

Assignment 4

Basic Banking System Implementation in Dart

Objective:

To practice basic concepts of procedural programming in Dart by implementing a comprehensive banking system with additional features.

Instructions:

1. Implement Bank Account Functionality:

- Use maps to store account details such as `accountNumber`, `accountHolder`, and `balance`.
- Implement functions to deposit and withdraw funds.

2. Implement Common Operations:

- Implement standalone functions for common operations such as deposit, withdraw, and check balance.
- Ensure these functions can handle multiple accounts.

3. Add Transaction History:

- Implement functionality to track transaction history for each account. Use lists or other data structures to store transaction records.
- Each transaction should include details such as transaction type (deposit/withdrawal), amount, and date/time.

4. Implement Account Management:

- Create functions to add new accounts and remove existing accounts.
- Implement a function to search for an account by account number.

5. Implement Account Limits:

- Introduce account limits such as minimum balance requirements or withdrawal limits.
- Ensure these limits are enforced in the deposit and withdrawal functions.

6. Test Your Implementation:

- Use lists or other data structures to create and manage multiple accounts.

- Perform deposit, withdrawal, balance check, and transaction history retrieval operations.

Note Guidelines:

- Ensure your code is well-commented and easy to understand.
- Test your implementation thoroughly to handle various scenarios.