### **Banking Application Use Cases**

# **UC1:** New User Registration

- Overview: Allows a new user to register by providing their details and an initial deposit.
- Related use cases: UC8 (Admin Approve Account Creation Requests)
- Actors: New UserPre Conditions: None
- **Post Conditions:** New user account request is added to the account creation requests file

### **UC2: Existing User Login**

- Overview: Allows an existing user to log in using their credentials.
- Related use cases: UC3 (Withdraw), UC4 (Deposit), UC5 (View Transactions), UC6 (Display Balance), UC7 (Request Deletion), UC9 (Admin Login)
- **Actors:** User
- **Pre Conditions:** User must have an existing account.
- **Post Conditions:** User is logged into their account and shown the user menu.

#### **UC3: Withdraw**

- Overview: Allows a user to withdraw funds from their account.
- Related use cases: UC2 (Existing User Login)
- Actors: User
- **Pre Conditions:** User must be logged in and have sufficient balance.
- **Post Conditions:** Withdrawal is recorded in the user's transaction history and balance is updated.

#### **UC4: Deposit**

- **Overview:** Allows a user to deposit funds into their account.
- Related use cases: UC2 (Existing User Login)
- **Actors:** User
- **Pre Conditions:** User must be logged in.
- **Post Conditions:** Deposit is recorded in the user's transaction history and balance is updated.

## **UC5: View Transactions**

- **Overview:** Allows a user to view their transaction history.
- Related use cases: UC2 (Existing User Login)
- **Actors:** User
- **Pre Conditions:** User must be logged in.
- **Post Conditions:** Transaction history is displayed to the user.

### **UC6: Display Balance**

- **Overview:** Allows a user to view their current account balance.
- Related use cases: UC2 (Existing User Login)
- **Actors:** User
- **Pre Conditions:** User must be logged in.
- **Post Conditions:** Current balance is displayed to the user.

#### **UC7: Request Account Deletion**

- Overview: Allows a user to request account deletion.
- Related use cases: UC2 (Existing User Login), UC10 (Admin Approve Account Deletion Requests)
- **Actors:** User
- **Pre Conditions:** User must be logged in.
- **Post Conditions:** Account deletion request is added to the account deletion requests file.

### **UC8: Admin Approve Account Creation Requests**

- Overview: Allows an admin to approve new user account creation requests.
- Related use cases: UC1 (New User Registration), UC9 (Admin Login)
- Actors: Admin
- **Pre Conditions:** Admin must be logged in.
- **Post Conditions:** Approved account is added to the existing users file, and removed from the account creation requests file.

#### UC9: Admin Login

- Overview: Allows an admin to log in using their credentials.
- Related use cases: UC8 (Admin Approve Account Creation Requests), UC10 (Admin Approve Account Deletion Requests), UC11 (View All Accounts), UC12 (View Account Creation Requests), UC13 (View Account Deletion Requests)
- **Actors:** Admin
- **Pre Conditions:** Admin must have a valid account.
- **Post Conditions:** Admin is logged in and shown the admin menu.

### **UC10: Admin Approve Account Deletion Requests**

- Overview: Allows an admin to approve user account deletion requests.
- Related use cases: UC7 (Request Account Deletion), UC9 (Admin Login)
- **Actors:** Admin
- **Pre Conditions:** Admin must be logged in.
- **Post Conditions:** Approved account is removed from the existing users file and removed from the account deletion requests file.

#### **UC11: View All Accounts**

- Overview: Allows an admin to view all existing user accounts.
- Related use cases: UC9 (Admin Login)

- **Actors:** Admin
- **Pre Conditions:** Admin must be logged in.
- **Post Conditions:** List of all existing accounts is displayed to the admin.

## **UC12: View Account Creation Requests**

- **Overview:** Allows an admin to view all account creation requests.
- Related use cases: UC1 (New User Registration), UC9 (Admin Login)
- **Actors:** Admin
- **Pre Conditions:** Admin must be logged in.
- **Post Conditions:** List of all account creation requests is displayed to the admin.

# **UC13: View Account Deletion Requests**

- **Overview:** Allows an admin to view all account deletion requests.
- Related use cases: UC7 (Request Account Deletion), UC9 (Admin Login)
- **Actors:** Admin
- **Pre Conditions:** Admin must be logged in.
- **Post Conditions:** List of all account deletion requests is displayed to the admin.