

## **Auction System Project Documentation**

### **Project Description:**

This Auction System serves as a platform for users to engage in transparent and efficient buying and selling experiences. With a user-friendly interface and robust functionality, the Auction System will have four key features:

#### **Add Product for Auction:**

This function allows users to seamlessly add products to the auction inventory. Through an interface, user can input essential details such as name, product name, product type, initial bid price and user CNIC. The system ensures a smooth onboarding process for diverse products, enhancing the variety available for auction.

#### **Remove Product:**

User can efficiently manage their inventory by utilizing the "Remove Product" feature. Whether an item is no longer available, or the seller wishes to withdraw it from auction consideration, this function provides a straightforward mechanism for product removal. It contributes to maintaining an updated and relevant auction catalog.

#### **Start Auction:**

Users can initiate auctions for selected products, triggering dynamic bidding rounds. The system automatically updates and tracks current bid values, ensuring a fair and competitive environment until the auction concludes. This feature guarantees an engaging and responsive auction experience.

#### **Show All Products:**

Enhancing transparency and accessibility, the "Show All Products" function offers a comprehensive view of the entire auction inventory. Users, both sellers and buyers, can quickly peruse the catalog, gaining insights into the diverse array of products available for bidding. This feature fosters informed decision-making and encouraged active participation in the auction process.

#### **Maintaining Auction History:**

The system will automatically store all the data into a file when the user exits the program. The system will provide the history of all the products that were listed for Auction.