# Proposal Document: Auction Management System

## Program Overview:

The Online Auction Management System is a software application designed to facilitate the buying and selling of items. The system provides a user-friendly environment for users to participate in auctions, manage their accounts, and track their transactions. It allows for efficient management of auctions, items, bids, and user accounts.

## End User Roles:

### 1. Admin:

The Admin role is responsible for overseeing the entire auction platform. Admin has access to privileged functionalities that allow them to manage users, auctions, and monitor the overall system performance. They can also perform administrative tasks such as blocking/unblocking sellers, generating summary reports.

### 2. Seller:

Sellers are registered users who can list items for auction on the platform. They have the ability to add, edit, and remove items, as well as view the status of their ongoing auctions. Sellers can also manage their funds, and view transaction histories.

### 3. Buyer:

Buyers are registered users who participate in auctions by placing bids on items. They have the ability to view available items, search for specific items, and monitor the status of ongoing auctions. Buyers can also view their winning bids, generate bills for purchased items, and manage their budgets.

## Modules and Functions:

### User Management Module:

1. **User Authentication:** Verify Every Username and Password Before each Login Try
2. **User Registration:** Allows Newcomers to Register their Accounts
3. **User Login:** Allows Registered Users to Login to their Specified Portals
4. **Load Data (File Handling):** Load Data from Existing Files to be used in Program
5. **Save Data (File Handling):** Save Data to the Files to be used in Future
6. **View All Users:** Allows Admin to See Everyone in a list Format Having Account in the Program
7. **Delete Any Users:** Allows Admin to Delete Any User Account in the Program
8. **View Particular Seller Info:** Allows Admin to See a Particular Seller’s Info
9. **Block/Unblock Any Seller:** Allows Admin to Block or Unblock any Particular Seller

### Auction Management Module:

1. **Bidding Function For an Item:** Allows Buyers to Bid on a Particular Item
2. **Terminate Any Auction Before Time:** Allows Admin to Terminate Any Auction Before Time (Due to Less than 3 Bidders for the Auction Item – The Item will not be sold)
3. **View Ongoing Auctions:** Allows Admin and Buyer to see List of All Ongoing Auctions
4. **View Auction Status:** Allows Seller to See if its Auction Item is Ongoing, Terminated or Expired.
5. **Redo Any Concerned Auction:** Allows Admin to Redo Any Item’s Auction
6. **Generate Overall summary on Auctions in a Table Format:** Shows Admin a Complete Tabled Summary of Almost Everything happening in Program

### Item Management Module:

1. **Add Item for Auction for a Particular Time with Fee Deduction Based on Time:** Allows Sellers to Add any Item for the Auction with taking Essential Details about the whole Item (like Attributes, Design, Time/Date Limit for the Expiry of the Auction Item etc.) and Before Addition Deduct Money from Seller as a Fee charged to Hold his Item for a Particular Time.
2. **Remove a Particular Item:** Allows Sellers to Remove a Particular Item
3. **Edit Particular Item Details:** Allows Sellers to Edit the Details of a Particular Item
4. **View Only Items of the Seller (Previous & Current):** Allows Sellers to See their List of all Items for Auction until Now.
5. **Find Items:** Allows Buyers to find a Particular Item for Auction.
6. **View Expired Auction Items:** Shows Expired Items List to Admin (All Items) and Sellers (Only their Expired Ones)
7. **View Won Auction Items:** Allows Buyers to See their Won Auction Items

### Budget Management Module:

1. **Budget Management for Sellers:** Allows Sellers to Manage their Budget (Money) Engaged in Program
2. **Budget Management for Buyers:** Allows Buyers to Manage their Budget (Money) Engaged in Program

### Delivery Module:

1. **Get Personal Details of Buyer for Delivery:** Asks Buyer to give his Personal Details including Address and Deduct charges of Delivery Before Confirmation
2. **View Delivery Status:** Allows Buyer to view Status of Delivery (One of the Following: 1 – In-Transit 2 – Delivered etc.)
3. **View Delivery History:** Allows Buyer to view Details of Delivery History

### Referral Module:

1. **Referral Discount for New Buyer:** When a new buyer registers and is referred by an existing user, they will receive a discount on their first purchase.
2. **Commission for Existing Buyer:** The existing buyer who referred the new buyer will receive a commission in their budget.

### Payment and Transaction Module:

1. **Process Payment:** Allows buyers to make payments for won auctions.
2. **Billing:** Generate Bill for buyers After winning auctions.
3. **View Transactions:** Enables users to view their transaction history.

## Conclusion:

The Online Auction Management System aims to provide a secure and efficient platform for users to engage in online auctions. With distinct roles for Admins, Sellers, and Buyers, each user can access functionalities tailored to their specific needs. The various modules cater to key aspects of the auction process, from item listing to payment processing and shipment tracking. This proposal outlines the essential features and functionalities of the system, ensuring a seamless and satisfying user experience.