



Student Support Team
Office Academic Lab

National CyberCity
Narawat Street and
ShweTawWin Street2

Purpose: To enhance students' logical and critical thinking skills in computer science and programming in Myanmar and globally. The Quality Control Department of National Cyber City creates each and every question.

Programming Language and Framework: Python Programming
Question:

Assignment Question:1

Design and implement a Python program for an Auction Management System using the concept of file input/output as a simple database. The program should allow users to perform various auction-related operations, and the data should be stored and retrieved from text files.

Requirements:

1. User Registration:

- Implement a feature for users to register with the system. Collect necessary information such as username, password, and contact details.

2. Auction Creation:

- Allow registered users to create auctions. Each auction should have a unique identifier, a title, a description, and a designated auction end time.

3. Bidding:

- Enable users to place bids on active auctions. Each bid should be associated with a specific auction, and the system should track the highest bidder.

4. Auction Status:

- Display the status of each auction, including details like the current highest bid, time remaining, and the username of the highest bidder.

5. File Database:

- Implement file input/output for storing and retrieving data related to users, auctions, and bids. Use separate text files for each type of data (e.g., users.txt, auctions.txt, bids.txt).

6. Error Handling:

- Include appropriate error handling mechanisms for cases such as invalid input, non-existing auctions, or attempting to bid after an auction has ended.

7. User Interface:

- Create a simple CLI(command line interface) to interact with the system. Allow users to navigate through different options using a menu system.

8. Documentation:

- Provide comments and documentation for your code to explain the purpose of each function, the structure of the program, and how the file input/output operations are handled.

9. Testing:

- Test your program with various scenarios, including user registration, auction creation, bidding, and edge cases. Ensure that the file database is updated correctly.

10. Submission:

- Submit your Python program along with a brief report that explains the design choices, challenges faced, and any improvements or extensions you would consider for future versions.

Note: Feel free to add any additional features or enhancements to make your Auction Management System more robust and user-friendly.

Time Consumption: This program should take roughly 1 month to complete.

Please use the following link to upload your program's file. Don't forget to zip up the entire program files. We only accept .zip file type.

Link: <https://forms.gle/PNKi7VD4nh7MZtuz8>

Student Support Services

National Cyber City

Narawat Street and ShweTawWin Street2

w/51 ,

+959453741976

Founder and CEO

Win Htut



