Project Brief: Online Auction System

Overview:
The Online Auction System is a Python-based application designed to facilitate secure and efficient online auctions, allowing users to buy and sell items from the comfort of their homes. This system is particularly beneficial as it saves time and money by eliminating the need for physical auction settings.

Key Features:
1. Sell Items:
   - Users can create auctions by listing items for sale, specifying a starting bid amount, and providing their name as the auctioneer.
   - Each auction is added to the sales list, making it available for bidding by other users.

2. Buy Items:
   - Users can view all available auctions in a neatly formatted table that displays the auction details, including the item name, starting bid, current bid, highest bidder, and the auction's status.
   - Users can place bids on items they are interested in, and if their bid is the highest, it becomes the new current bid.
   - After bidding, users have the option to close the auction, finalizing the sale to the highest bidder.

3. Auction Management:
   - The system allows users to continuously interact with the auction list, either by adding new auctions or bidding on existing ones.
   - Once an auction is closed, the item is considered sold, and a message confirming the sale is displayed.
   - Closed auctions are automatically removed from the active sales list.

4. User-Friendly Interface:
   - The system presents a simple menu-driven interface, allowing users to easily navigate between selling, buying, and exiting the application.
   - Auction details are displayed in a table format using the `PrettyTable` module, enhancing readability and organization.

Benefits:
- Secure and Convenient: Users can engage in auctions without leaving their homes, ensuring a secure and convenient experience.
- Time and Cost-Efficient: The online nature of the system reduces the need for physical venues and associated costs.
- Flexible Participation: Users can act as both bidders and auctioneers, increasing their engagement and potential profit.
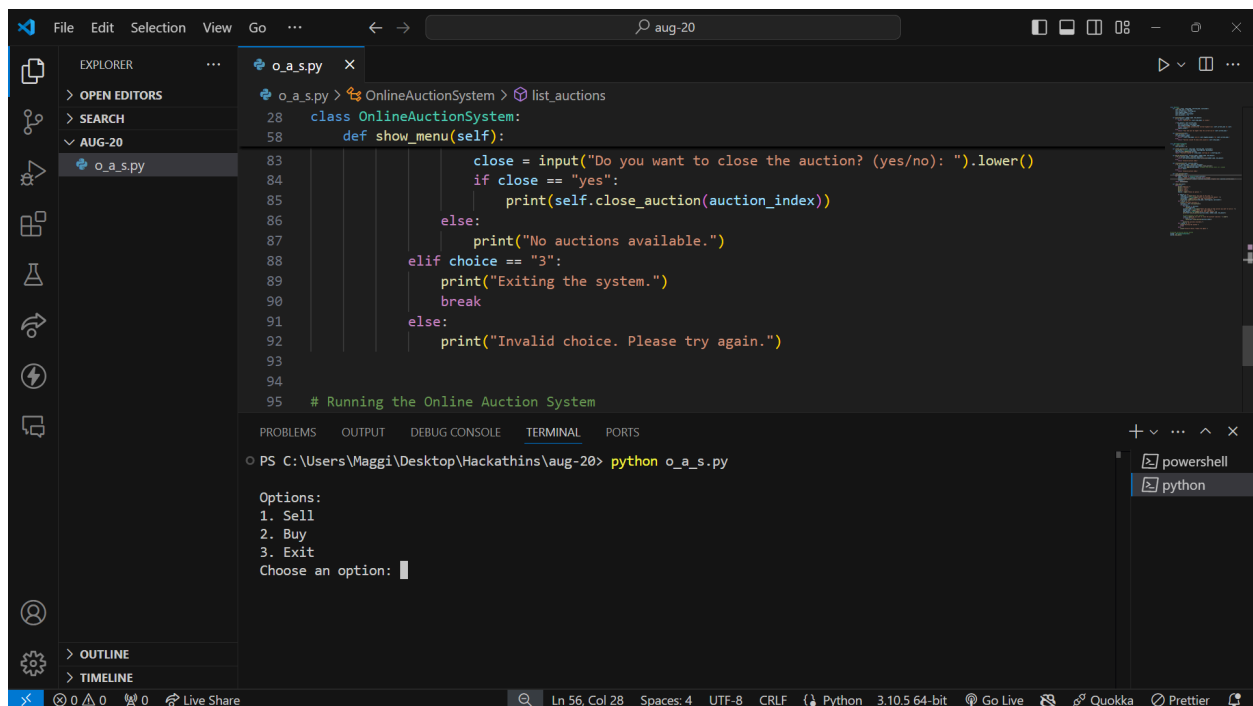
Technologies Used:
- Python: Core programming language used to develop the application.
- PrettyTable: Python library used to display auction details in a tabular format within the console.

Conclusion:
The Online Auction System is an efficient solution for conducting online auctions, offering a simple yet powerful interface that caters to both buyers and sellers. The system's design ensures ease of use, making it accessible to a wide range of users, whether they are tech-savvy or not.

Screenshots:

Sell:

```
2. Buy
3. Exit
Choose an option: 1
Enter the name of the item: Monalisa
Enter the starting bid amount: 300
Enter your name (Auctioneer): Meghana
Auction created for Monalisa starting at $ 300.0.
```

Buy:

```
2. Buy
3. Exit
Choose an option: 2

Current Auctions:
0: Monalisa (Highest bid: 300.0) - Open
Enter the index of the auction you want to bid on: 0
Enter your name (Bidder): puppy
Enter your bid amount: 1200
Bid placed successfully! Current highest bid: 1200.0 by puppy
Do you want to close the auction? (yes/no): yes
Monalisa sold to puppy for 1200.0.
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