will be: Sellers, Buyers, Administrator.

### Admin Modules[ASP.net]

Admin is the main user of the website who controls complete website with authority.

In figure 1, it shows about the Login Module which is authorized by admin

- Login  
Login using credentials given to admin.
- Dashboard  
Summary of farmers, dealers and transactions
- Transactions  
Confirmed bids and payments
- View Farmers  
Admin can check the register farmers
- View Dealers  
Dealers who registers in the system
- Block Farmers  
Block the farmers if it is identified as fake account
- Block Dealers  
Fake dealers account can be blocked here.



Figure 1: Login Module which is authorized by admin

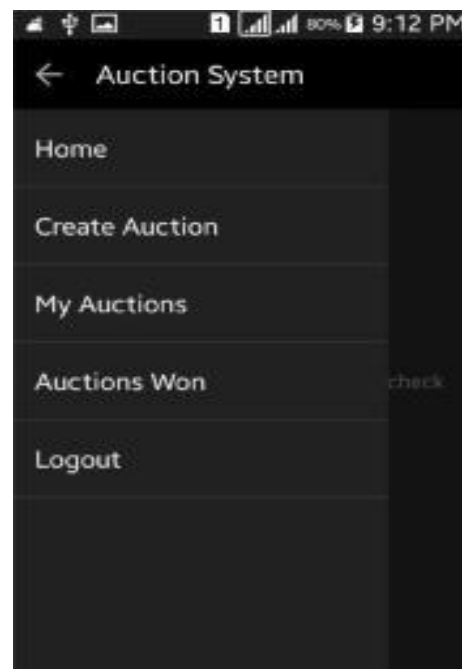


Figure 2: Dashboard for the farmer

### Farmer[Android]

This module allows farmers to register by providing necessary details.

In figure 2, it shows about the Dashboard for the farmer

- Registration

Here farmers can register their details and use the system, location information will be captured automatically using GPS device of phone.

- Login  
Login using the farmer's credentials
- Auction

Here farmer can create an auction by selecting the item and entering the initial price, expiry date etc.

- Bids  
Here farmer can check the total bids placed for his/her auction and they can see the maximum bid price till time.
- Confirm bid  
Once the farmer is finalised with the bids they can select any bid and based on the price and confirm it.
- Dealer details  
Farmer can check the dealer details that placed the bid.

### **Dealer [Android]**

This module allows dealers to register themselves by providing necessary details to the website. It also includes the dealer's login details.

In figure 3, it shows about the Dashboard for the Dealer.

- Registration

Dealer registration is the process where dealer can register their details and start using the system, Location information will be captured automatically using GPS device of the phone

- Login  
Login using the dealer credentials.
- Active Auctions  
Here dealer can check the actions which are active. Based on the requirement dealer can place the bids to any auction
- Approved bids  
Once the bid is approved by the farmer dealer can see those details in his/her account.
- Location/Distance details  
After the confirmation dealer can check the exact distance/route between his location and farmer location using the map.
- Online Payment  
After the confirmation dealer can make the advance payment in the App.

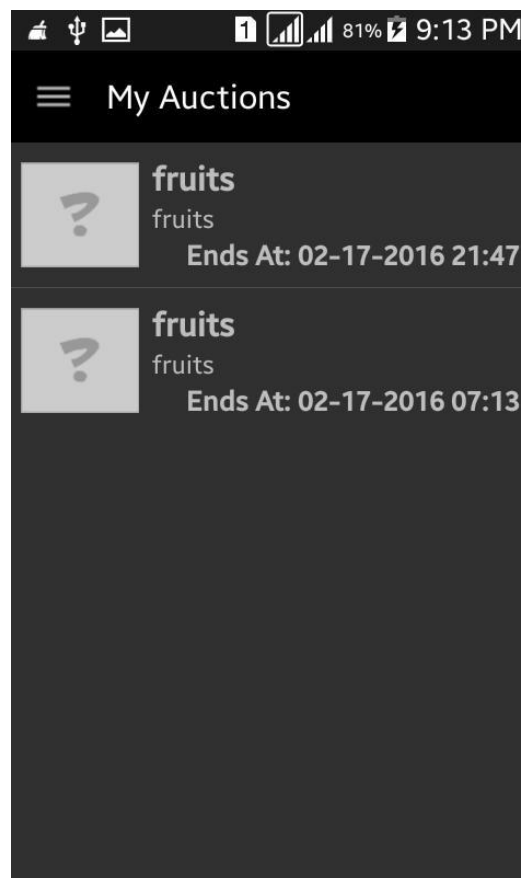


Figure (c): Dashboard for the Dealer

## 5. CONCLUSION.

Overall we provide a user-friendly auctioning site where any kind of product can be auctioned and provide value added service to the bidders and sellers. In our project we have developed two modules. Our first module is the validation for the administrator. In the second module we provide the registration for the seller and buyers. If already registered then the user can directly login to the auction website and the administrator can keep the overall data of the users. Final phase of our project requires shipment process, where the winner of the bidder will get his products delivered through proper online transactions.

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