EVENT TICKETING SYSTEM

TEAM MEMBERS:

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PROJECT SUMMARY

This project is designed to create a python-based event ticketing system that manages ticket sales by prioritizing VIP requests and processing them first-come, first-served. Users can register, purchase tickets, and select between VIP or Regular ticket types, with real-time updates on availability. The system logs all transactions to a text file and handles errors gracefully. While the non-functional requirement calls for a text-based interface, a graphical user interface (GUI) using Tkinter has been implemented to enhance usability and provide clear, intuitive controls, aligning with the project's goal of ease of use and clarity. The design utilizes priority queues to efficiently manage requests and ensure smooth operation even under high demand.

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PROCESS OVERVIEW

Algorithm

1. **Start**
2. **Main Menu**
    - **Options:**
        1. Register for a Ticket
        2. Process next Ticket
        3. Show Ticket Availability
        4. Show Transaction Log
        5. Cancel Ticket Request
        6. Exit
3. **Register for a Ticket:**
    - Prompt for First Name
    - Validate First Name
    - Prompt for Last Name
    - Validate Last Name
    - Combine Names
    - Check for Existing Registration
    - Prompt for Ticket Type (VIP/Regular)
    - Register Ticket
    - Update Availability
    - Log Transaction
4. **Process Next Ticket:**
    - Check VIP Queue
    - Process VIP Ticket
    - Update Log
    - If no VIP, Check Regular Queue

- Process Regular Ticket
- Update Log

5. **Cancel Ticket Request:**
    - Prompt for First Name
    - Prompt for Last Name
    - Validate Ticket
    - Confirm Cancellation
    - Update Availability
    - Log Cancellation
6. **Show Transaction Log:**
    - Display Log in Table Format
7. **Show Ticket Availability:**
    - Display Remaining Tickets
8. **Exit:**
    - End Program

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FLOW CHART

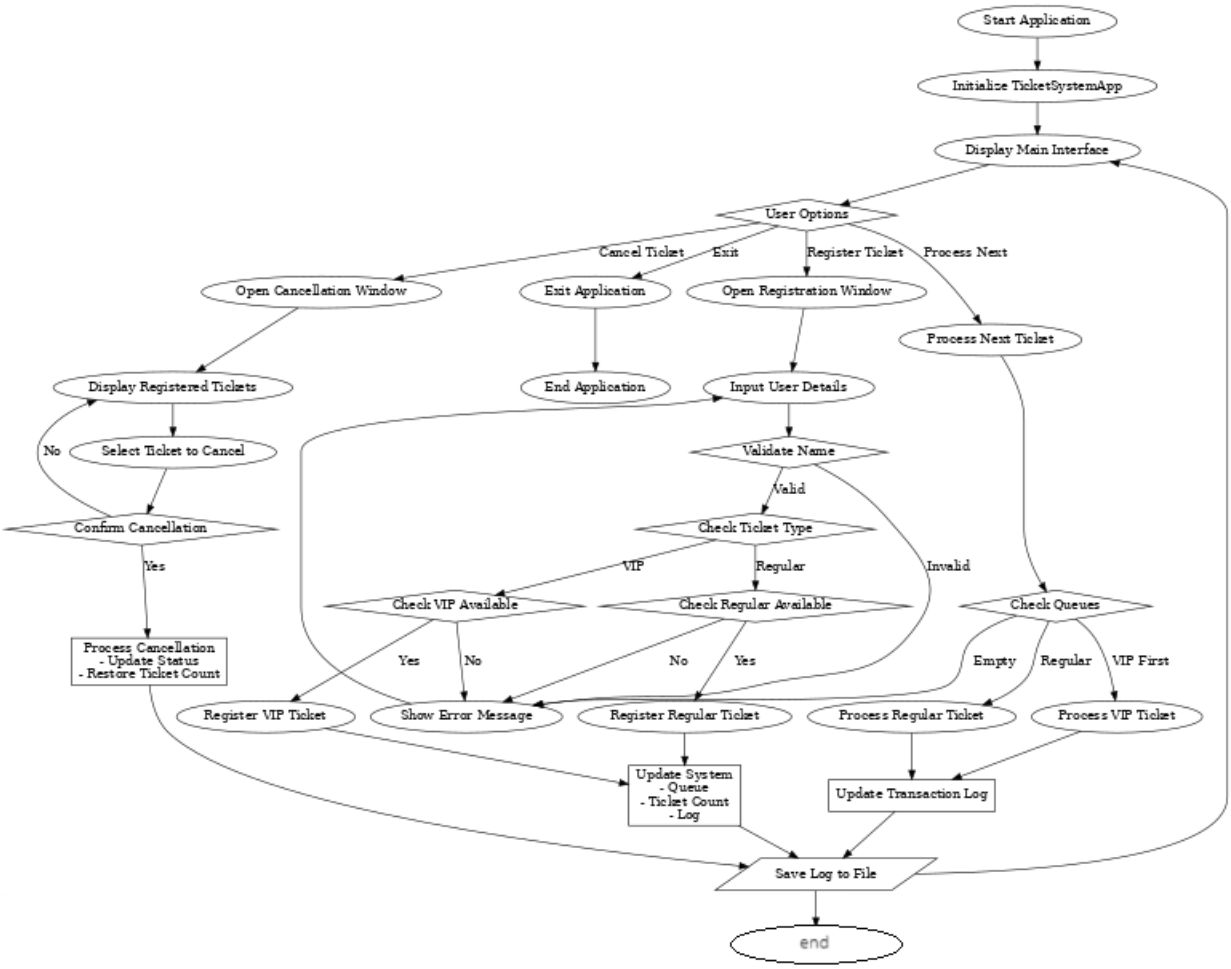

Figure 1: Flow chart