

## **1.Introduction:**

An online auction is a type of auction that's held over the internet, unlike in-person auctions. The best part of holding an online auction is the freedom of bidding from any location with bidders connected through the internet. Ebay is a fine example of this types of auction. Apart from eBay, our E-ANTIQUE Online Auction system is used for online antique products auction. Anyone can use the portal and browse the available products, but in order to make a purchase or place an order, a user needs to log in using their unique userId and password. The default role is "User" when a user registers with the website.

This proposed system can be used by any naïve users and does not require any educational level, experience, or technical expertise in the computer field. However, it will be of good use if the user has good knowledge of how to operate a computer. Online Auction System is the public web application. There are mainly two types of users. One is the Buyer or Bidder and other is Seller.

## **2.Problem Definition & Scope:**

### **2.1 Problem Definition:**

Creating an online auction system involves building a website or app where people can sell and buy items through bidding. Users should be able to register, list their products for auction, and others can place bids. The system needs to handle secure payments, provide real-time updates on ongoing auctions, and have a way to resolve disputes. It's important to make it user-friendly, secure, and able to handle a large number of users and items.

### **2.2 Goals & Objectives:**

The main objective of this project is building a website which will help buyers and sellers to participate in auction. Here if suppose some seller or buyer want to use this facility and learn how is it possible and how they can use Online Auction System to buy or sell the products(antique items ), they must have knowledge of computer then they can directly register in the site and sell or buy the products online.

### **2.3 Major Constraints& Outcomes:**

This system is designed as an online web-based application which shall be accessed by any device, either a computer, tablet, iPad, iPhone, mobile phone or PDAs. Compared to traditional auctions, online auctions can be more efficient. They reduce the time and geographical constraints associated with physical auctions. Online auctions generate a wealth of data that can be analysed to understand buyer behaviour, market trends, and the performance of different items. This information can be valuable for sellers and auction platforms.

### **3 Software Requirement Specification:**

#### **3.1 Purposed System:**

- Our System contain three actors – Admin , Seller , Buyer .
- Admin have control over system. First seller/Buyer need to register on portal . Seller will add product for auction. Seller need to set start and end date of auction as well as base price of product.
- Admin will verify every product before it goes for auctioning.
- If Admin approve product to place for auction then product will be place for auction. Otherwise it will not placed for auction. Now Buyers will Bid on product.
- At the end of auction highest bidder will win auction .Bidder can rate for the product and seller .
- This system allows multiple bids by single users.

#### **3.2 Scope:**

The scope of this application to build a user friendly auctioning website, where user will be able to auctioned any product which is available nearby or anywhere in the world. By using Online Auction management system it will be easy for seller to make an auction and time saving also. Bidders/Buyers can search for the products available in the auction and even the information about the seller. Online Auction System provides the functions which connect the sellers and the bidders efficiently. Online auctions allow sellers to reach larger audiences, in different locations and geographical areas. The competitive nature of online auctions can result in higher prices for sellers. Bidders compete with each other, driving the final bid closer to the true market value of the item.

## **4. System Modules:**

Online Auction System consists of three modules described as below:

- Seller Module
- Bidder Module
- Admin Module

### **4.1 Seller Module**

- Seller can register and create his own account.
- Online Auction System provides the function which allows Sellers to add their products for auction.
- Seller can set base price for the product added.
- The Seller can end the auction.
- The Seller can see the current bid price on the product added. seller can give answers of buyer questions

### **4.2 Bidder Module**

- Bidder can register and create his own account.
- Online Auction System provides the function which allow buyers to bid on product and see the description of product.
- Bidder can see sellers rating for authenticity
- Bidder can rate the product and seller
- Buyer can ask questions

### **4.3 Admin Module**

- Online Auction System should provide all functions to admin how to handle the System.
- Admin can check KYC and authorize bidder/buyers and sellers based on Government Identity proof.
- Admin can verify every product before it goes for auctioning.
- Admin can remove fraud Sellers and Buyers.

## **5. Performance-Requirements**

### **5.1 H/W Requirements:**

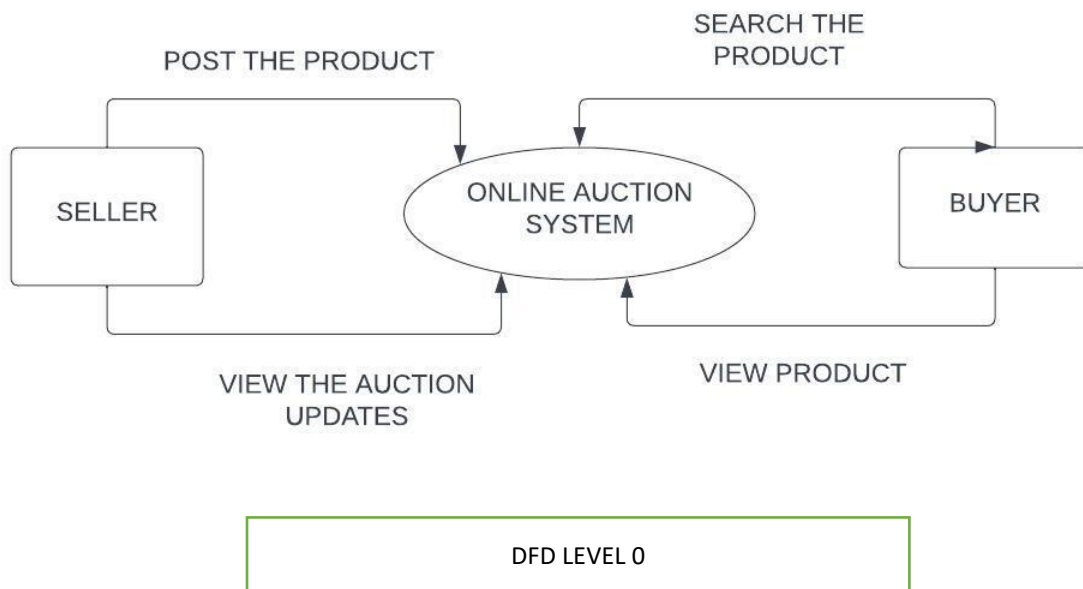
- Processor: Minimum 1 GHz; Recommended 2GHz or more
- Ethernet connection (LAN) OR a wireless adapter (Wi-Fi)
- Hard Drive: Minimum 32 GB; Recommended 64 GB or more
- Memory (RAM): Minimum 1 GB; Recommended 4 GB or above

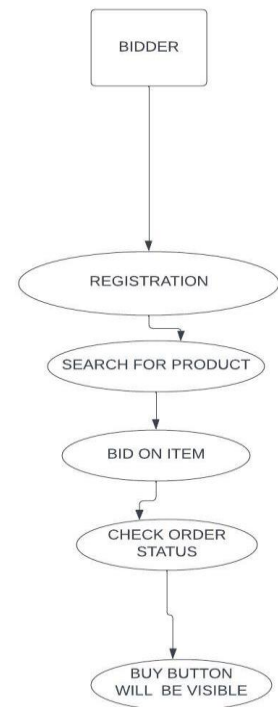
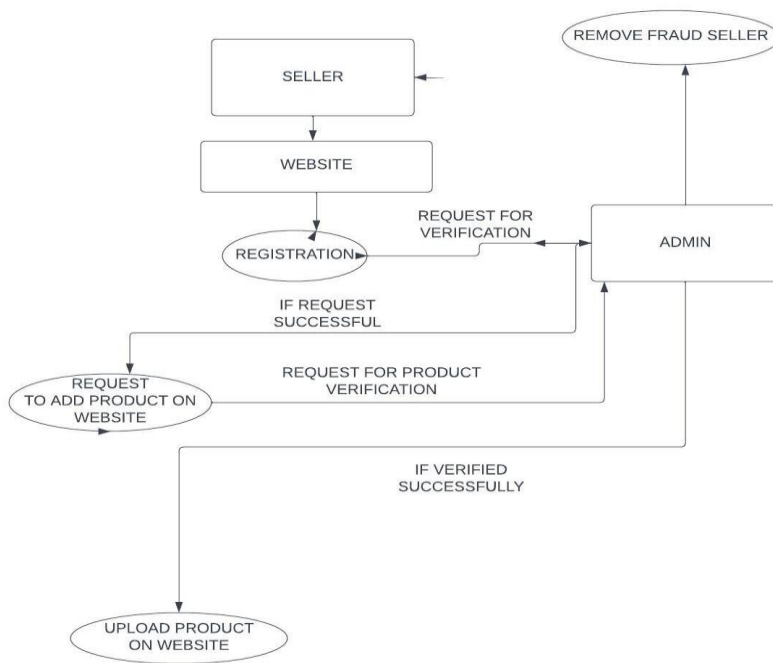
### **5.2. S/W Requirements:**

- Firefox browser
- Chrome browser
- Front End Technologies: 1. React.js · 2.Bootstrap · 3. HTML5 · 4. CSS ·  
5. JavaScript
- Backend Technologies : 1. Java · 2. Spring Boot· 3. Hibernate · 4. MySql·

## 6 UML Diagram

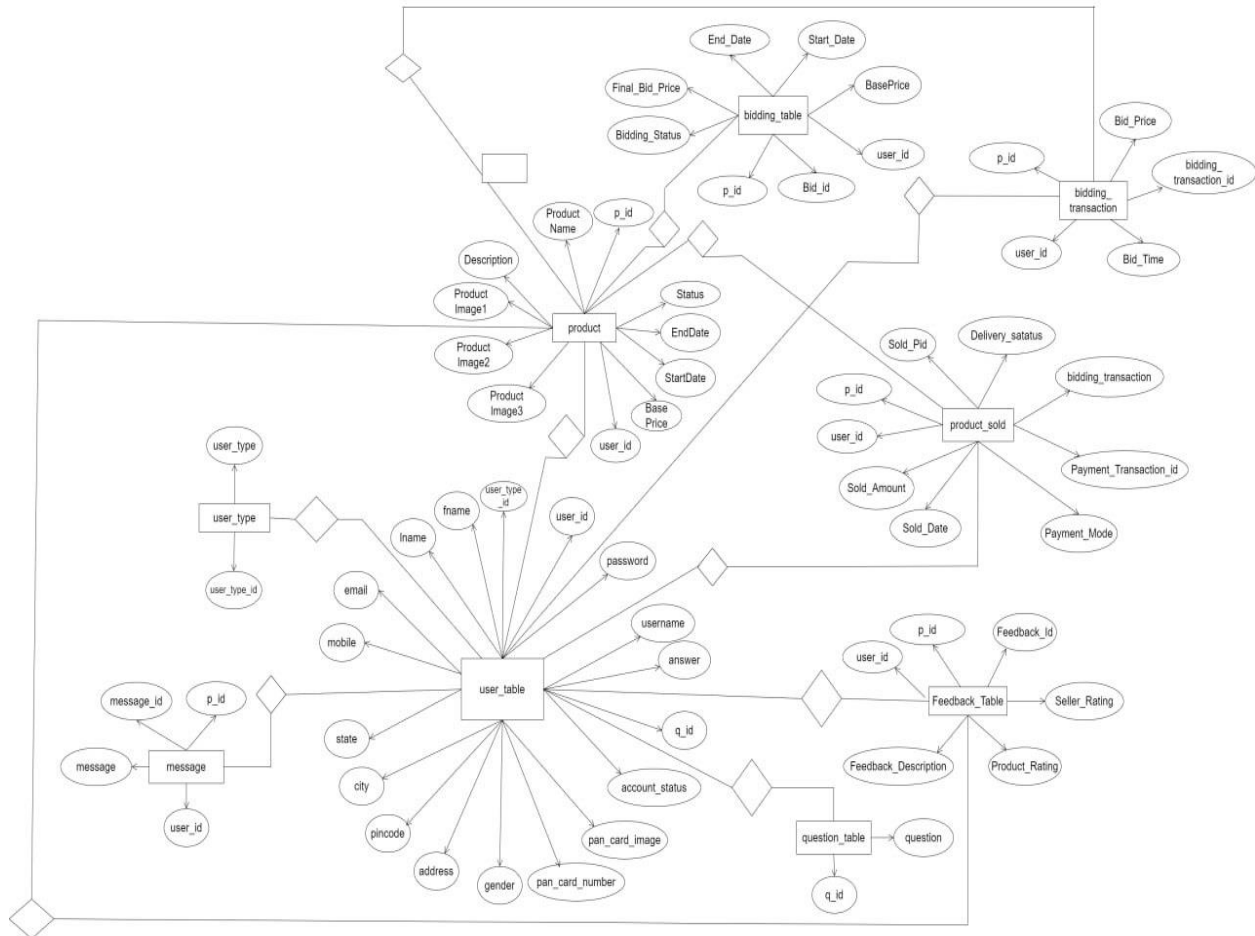
### 6.1 DFD:



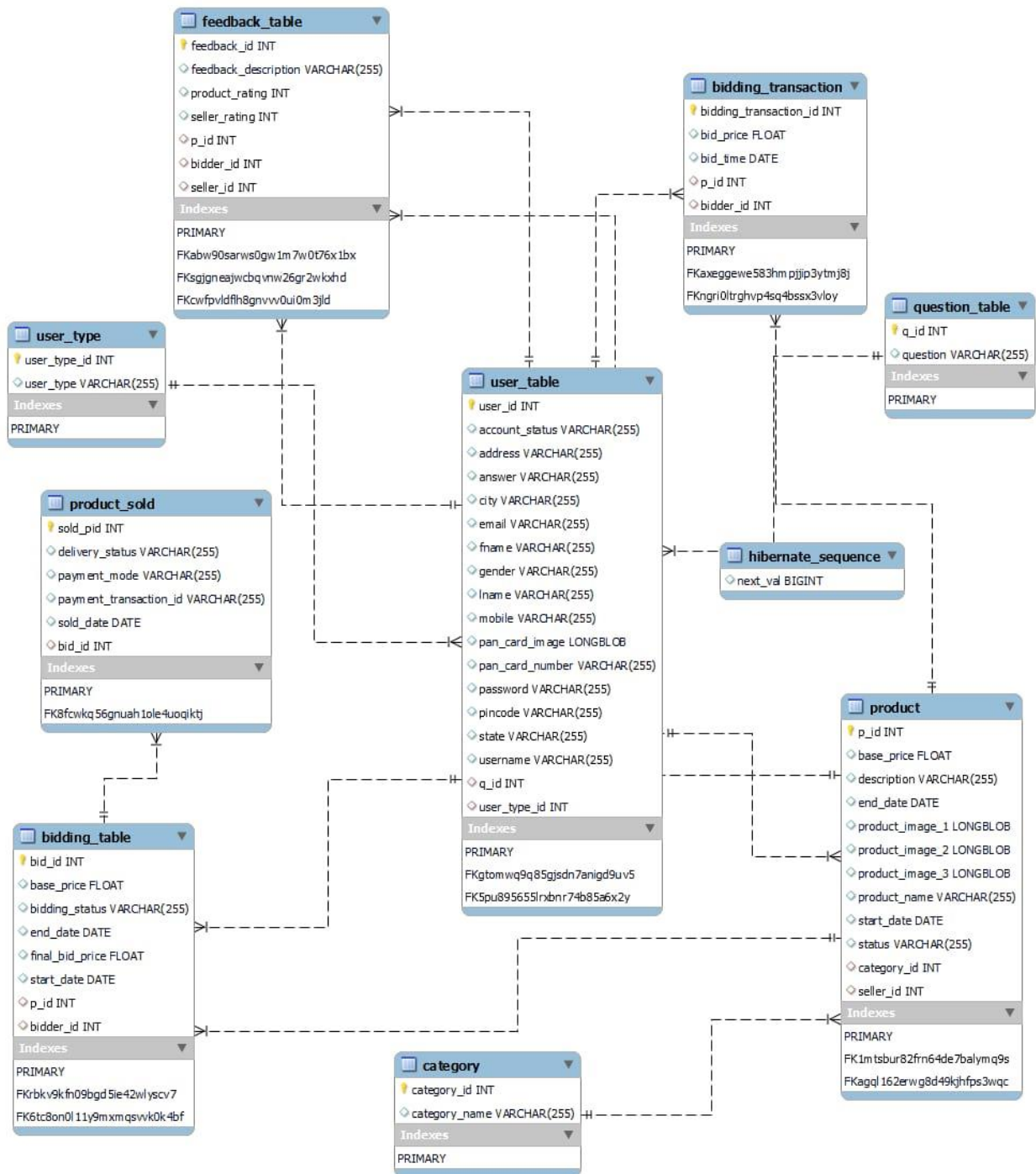


**DFD LEVEL 1**

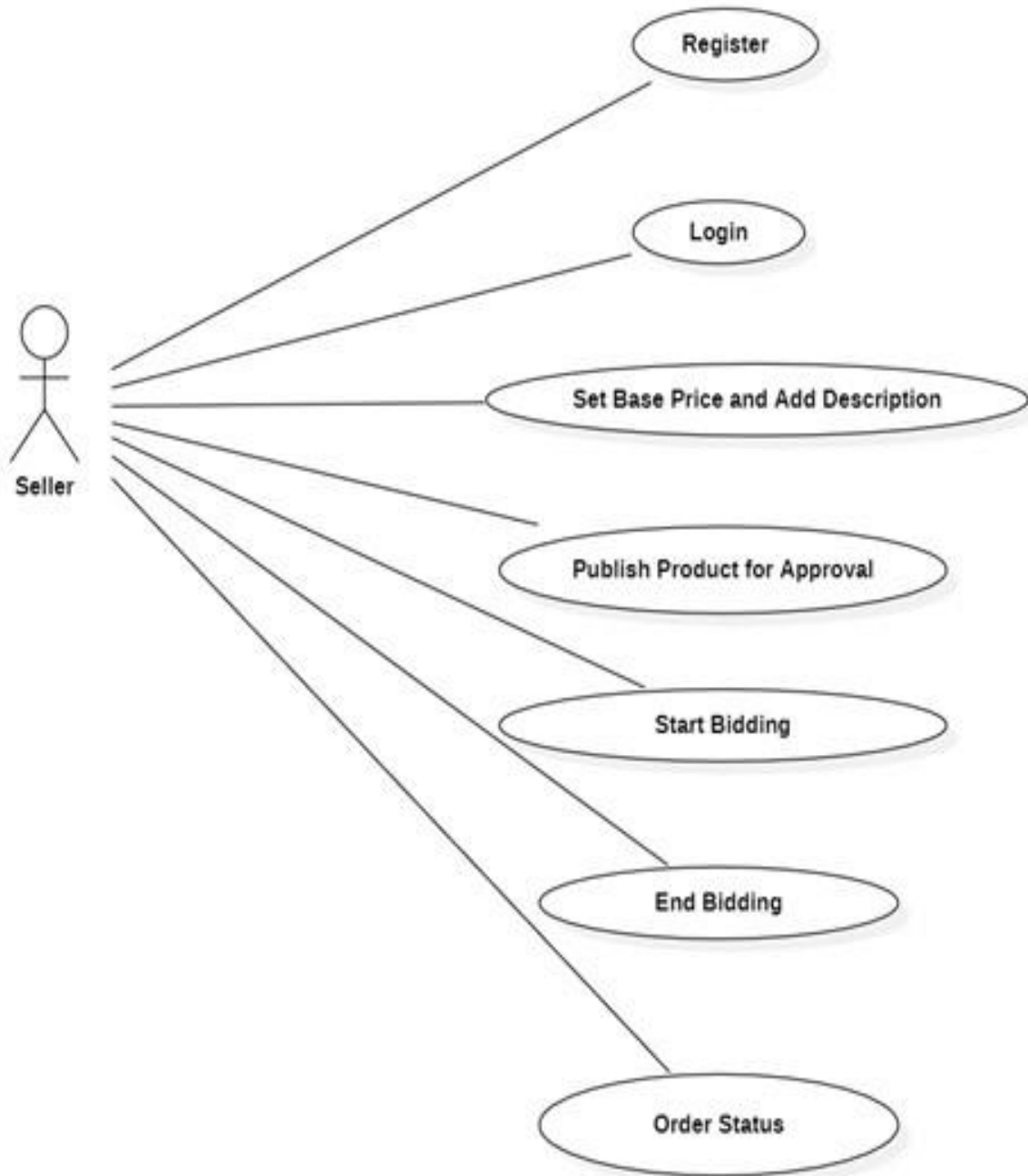
## 6.2 ERD :

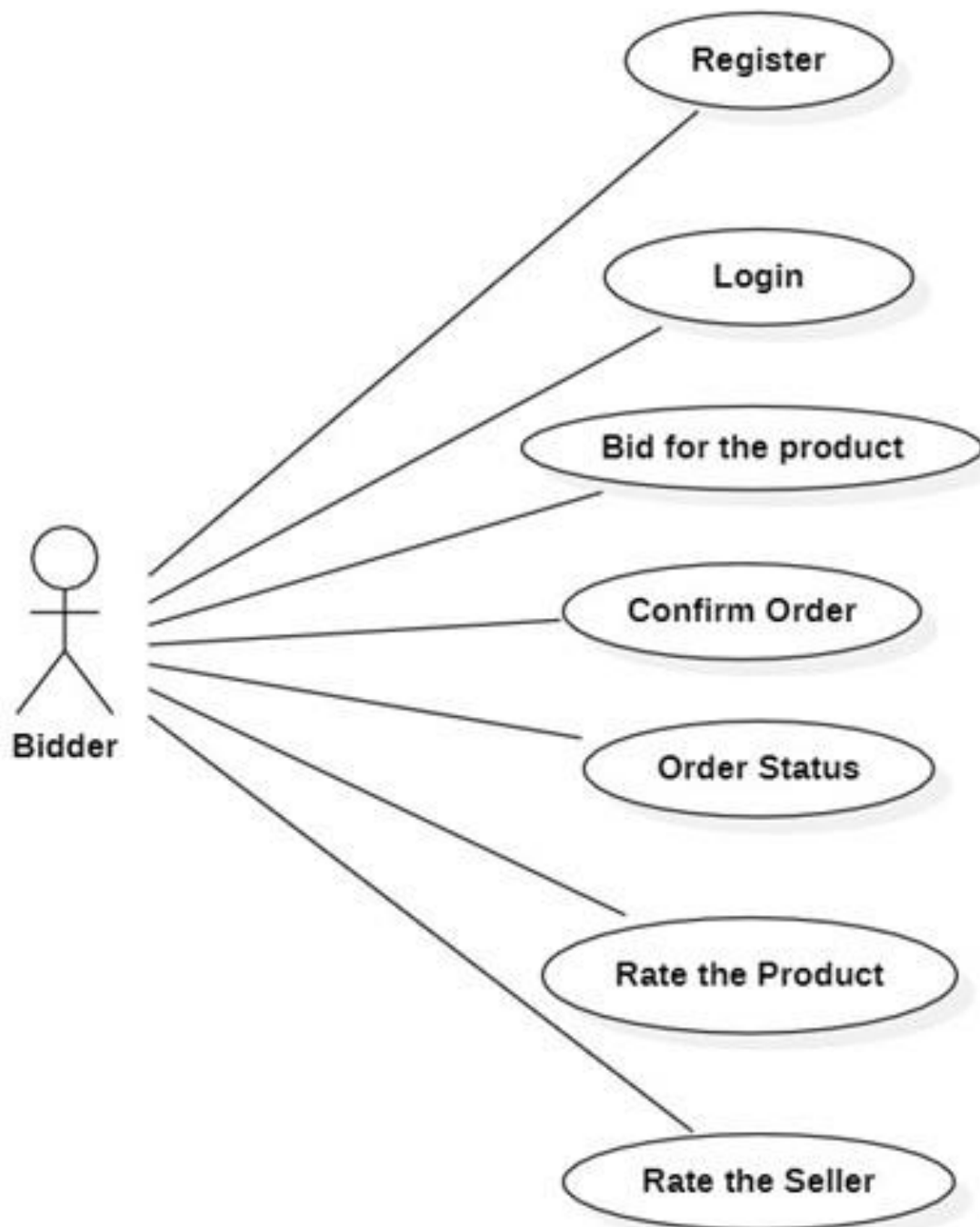


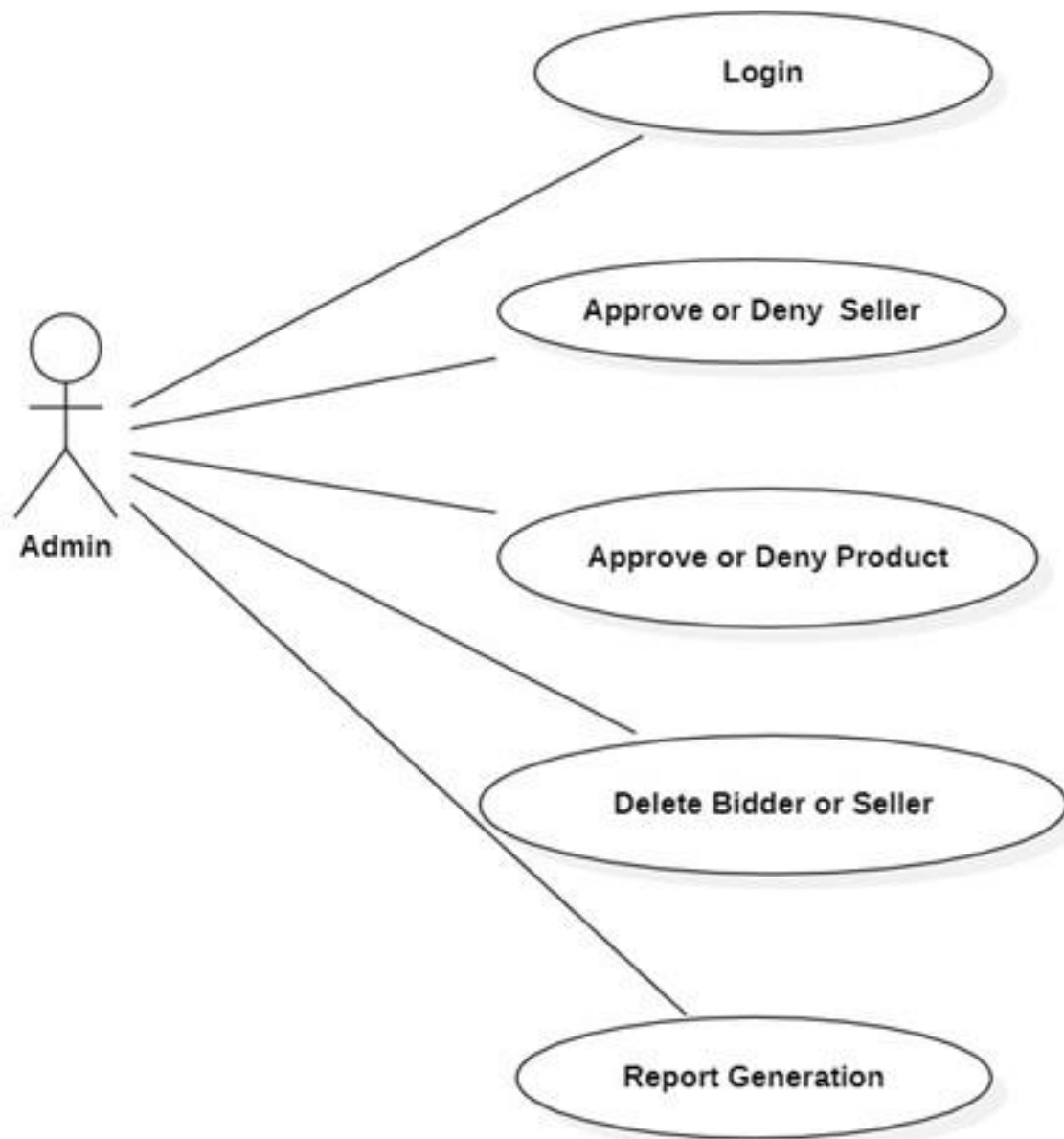




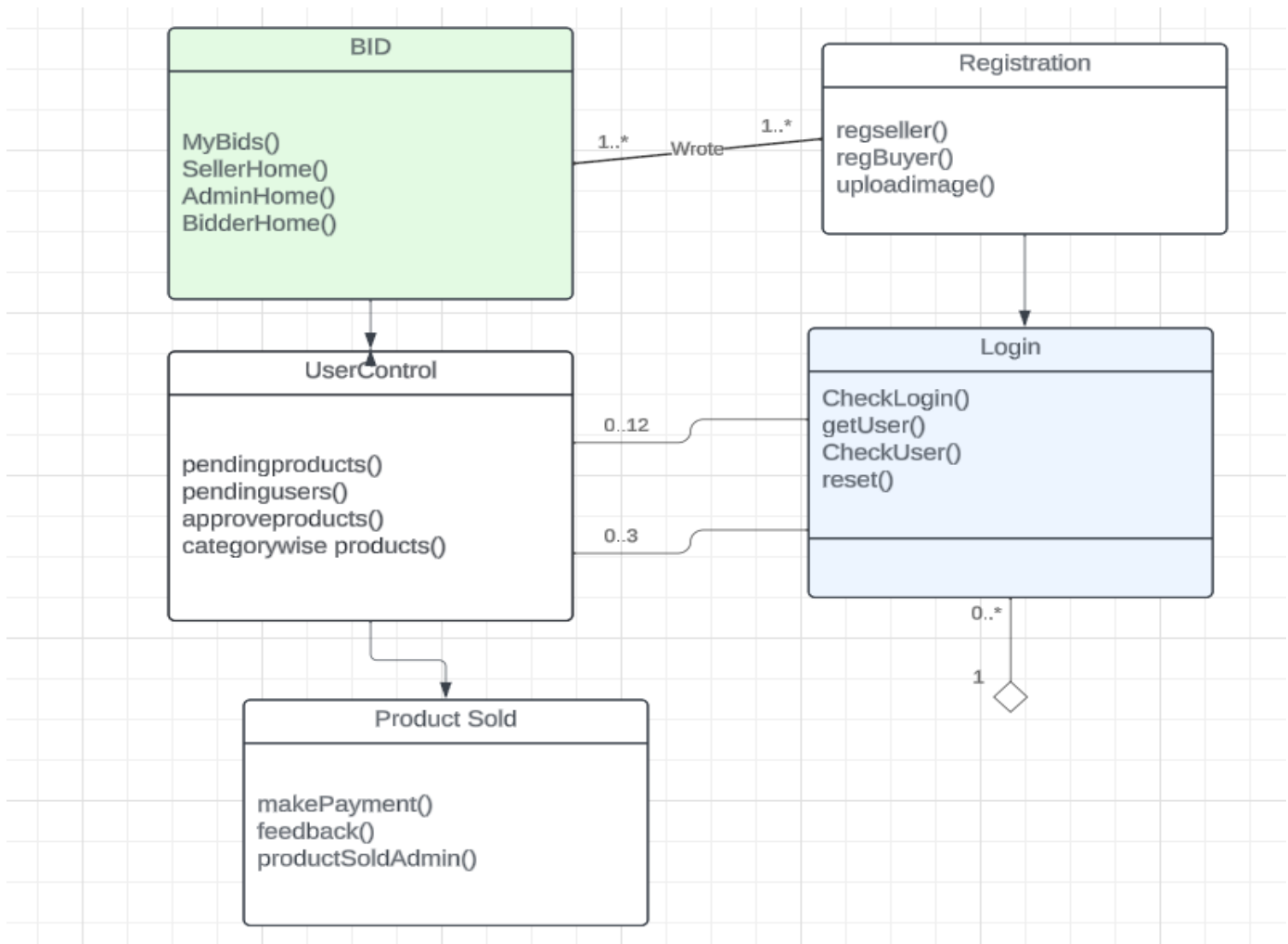
### 6.3 Use case diagram:







## 6.4 Class Diagram:



## 6.5 Sequence diagram:

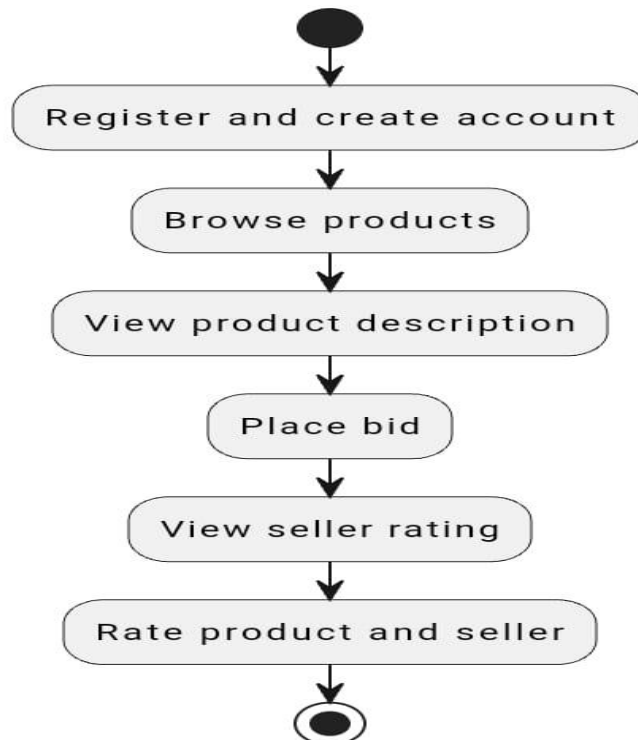


## 6.6 Activity Diagram:

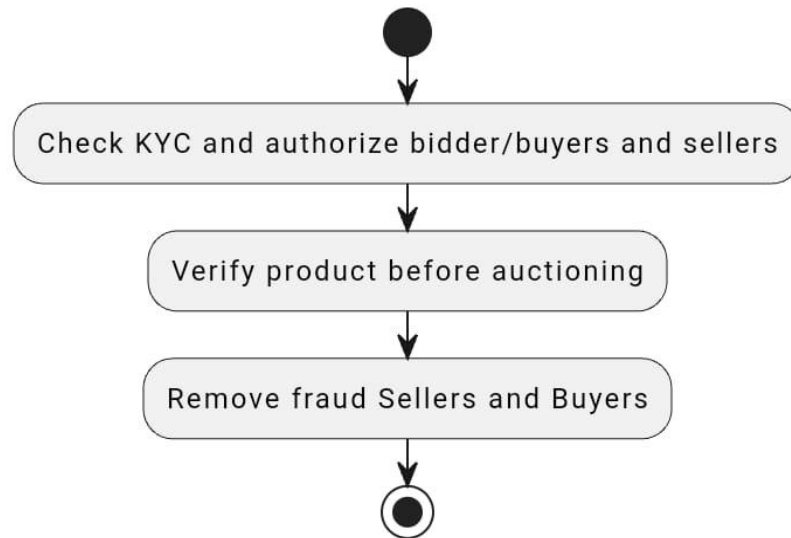
- **SELLER ACTIVITY DIAGRAM :**



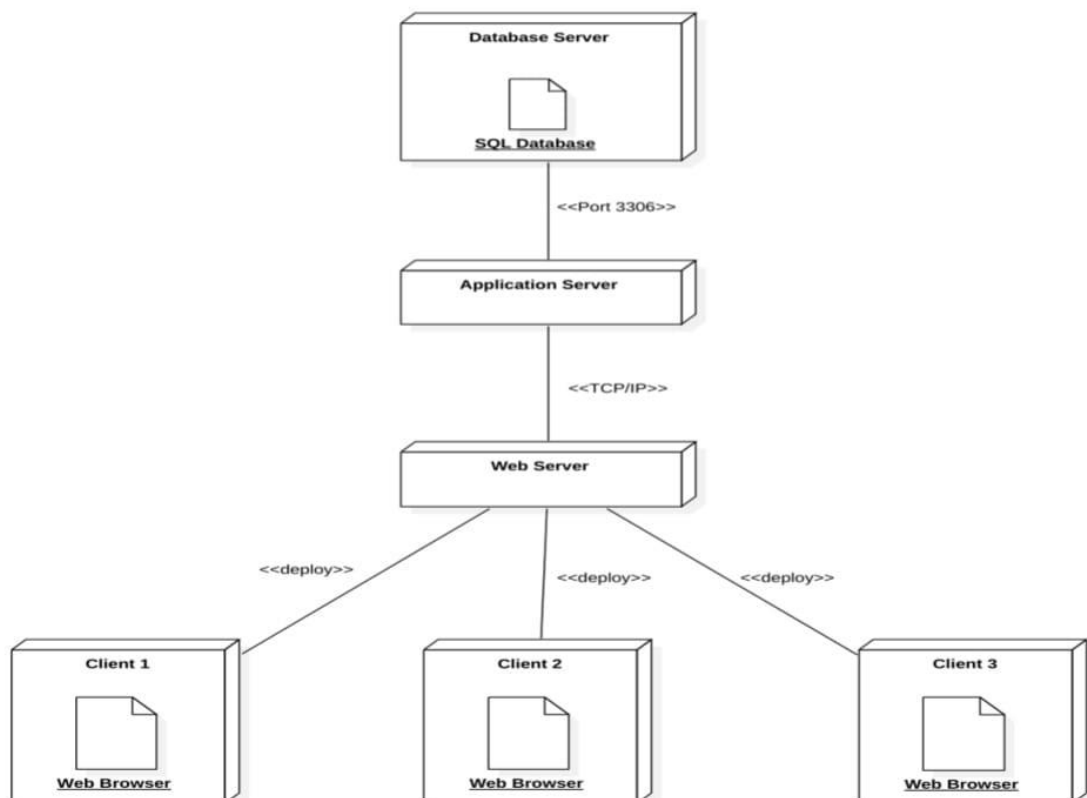
- **BUYER ACTIVITY DIAGRAM:**



- **ADMIN ACTIVITY DIAGRAM:**

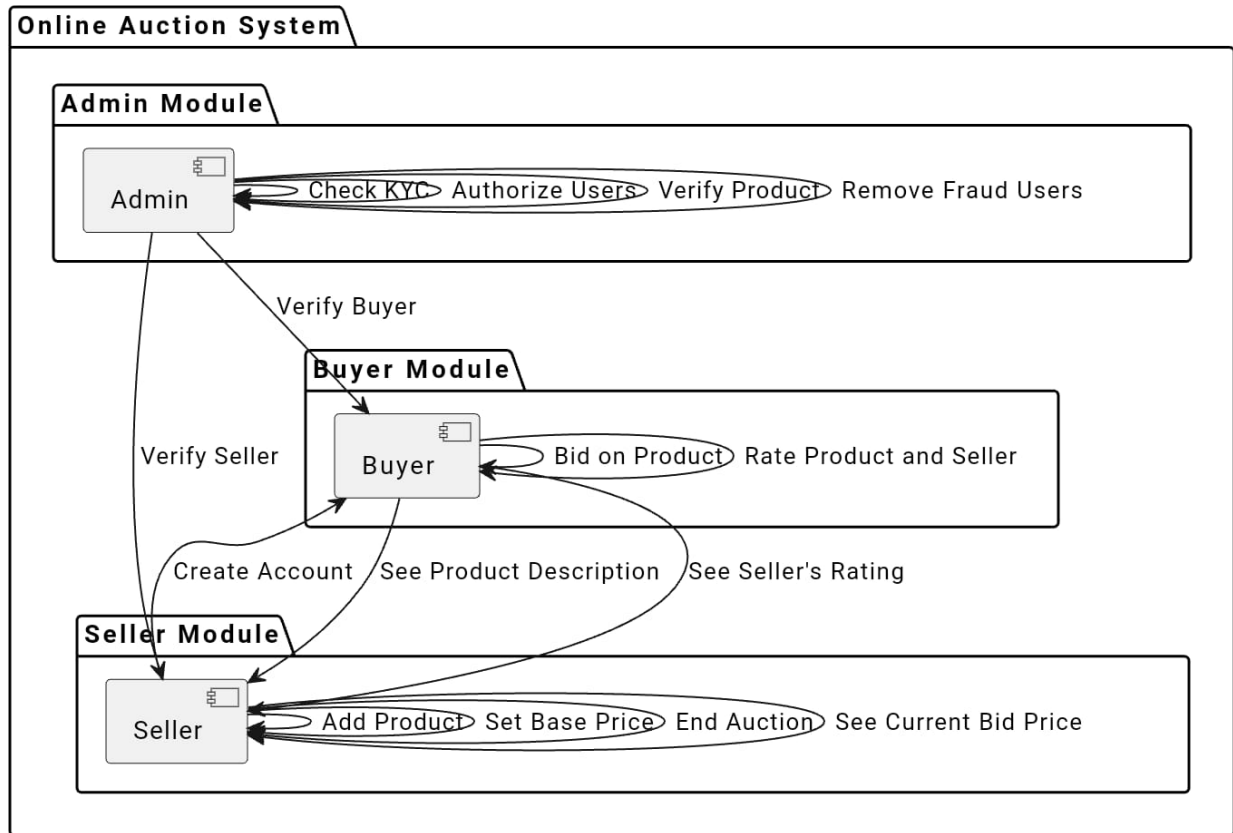


## 6.7. Deployment diagram:





## 6.8. System Architecture

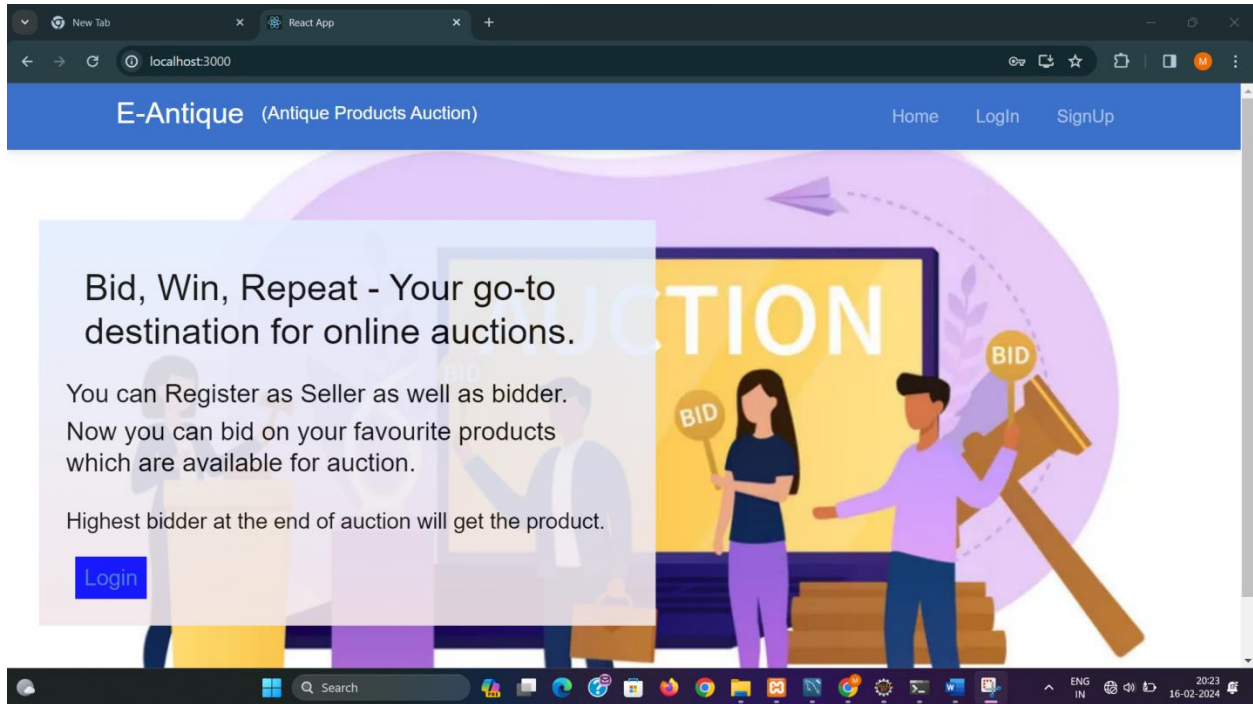


## 7. Test Cases:

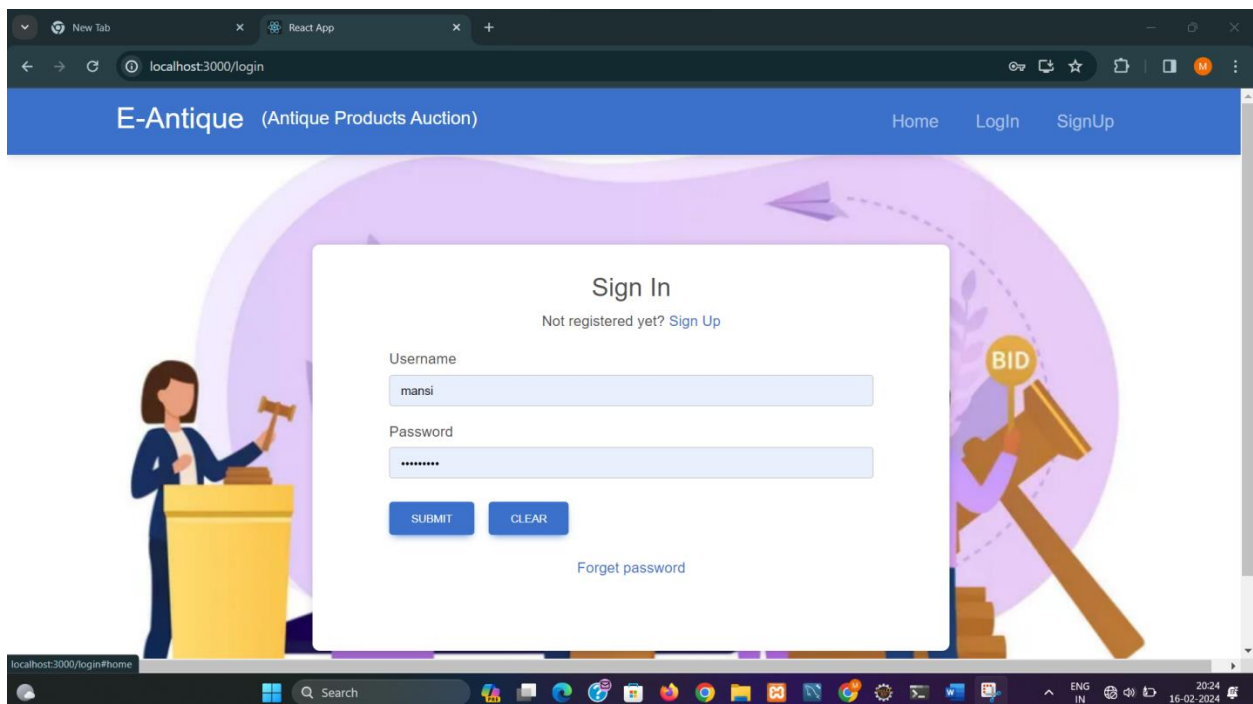
Test Case ID	Test Case Description	Test Steps	Expected Result	Pass/Fail
TC001	User Registration	1. Navigate to the registration page. 2. Enter valid user details. 3. Submit the registration form.	User is successfully registered, and a confirmation message is displayed.	Pass
TC002	User Login	1. Navigate to the login page. 2. Enter valid credentials. 3. Click on the login button.	User is successfully logged in, and the system redirects to the user's dashboard.	Pass
TC003	Create Auction Listing	1. Log in as a seller. 2. Fill ADD FORM	Request is successfully sent to admin	Pass
TC004	See All Ongoing Auction which seller created	1. Log in as a seller. 2. Navigate to an "Ongoing Auction".	List of ongoing auctions display	Pass
TC005	See all sold products Of seller	1. Log in as a seller 2. Navigate to an "Product Sold".	List of all sold products display	Pass
TC006	Test Case ID	Test Case Description	Bid is successfully placed, and the bid amount is updated in real-time.	PASS
TC007	TC001	User Registration	List of all purchased product will be shown	PASS
TC008	TC002	User Login	User is approved	PASS
TC009	TC003	Create Auction Listing	Product is approved	PASS
TC010	TC004	See All Ongoing Auction which seller created	USER IS Logout	PASS

## 8 Screenshots:

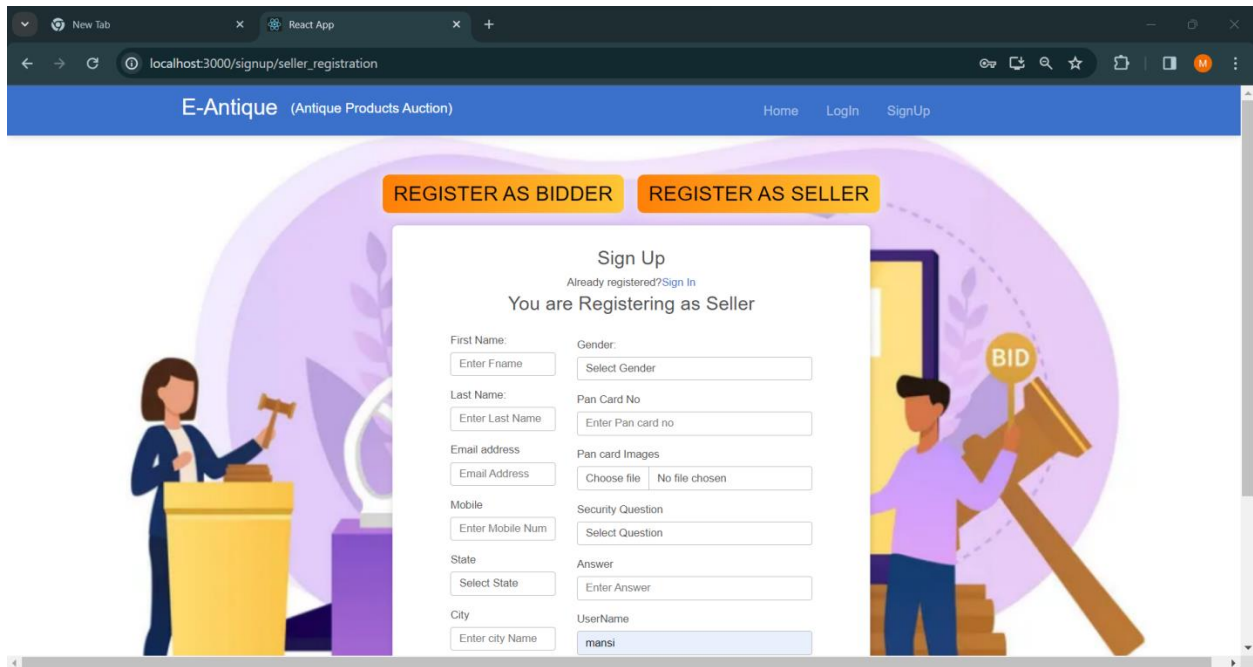
### 8.1 Home Page:



### 8.2 Sign In Page:



## 8.3 Registration Page:

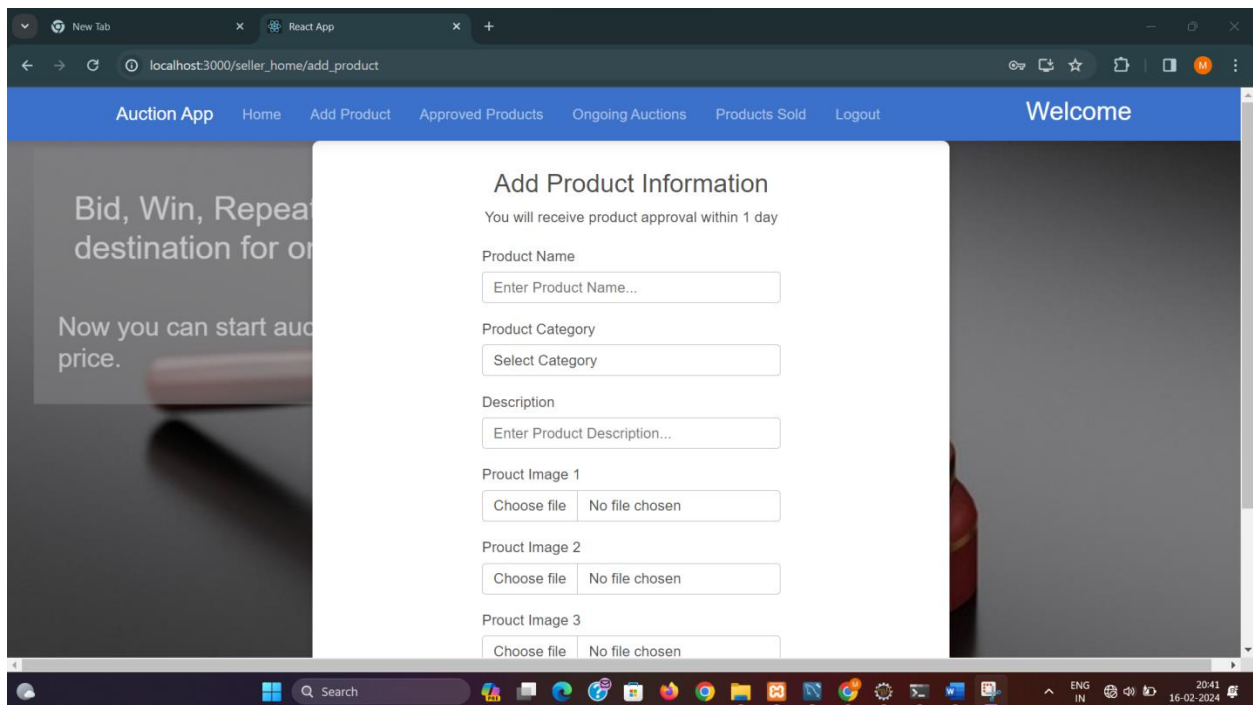


The screenshot shows a web browser window with the URL `localhost:3000/signup/seller_registration`. The page has a blue header with the text "E-Antique (Antique Products Auction)" and navigation links for "Home", "Login", and "SignUp". Below the header, there are two orange buttons: "REGISTER AS BIDDER" and "REGISTER AS SELLER". The "REGISTER AS SELLER" button is active, leading to a "Sign Up" form. The form title is "Sign Up" with a link "Already registered? Sign In". Below the title, it says "You are Registering as Seller". The form contains the following fields:

- First Name:
- Gender:
- Last Name:
- Pan Card No:
- Email address:
- Pan card Images:
- Mobile:
- Security Question:
- State:
- Answer:
- City:
- UserName:

The background of the page features an illustration of a woman at a podium and a man holding a "BID" sign.

## 8.4 Seller Add Product Page

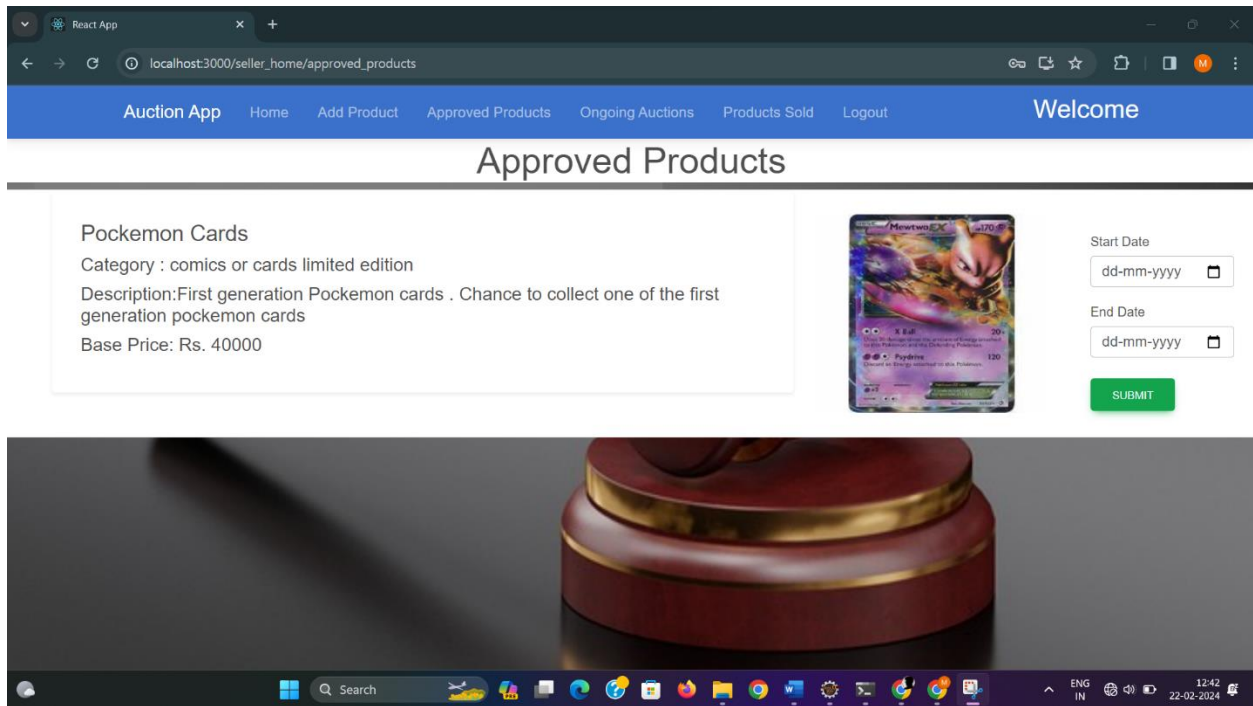


The screenshot shows a web browser window with the URL `localhost:3000/seller_home/add_product`. The page has a blue header with the text "Auction App" and navigation links for "Home", "Add Product", "Approved Products", "Ongoing Auctions", "Products Sold", and "Logout". On the right side of the header, it says "Welcome". The main content area has a dark background with a large text overlay: "Bid, Win, Repeat destination for o" and "Now you can start auc price.". In the center, there is a white box titled "Add Product Information" with the text "You will receive product approval within 1 day". The form contains the following fields:

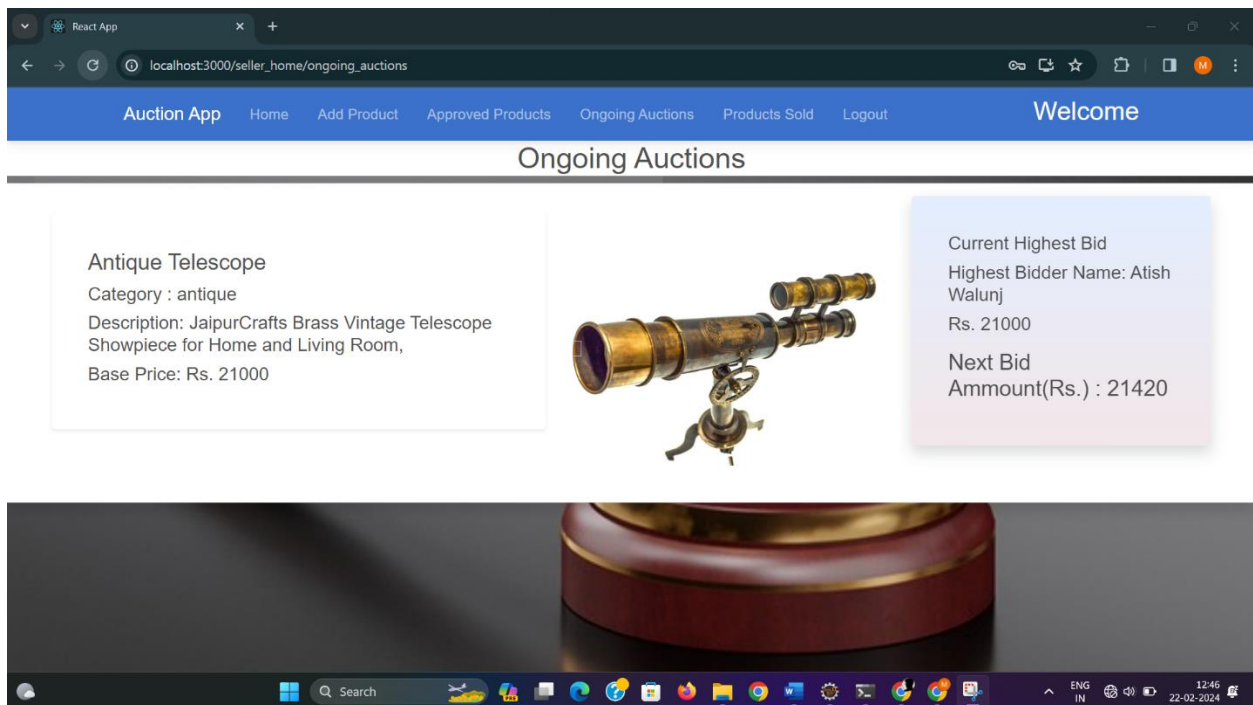
- Product Name:
- Product Category:
- Description:
- Prouct Image 1:
- Prouct Image 2:
- Prouct Image 3:

The Windows taskbar is visible at the bottom of the screen.

## 8.5 Seller Approve Product Page:



## 8.6 Seller Ongoing Auctions Page:



## 8.7 Seller Product Sold Page:

The screenshot shows the 'Products Sold' page in the Auction App. The browser address bar displays 'localhost:3000/seller\_home/products\_sold'. The navigation bar includes 'Auction App', 'Home', 'Add Product', 'Approved Products', 'Ongoing Auctions', 'Products Sold' (highlighted), and 'Logout'. A 'Welcome' message is on the right. The main content area features a product listing for a 'Vintage Brass Pot'. The product details include: Product Name: 'Vintage Brass Pot| Pot planter| Holy Water pot|', Product Category: 'antique', Product Description: 'The vintage Indian pot is a rare collectable and carries religious values. It has been beautifully carved. Handmade by artisans ,the workmanship is difficult to replicate.', Product Base Price(Rs.): 50000, Product Purchased at(Rs.): 52020, Bidder Name: Atish Walunj, and Bidder Mobile Number: 9309385221. An image of the brass pot is shown. To the right, auction details are listed: Auction Start Date: 2024-02-20, Auction End Date: 2024-02-20, and Feedback: 'very good product'. Below the product listing is a large image of a wooden gavel resting on a wooden block. The Windows taskbar at the bottom shows the time as 13:08 on 22-02-2024.

Product Name: **Vintage Brass Pot| Pot planter| Holy Water pot|**  
Product Category: antique  
Product Description: The vintage Indian pot is a rare collectable and carries religious values. It has been beautifully carved. Handmade by artisans ,the workmanship is difficult to replicate.  
Product Base Price(Rs.): 50000  
Product Purchased at(Rs.): 52020  
Bidder Name: Atish Walunj  
Bidder Mobile Number: 9309385221

Auction Start Date : 2024-02-20  
Auction End Date : 2024-02-20  
Feedback: very good product

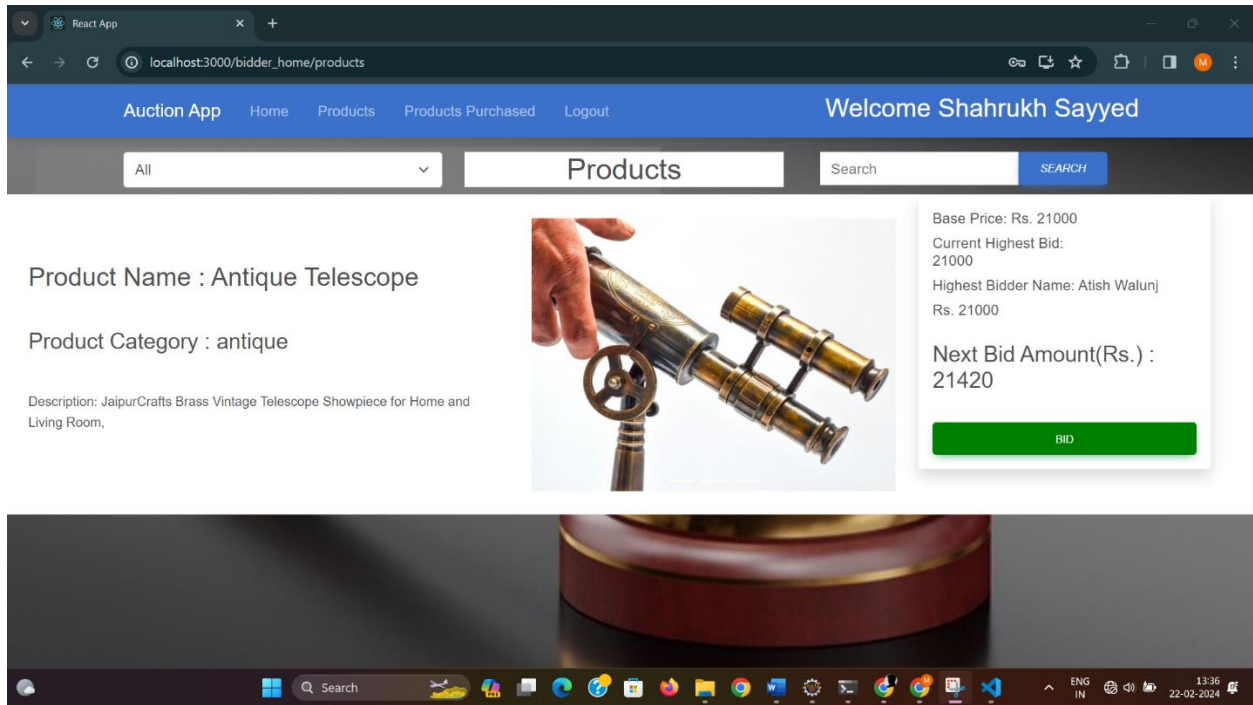
## 8.8 Bidder Products Page:

The screenshot shows the 'Products' page in the Auction App for a bidder. The browser address bar displays 'localhost:3000/bidder\_home/products'. The navigation bar includes 'Auction App', 'Home', 'Products' (highlighted), 'Products Purchased', and 'Logout'. A 'Welcome Atish Walunj' message is on the right. Below the navigation bar is a search bar with a dropdown menu set to 'All', a 'Products' label, a search input field, and a 'SEARCH' button. The main content area features a product listing for an 'Antique Telescope'. The product details include: Category: 'antique', Description: 'JaipurCrafts Brass Vintage Telescope Showpiece for Home and Living Room,', Base Price: Rs. 21000, Current Highest Bid: 21000, Highest Bidder Name: Atish Walunj, Rs 21000, and Next Bid Amount(Rs.): 21420. An image of the antique telescope is shown. Below the product listing is a large image of a wooden gavel resting on a wooden block. The Windows taskbar at the bottom shows the time as 13:15 on 22-02-2024.

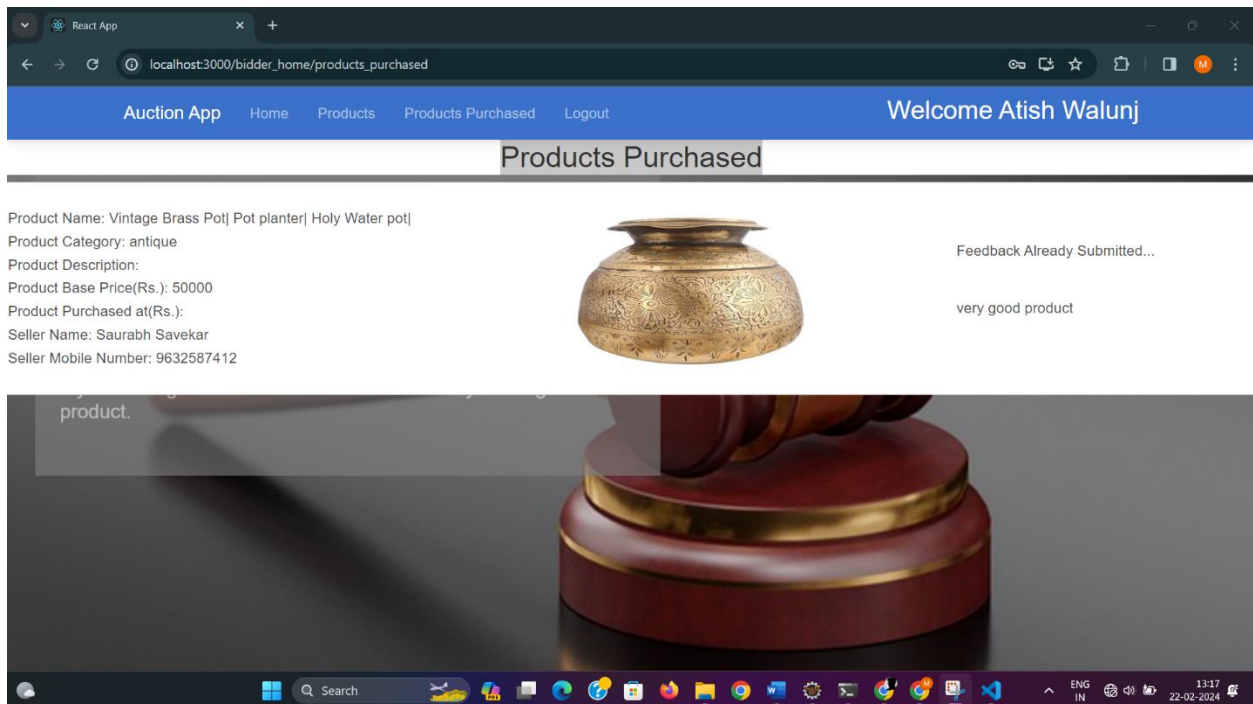
Antique Telescope  
Category :antique  
Description: JaipurCrafts Brass Vintage Telescope Showpiece for Home and Living Room,

Base Price: Rs. 21000  
Current Highest Bid: 21000  
Highest Bidder Name: Atish Walunj  
Rs 21000  
Next Bid Amount(Rs.) : 21420





## 8.9 Bidder Products Purchase Page:



## 8.10 Admin Home Page:

The screenshot shows the Admin Home Page with the title "Auctions Ended". The page lists three auctioned items:

- Item 1:** Product Name: Vintage Brass Pot| Pot planter| Holy Water pot| antique. Seller Name: Saurabh Savekar. Base Price: 50000. Bidder Name: Atish Walunj. Final Bid Price: 52020. Payment status: payment done.
- Item 2:** Product Name: Egyptian Artifact. Seller Name: Saurabh Savekar. Base Price: 40000. Bidder Name: Atish Walunj. Final Bid Price: 40000. Payment status: Payment not done yet.
- Item 3:** Product Name: MS Dhoni signed jersey. Seller Name: Saurabh Savekar. Base Price: 10000. Bidder Name: Shahrukh Sayyed. Final Bid Price: 106121. Payment status: Payment not done yet.

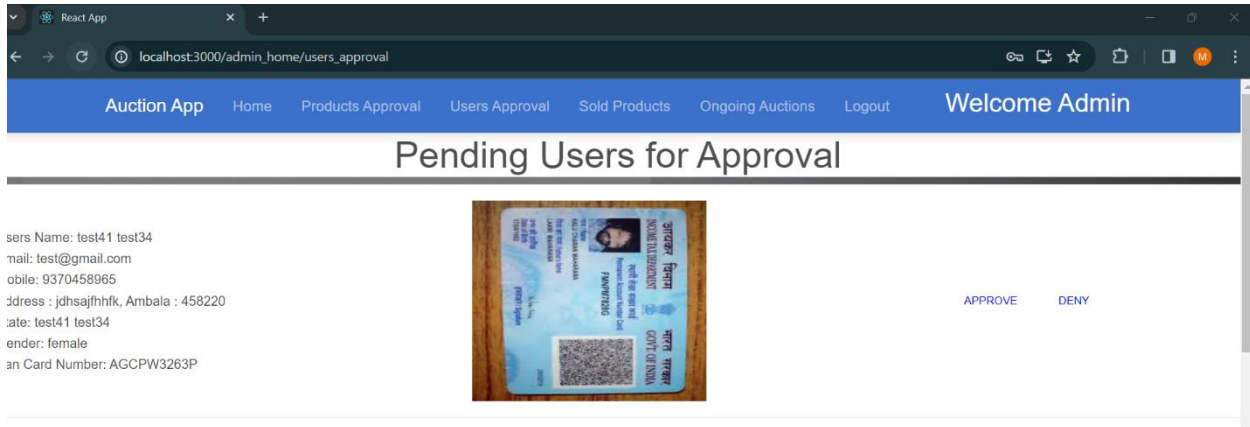
## 8.11 Admin -Pending Products For Approval Page

The screenshot shows the Admin -Pending Products For Approval Page with the title "Pending Products for Approval". The page lists two items pending approval:

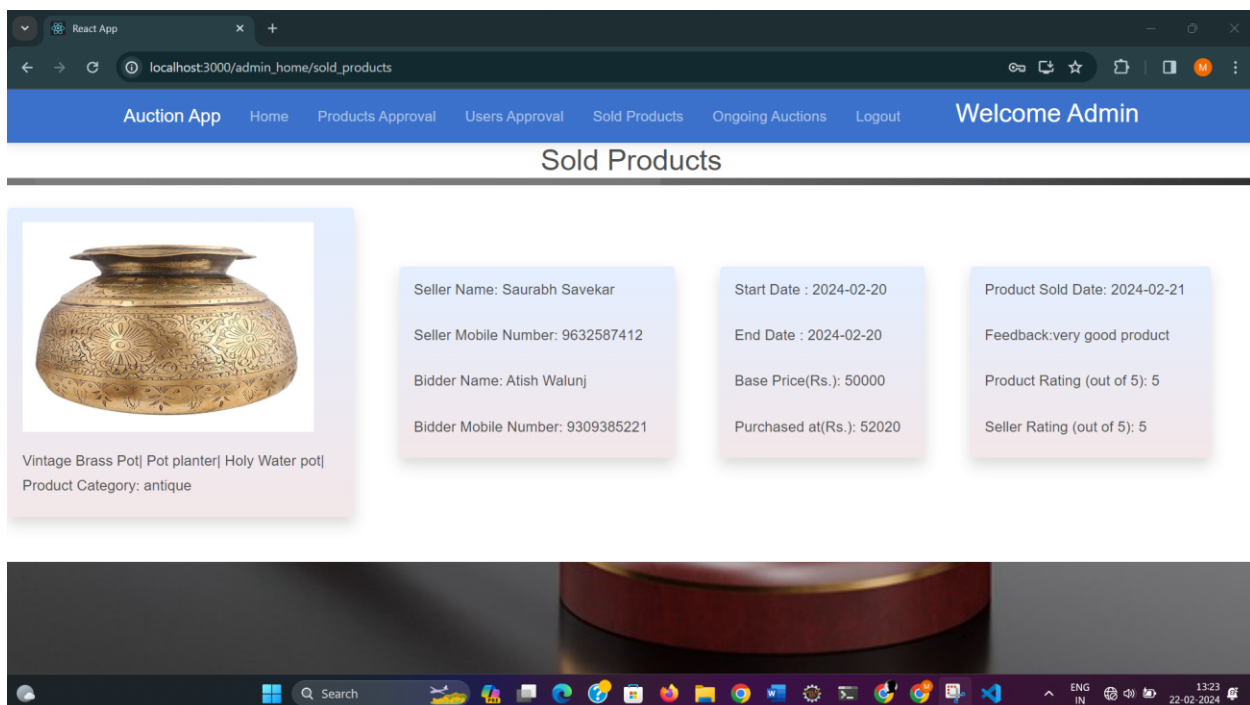
- Item 1:** Product Name: Peacock Painting. Product Description: In traditional Asian culture, the peacock is the King of all birds. It is early 1900s Realist Antique Peacock Painting. Product Category: painting. Base Price: ₹ 25000. Seller Name: Saurabh Savekar. Status: APPROVE / DENY.
- Item 2:** Product Name: Gramophone. Product Description: A gramophone plays recorded music of any form. Title Gramophone 1990. Product Category: antique. Base Price: ₹ 30000. Seller Name: Saurabh Savekar. Status: APPROVE / DENY.



## 8.12 Admin -Pending Users For Approval Page



## 8.13 Admin – Sold Products Page



## 8.14 Admin – Ongoing Auction Page

The screenshot shows a web browser window displaying the 'Ongoing Auctions' page of an 'Auction App'. The browser's address bar shows 'localhost:3000/admin\_home/ongoing\_auctions'. The app's navigation bar includes links for 'Home', 'Products Approval', 'Users Approval', 'Sold Products', 'Ongoing Auctions', and 'Logout'. A 'Welcome Admin' message is visible in the top right corner of the app interface.

The main content area is titled 'Ongoing Auctions' and features a card for an 'Antique Telescope' auction. The card is divided into three sections:

- Product Details:**
  - Product Name: Antique Telescope
  - Category : antique
  - Description: JaipurCrafts Brass Vintage Telescope Showpiece for Home and Living Room,
  - Base Price: Rs. 21000
  - Seller Name: Saurabh Savekar
- Image:** A photograph of a hand holding a brass vintage telescope.
- Auction Details:**
  - Start Date: 2024-02-20
  - End Date: 2024-02-22
  - Current Highest Bid
  - Highest Bidder Name: Atish Walunj
  - Rs. 21000
  - Next Bid Ammount(Rs.) : 21420

The bottom of the screenshot shows a Windows taskbar with various application icons and a system clock indicating 13:26 on 22-02-2024.

## 9. References:

1. <https://www.ebay.com>
2. <https://www.ebid.net>
3. <https://salasarauction.com>
4. 'People no longer go into antiques shops'-  
<https://www.bbc.com/news/business-45186811>
5. Github Link: [aksh-200/Online-auction-system \(github.com\)](https://github.com/aksh-200/Online-auction-system)
6. [React js, CSS, Html, Bootstrap- Prachi Godbole Notes](#)
7. [Spring Boot – Kishori Khadilkar Notes](#)
8. [MySql- Saleel Kulkarni Notes](#)