**Project Name: Bank Queue Management System (BQMS)**

**Objective:**

To develop a console-based application in C++ that efficiently manages customer queues in a bank, assigning customers to tellers for service, and minimizing wait times.

**Core Features:**

1. **Customer Queue Management**: Implement a Queue to manage customers waiting for service. The Queue should support basic operations like enqueue (customer arrival), dequeue (customer served), and display (current queue status).
2. **Teller Assignment**: Simulate multiple tellers in the bank, each capable of serving customers. You can use an Array or a Linked List to manage tellers, with each teller being either available or busy.
3. **Service Time Simulation**: Randomly assign a service time to each customer-teller interaction to simulate real-world variability. This will require managing teller availability and updating it as customers are served.
4. **Priority Queue Option**: For a more advanced implementation, introduce a priority queue for certain customers, such as those with special needs, elderly customers, or premium account holders, ensuring they are served more quickly.
5. **Waiting Time Analysis**: Calculate and display metrics such as average waiting time, average service time, and teller utilization rates to evaluate the efficiency of the queue system.

**Data Structures to Use:**

* **Queue**: For managing customers waiting for service.
* **Array/Linked List**: For handling multiple tellers.
* **Priority Queue (Optional)**: For managing priority customers.

**Advanced Features (Optional):**

* **Dynamic Teller Allocation**: Implement logic to dynamically add or remove tellers based on the queue length to optimize wait times and teller utilization.