

## An Android Application for Online Agri-Auction

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**Abstract** - In this project, an online auction system is presented. It has a very large potential market of sellers and buyers. An On Line Transaction Processing (OLTP) database model structure is, therefore, desirable. The project involves the design and implementation of an online auction system. The analysis stage is performed first for the case study. Project begins by analyzing and presenting the OLTP database model for the online auction house. Besides, the intention to establish what goes on operationally within the online auction house. It also defines the layout in android application. In which many number of bidders bids the auction and final the auction won will store the result of the winning bidder details. And finally the shipment process will carried out.

**Key Words:** Online auction, marketing, information, Electronic commerce auction.

### 1. INTRODUCTION

Farmers basically belong to rural areas, being unaware about the market conditions and due to the lack of study related to various market places over world, they have to sell their AGRI products in local market. Even many times buyers, dealers of AGRI products are unaware about the productions, quality, quantities and availabilities of different AGRI Products produced in every corner of country or world. May be buyers don't have time to go and waste their time to buy the product in market. Now everyone wants to save his time.

The basic idea of this, Android App is to provide a user-friendly Application for the buyers and sellers/farmers to auction their products easily. The products available through this Application for

auction will be authenticated products. This will be a safe environment for online users. The traditional way of doing auction is still popular but due to its limitations more and more people are thinking of shifting to Mobile Applications. In basic manual auction there is very limited number of general public involved. There is a chance of corruption and other factors for not providing transparent bidding. 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. It is a fatigue and time consuming process. An auction is a procedure where an auctioneer cries successively for high type of prices to a group of rival bidders until only one remains active. Auction has been extensively studied by economists to understand their properties as a dynamic pricing mechanism. The different auction mechanisms studied include the English auction (or ascending bid auction), the Dutch auction (or descending bid auction), the first price sealed-bid auction, and the Vickrey auction (second price sealed-bid auction).

Simply we can define auction as a process of buying and selling goods or services by offering up of them for bids, taking bids, and selling items to the highest bidders. Auctions are used to sell many things in addition to antiques and arts. All over the

world there are auctions of commodities and where there is a market of multiple people interested buying in same thing. A key to auction- a bunch of people who are interested in buying the same object and taking turns offering bids to the object. The right to buy the object will go to the highest object. Auction may include one seller many buyers, many sellers one buyers, many sellers many buyers, etc.

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: Secure registration of all users including a personal profile Administrators would authorize the product to auction, set auction dates and minimum auction amount for that product. Administrator can take a backup of the database for every auction that is happening periodically. All users are authenticated to avail the services.

## 2. LITERATURE REVIEW

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

users 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. First product was Tea Auction.

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 came into existence because now-a-days very small markets does the auctioning of similar items which results into less efficiency.

Multi-attribute auctions consists of practical and theoretical problems which has 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 behaviour 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 testing. 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 is 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

#### 3.1 Introduction

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 an unless the auction process gets finished. Another problem is that the auction is only held at the local market not at the global level.

#### 3.2 Proposed Work:-

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.

#### 3.2.1 Login and register module:-

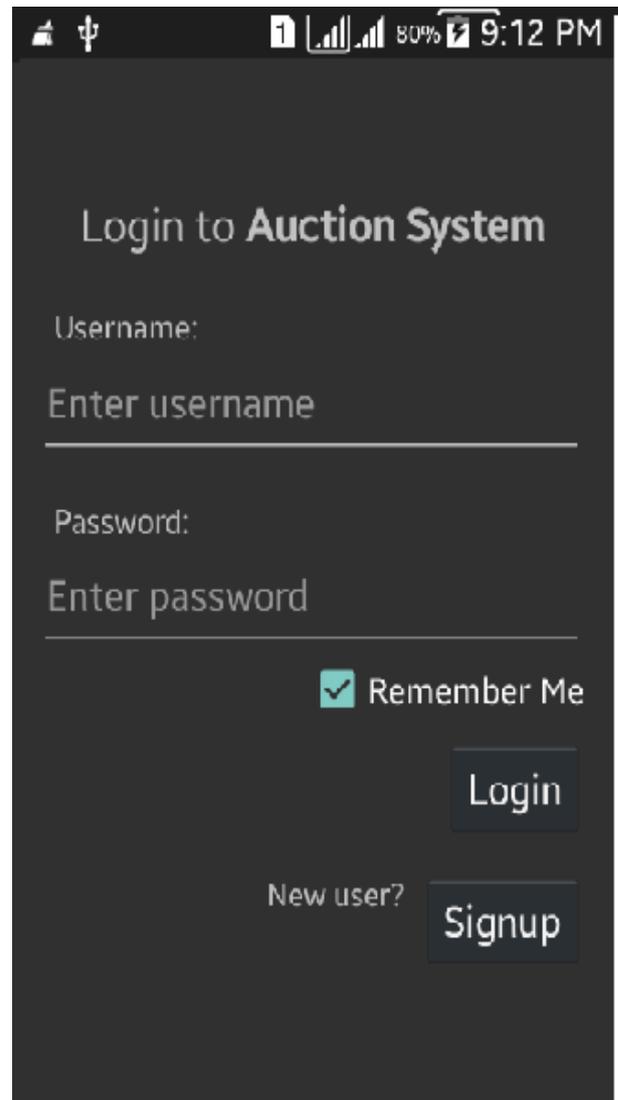
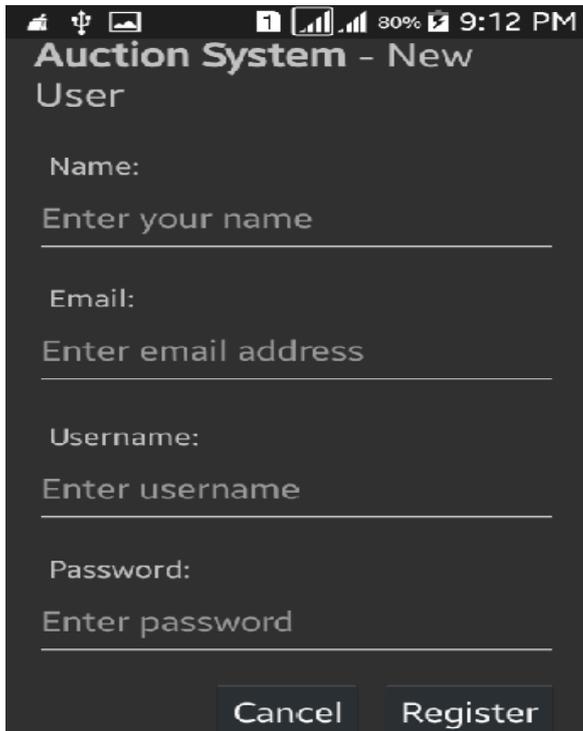
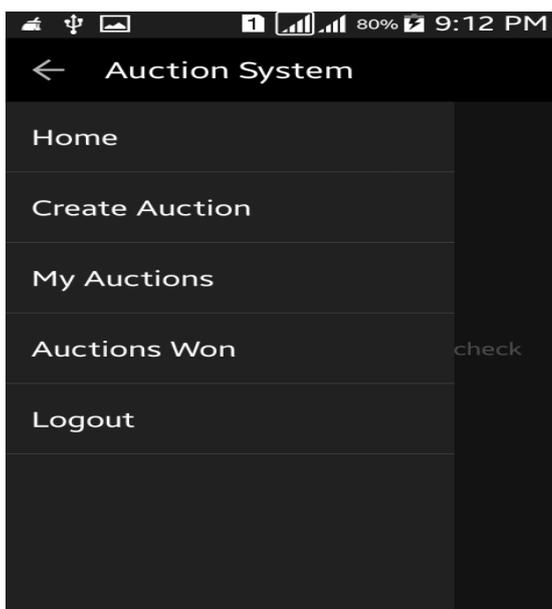


Fig 3.1 Login module for the registered user



**Fig 3.2 Registration Module**

In this module any one can register or login for this app. In this the validation for user name and password is of upto minimum five characters. If the user is not login then he/she should register first.



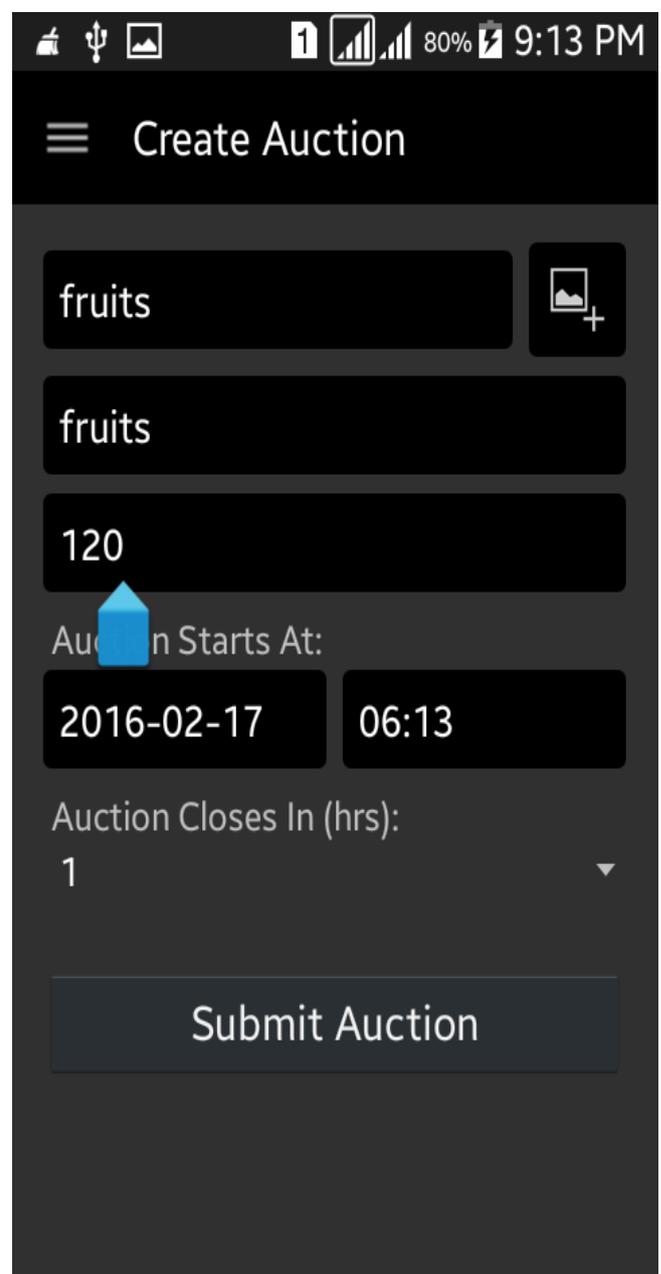
**Fig 3.3 Navigation List view of overall project**

In this the navigation list views of overall project. The home page consists the login page. The

create auction will be created by the seller when the seller will post the products for auctioning.

**3.2.2 Seller module:-**

In this module, the seller will post the product information in which he/she wants to sell or auction the product through online. In this module the seller can post the image of the product by using capture image and all the necessary information about the product such as the product name, its description and the auction date and time at what the product is going to be auctioned and finally the stop time of the auction.

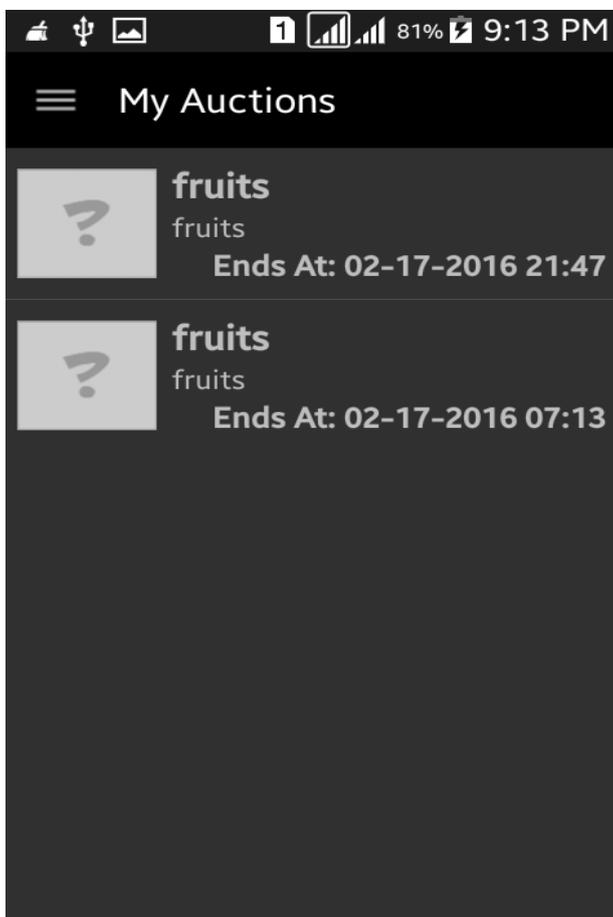


**Fig 3.4 Seller module while creating the auction**

### 3.2.3 Buyer module:-

In this module, the bidder will first see which product is been posted on the app which is to be auctioned. The bidder/buyer will see all the information about the product. If the bidder is interested to buy that product then he can register for the auctioning and bid the amount. At last, at the end of the auctioning the bidder will get to know the result.

Last when the number of auction has been created the bidder will decide the amount which product to be auction. The bidder has to auction within a time which is set by the seller while creating auction that is one hour, twenty-four hours, etc.



**Fig 3.5 Bidder will see the items details that has been posted for auction**

## 4. 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 the first phase of 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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