

# DPS Project Requirements Specifications 2018

## Bank System Stories

1. **(SEC) Create password** - A password must have at least 1 alphanumeric, at least 1 special character, at least one lowercase character and at least one uppercase character with a minimum of 8 characters and a maximum of 20 characters.
2. **Account owner** - An account owner has Name (First Last), Account owner ID, password.

### Create Account Owner

Account Owner ID \_\_\_\_\_ (created and controlled by the system)

Name \_\_\_\_\_

Password \_\_\_\_\_ (maximum 6 characters)

Error Message \_\_\_\_\_ (hidden field unless there is an error)

Submit

Clear

1. **(SEC) Login lock out and unlock** - login is disabled after 2 failed login attempts. A new password must be created via an unlock operation. At the 2<sup>nd</sup> failed login the error message - Two failed login attempts – contact bank for password reset.

When another login is attempted the error message – Contact bank for password reset.

**Password Reset** Account Owner ID \_\_\_\_\_ Unlock Password \_\_\_\_\_

\_\_\_\_\_ New Password \_\_\_\_\_

Error Message \_\_\_\_\_ (hidden field unless there is an error)

Submit

Clear

1. **4. Create Account** - An account has an Account owner ID, unique account ID, an account type and a balance. The account types are checking and savings. Need GUI to create an account

### Create Account

Account ID \_\_\_\_\_ (created and controlled by the system)

Account Owner ID \_\_\_\_\_ Password \_\_\_\_\_

Account Type \_\_\_\_\_ (Initially only Checking and Savings)

Opening Balance \_\_\_\_\_

Error Message \_\_\_\_\_ (hidden field unless there is an error)

Submit

Clear

1. **5. Deposit** - An account owner may deposit money into their accounts.<sup>[1]</sup><sub>SEP</sub> Need GUI for a deposit

### Deposit

Deposit ID \_\_\_\_\_ (created and controlled by the system)

Account Owner ID \_\_\_\_\_ Password \_\_\_\_\_

Account ID \_\_\_\_\_

Deposit Amount \_\_\_\_\_

Error Message \_\_\_\_\_ (hidden field unless there is an error)

Submit

Clear

1. **6. Withdraw** - An account owner may withdraw money from their accounts.<sup>[1]</sup><sub>SEP</sub> The withdrawal amount may not be greater than the account balance.<sup>[1]</sup><sub>SEP</sub> Need GUI for a withdrawal

### Withdraw

Withdrawal ID \_\_\_\_\_ (created and controlled by the system)

Account Owner ID \_\_\_\_\_ Password \_\_\_\_\_

Account ID \_\_\_\_\_

Withdrawal Amount \_\_\_\_\_

Error Message \_\_\_\_\_ (hidden field unless there is an error)

Submit

Clear

1. **7. Transfer** - An account owner may transfer money from one of their accounts to another of their accounts<sup>[1]</sup><sub>SEP</sub>. The amount transferred must not be greater than the balance in the account from which it is being transferred.<sup>[1]</sup><sub>SEP</sub>

### Transfer

Transfer ID \_\_\_\_\_ (created and controlled by the system)

Account Owner ID \_\_\_\_\_ Password \_\_\_\_\_

Transfer From Account ID \_\_\_\_\_ Transfer To Account ID \_\_\_\_\_

Transfer Amount \_\_\_\_\_

Error Message \_\_\_\_\_ (hidden field unless there is an error)

Submit

Clear

1. **8. Bank transactions** - all transactions must be saved and be able to be retrieved. A transaction consists of: Account owner ID, Account ID, Transaction date, Transaction Type, Transaction ID, Transaction amount<sup>[1]</sup><sub>SEP</sub>. Transaction types – create account owner, create account, deposit, withdrawal, transfer from, transfer to

1. **9. List transactions** - an account owner needs to be able to list all transactions for

their accounts<sup>[L][SEP]</sup>Account Owner ID, First name, last name in the header of the list<sup>[L][SEP]</sup>  
Account ID, transaction type, transaction ID, transaction date, transaction amount<sup>[L][SEP]</sup>

1. **10. Report balance** – Account owner may request the current balance for one of their accounts<sup>[L][SEP]</sup>Need GUI – Balance result in the GUI

### Report Balance

Balance Report ID \_\_\_\_\_ (created and controlled by the system)

Account Owner ID \_\_\_\_\_ Password \_\_\_\_\_

Account ID \_\_\_\_\_

Balance \_\_\_\_\_ (entered by the system as output to the request)

Error Message \_\_\_\_\_ (hidden field unless there is an error)

Submit

Clear

1. **11. List Transactions by Account Type** – Account owner must be able to list transactions by selected account type, i.e., checking, savings, etc.<sup>[L][SEP]</sup>List in date order (see story 7)<sup>[L][SEP]</sup>

### Transaction List by Account Type

Account Owner ID \_\_\_\_\_ Password \_\_\_\_\_

Account Type \_\_\_\_\_

1. **12. Check processing** – Checks may be drawn against a checking account. The check will contain the Account owner ID, account ID, date, check ID, amount. The balance in the account will be reduced by the check amount. There must be sufficient funds in the account to cover the check amount. The account type must be checking.

### 1. 13. GUI for check processing

1. **14. Bill payment** – The account owner may pay a bill directly from any of the accounts. <sup>[1]</sup><sub>SEP</sub> Need GUI for Bill Payment
2. **15. Statements** – The Account owner may request statements on demand. The statement will display an opening and closing balance and all transactions completed from the start date to the end date.

### 1. 16. GUI to request a statement.

1. **17. Search for transactions** – The account owner must be able to list transaction(s) by any or all of transaction type, transaction date range, transaction amount.

Need GUI for Search Transactions.

### 18. List all account owners and their accounts

Owner ID	Name	Password
Account ID	Account Type	Balance
Account ID	Account Type	Balance

Owner ID	Name	Password
***	No Accounts	***

Owner ID	Name	Password
Account ID	Account Type	Balance

### 19. Account owner login and application menu- An account owner has to log in before any

transactions can be processed. Once logged in, all applications will be accessed via the menu buttons. When an application is closed, control returns to the login-menu screen. Closing the login screen logs the user out; or they can press the Log Out button.

All the applications will have the Account Owner ID entered into the Account Owner ID field

### **Bank login and application menu**

Account Owner ID \_\_\_\_\_ Password \_\_\_\_\_ **Log in** (Button) **Log Out**

Name \_\_\_\_\_ (returned from login)

Error Message \_\_\_\_\_ (hidden field unless there is an error)

### **Application Menu**

**Create Account**   **Deposit**   **Withdraw**   **Transfer**   **Report Balance**

(These are all buttons to access the applications)

**20. List Transactions by Date range** – Account owner must be able to list transactions by selected date range

List in date order (see story 7)

### **Transaction List by Date Range**

Account Owner ID \_\_\_\_\_ Password \_\_\_\_\_

Start Date \_\_\_\_\_ End Date \_\_\_\_\_

## 21. List transaction to a GUI

Account Owner ID \_\_\_\_\_ Name \_\_\_\_\_

Account ID	Type	Transaction ID	Date	Amount
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

## **Bank System Acceptance Tests:**

**1.1 Given that we are creating a new Account Owner and the last Account Owner ID is O1002,**

**When we enter First Name John, Last name Smith, Password J\$1234,**

**Then the New Account Owner should be – Account Owner ID = O1003, First name = John, Last Name = Smith, Password = J\$1234**

**1.2 Given that we are creating a new Account Owner and the last Account Owner ID is O1002,**

**When we enter First Name John, Last name Smith, Password J\$12345,**

**Then we should get an error message = Password maximum 6 characters**

**1.3 Given that we are creating a new Account Owner and the last Account Owner ID is O1002,**

**When we enter First Name John, Last name Smith, Password J12345,**

**Then we should get an error message = Password must contain at least 1 non-alphanumeric character**

**1.4 Given that we are creating a new Account Owner and the last Account Owner ID is O1002,**

**When we enter First Name John, Last name Smith, Password J\$,**

**Then the New Account Owner should be – Account Owner ID = O1003, First name = John, Last Name = Smith, Password = J\$**



**1.5 Given that we are creating a new Account Owner and the last Account Owner ID is O1002,**

**When we enter First Name John, Last name Smith, Password \$#\$,**

**Then we should get an error message = Password must contain at least 1 alphanumeric character**

**1.6 Given that we are creating a new Account Owner and the last Account Owner ID is O1002,**

**When we enter First Name John, Last name Smith, Password J,**

**Then we should get an error message = Password minimum 2 characters**

**2.1 Given that Account Owner ID O1002 exists and the Password is P\$2222 and the last account ID for this owner is A1004 and we are creating a new checking account**

**When we enter Account Owner O1002, Password P\$2222, Account Type Checking and Balance 50.00**

**Then the new account should be – Account Owner ID = O1002, Account ID = A1005, Account Type = Checking, Balance = 50.00**

**2.2 Given that Account Owner ID O1002 does not exist and we are creating a new checking account**

**When we enter Account Owner O1002, Password P\$2222, Account Type Checking and Balance 50.00**

**Then we should get an error message = Invalid Account Owner ID**

**2.3 Given that Account Owner ID O1002 exists and the Password is P\$2222 and we are creating a new checking account**

**When we enter Account Owner O1002, Password P\$2223, Account Type Checking and Balance 50.00**

**Then we should get an error message = Invalid Password**

**2.4 Given that Account Owner ID O1002 exists and the Password is P\$2222 and the last account ID for this owner is A1004 and we are creating a new checking account**

**When we enter Account Owner O1002, Password P\$2222, Account Type Checking and Balance -50.00**

**Then we should get an error message = Balance cannot be negative.**

**2.5 Given that Account Owner ID O1002 exists and the Password is P\$2222 and the last account ID for this owner is A1004 and we are creating a new checking account**

**When we enter Account Owner O1002, Password P\$2222, Account Type Checking and Balance is empty**

**Then we should get an error message = Balance cannot be empty.**

**2.6 Given that Account Owner ID O1002 exists and the Password is P\$2222 and the last account ID for this owner is A1004 and we are creating a new checking account**

**When we enter Account Owner O1002, Password P\$2222, Account Type Checking and Balance is space(s)**

**Then we should get an error message = Balance cannot be blank.**

**2.7 Given that Account Owner ID O1002 exists and the Password is P\$2222 and the last account ID for this owner is A1004 and we are creating a new checking account**

**When we enter Account Owner O1002, Password P\$2222, Account Type Checking and Balance is 23w**

**Then we should get an error message = Balance must be numeric**

**2.8 Given that Account Owner ID O1002 exists and the Password is P\$2222 and the last account ID for this owner is A1004 and we are creating a new checking account**

**When we enter Account Owner O1002, Password P\$2222, Account Type Money Market and Balance is 50**

**Then we should get an error message = Account type invalid**

**2.9 Given that Account Owner ID O1002 exists and the Password is P\$2222 and the last account ID for this owner is A1004 and we are creating a new checking account**

**When we enter Account Owner O1002, Password P\$2222, Account Type Checking and Balance is 12.345**

**Then we should get an error message = Amount must be dollars and cents**

**3.1 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 50.00 and we are making a deposit**

**When we enter Account Owner O1002, Password P\$2222, Account ID A1004 and deposit amount 100**

**Then the account should be – Account Owner ID = O1002, Account ID = A1004, Account Type = Checking, Balance = 150.00**

**3.2 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 50 and we are making a deposit**

**When we enter Account Owner O1002, Password P\$2222, Account ID A1004 and deposit amount -100**

**Then we should get an error message = Deposit amount cannot be negative**

**3.3 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 50 and we are making a deposit**

**When we enter Account Owner O1002, Password P\$2222, Account ID A1004 and deposit amount is blank**

**Then we should get an error message = Deposit amount cannot be spaces(s)**

**3.4 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 50 and we are making a deposit**

**When we enter Account Owner O1002, Password P\$2222, Account ID A1004 and**

**deposit amount is empty**

**Then we should get an error message = Deposit amount cannot be empty**

**3.5 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 50 and we are making a deposit**

**When we enter Account Owner O1002, Password P\$2222, Account ID A1004 and deposit amount is 0**

**Then we should get an error message = Deposit amount cannot be zero**

**3.6 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 50 and we are making a deposit**

**When we enter Account Owner O1002, Password P\$2222, Account ID A1004 and deposit amount is 23w**

**Then we should get an error message = Deposit amount must be numeric**

**3.7 Given that Account Owner ID O1002 does not exist and we are making a deposit**

**When we enter Account Owner O1002, Password P\$2222, Account Type Checking and deposit amount 50**

**Then we should get an error message = Invalid Account Owner ID**

**3.8 Given that Account Owner ID O1002 exists and the Password is P\$2222 and we are making a deposit**

**When we enter Account Owner O1002, Password P\$2223, Account Type Checking and deposit amount 50.00**

**Then we should get an error message = Invalid Password**

**3.9 Given that Account Owner ID O1002 exists and the Password is P\$2222 and we are making a deposit**

**When we enter Account Owner O1002, Password P\$2223, Account Type Checking and deposit amount 1.234**

**Then we should get an error message = Amount must be dollars and cents**

**4.1 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 50.00 and we are reporting a balance**

**When we enter Account Owner O1002, Password P\$2222, Account ID A1004**

**Then the Balance should contain 50.00**

**4.2 Given that Account Owner ID O1002 does not exist and we are reporting a balance**

**When we enter Account Owner O1002, Password P\$2222, Account ID A1004**

**Then we should get an error message = Invalid Account Owner ID**

**4.3 Given that Account Owner ID O1002 exists and the Password is P\$2222 and Account ID A1004 exists and we are reporting a balance**

**When we enter Account Owner O1002, Password P\$2223, Account ID A1004**

**Then we should get an error message = Invalid Password**

**4.4 Given that Account Owner ID O1002 exists and the Password is P\$2222 and Account ID A1004 does not exist and we are reporting a balance**

**When we enter Account Owner O1002, Password P\$2223, Account ID A1004**

**Then we should get an error message = Invalid Account ID**

**5.1 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 100 and we are making a withdrawal**

**When we enter Account Owner O1002, Password P\$2222, Account ID A1004 and withdrawal amount 50**

**Then the account should be – Account Owner ID = O1002, Account ID = A1004, Account Type = Checking, Balance = 50.00**

**5.2 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 100 and we are making a withdrawal**

**When we enter Account Owner O1002, Password P\$2222, Account ID A1004 and withdrawal amount -100**

**Then we should get an error message = Withdrawal amount cannot be negative**

**5.3 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 100 and we are making a withdrawal**

**When we enter Account Owner O1002, Password P\$2222, Account ID A1004 and withdrawal amount 100**

**Then the account should be – Account Owner ID = O1002, Account ID = A1004, Account Type = Checking, Balance = 0.00**

**5.4 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 100 and we are making a withdrawal**

**When we enter Account Owner O1002, Password P\$2222, Account ID A1004 and withdrawal amount 50.25**

**Then the account should be – Account Owner ID = O1002, Account ID = A1004, Account Type = Checking, Balance = 49.75**

**5.5 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 100 and we are making a withdrawal**

**When we enter Account Owner O1002, Password P\$2222, Account ID A1004 and withdrawal amount 150**

**Then we should get an error message = Withdrawal amount cannot be greater than balance**

**5.6 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 100 and we are making a withdrawal**

**When we enter Account Owner O1002, Password P\$2222, Account ID A1004 and withdrawal amount empty**

**Then we should get an error message = You must enter a withdrawal amount**

**5.7 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 100 and we are making a withdrawal**

**When we enter Account Owner O1002, Password P\$2222, Account ID A1004 and withdrawal amount is w45**

**Then we should get an error message = Withdrawal amount must be numeric**

**5.8 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 100 and we are making a withdrawal**

**When we enter Account Owner O1002, Password P\$2222, Account ID A1004 and withdrawal amount 50.234**

**Then we should get an error message = Withdrawal amount must be dollars and cents**

**5.9 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 100 and we are making a withdrawal**

**When we enter Account Owner O1002, Password P\$2222, Account ID A1004 and withdrawal amount space(s)**

**Then we should get an error message = Withdrawal amount cannot be blank**

**5.10 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 100 and we are making a withdrawal**

**When we enter Account Owner O1002, Password P\$2222, Account ID A1004 and withdrawal amount is zero**

**Then we should get an error message = Withdrawal amount cannot be zero**

**6.1 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 150 and account ID A1003 exists and the balance is 100 and we are making a transfer**

**When we enter Account Owner O1002, Password P\$2222, Transfer From Account ID A1004, Transfer To Account ID A1003 and transfer amount 100**

**Then the account balances should be – Account Owner ID = O1002, Account ID = A1004, Balance = 50.00 and Account Owner ID = O1002, Account ID = A1003, Balance = 200.00**

**6.2 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 150 and account ID A1003 exists and the balance is 100 and we are making a transfer**

**When we enter Account Owner O1002, Password P\$2222, Transfer From Account ID A1004, Transfer To Account ID A1003 and transfer amount 250**

**Then we should get an error message – Transfer amount cannot be greater than the From Account balance**

**6.3 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 150 and account ID A1003 exists and the balance is 100 and we are making a transfer**

**When we enter Account Owner O1002, Password P\$2222, Transfer From Account ID A1004, Transfer To Account ID A1003 and transfer amount 150**

**Then the account balances should be – Account Owner ID = O1002, Account ID = A1004, Balance = 0.00 and Account Owner ID = O1002, Account ID = A1003, Balance = 250.00**

**6.4 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 150 and account ID A1003 does not exist**



**and we are making a transfer**

**When we enter Account Owner O1002, Password P\$2222, Transfer From Account ID A1004, Transfer To Account ID A1003 and transfer amount 100**

**Then we should get an error message – Transfer to account does not exist**

**6.5 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 150 and we are making a transfer**

**When we enter Account Owner O1002, Password P\$2222, Transfer From Account ID A1004, Transfer To Account ID A1004 and transfer amount 100**

**Then we should get an error message – Transfer to and from accounts must be different**

**6.6 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 150 and account ID A1003 does not exist and we are making a transfer**

**When we enter Account Owner O1002, Password P\$2222, Transfer From Account ID A1003, Transfer To Account ID A1004 and transfer amount 100**

**Then we should get an error message – Transfer from account does not exist**

**6.7 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 150 and account ID A1003 exists and the balance is 100 and we are making a transfer**

**When we enter Account Owner O1002, Password P\$2222, Transfer From Account ID A1004, Transfer To Account ID A1003 and transfer amount -250**

**Then we should get an error message – Transfer amount cannot negative**

**6.8 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 150 and account ID A1003 exists and the balance is 100 and we are making a transfer**

**When we enter Account Owner O1002, Password P\$2222, Transfer From Account**

**ID A1004, Transfer To Account ID A1003 and transfer amount 1.234**

**Then we should get an error message – Transfer amount must be dollars and cents**

**6.9 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 150 and account ID A1003 exists and the balance is 100 and we are making a transfer**

**When we enter Account Owner O1002, Password P\$2222, Transfer From Account ID A1004, Transfer To Account ID A1003 and transfer amount 12a3**

**Then we should get an error message – Transfer amount must be numeric**

**7.1 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 50.00 and the last deposit transaction ID used is D1002 and we are making a deposit**

**When we enter Account Owner O1002, Password P\$2222, Account ID A1004 and deposit amount 100 and the system date is 10/23/2012**

**Then the Transaction written to the database should have the following fields: [L] Transaction ID, Account owner ID, Account ID, Transaction date, [L] Transaction Type, Transaction amount [SEP]**

**and the transaction record should have the values:**

**D1003,O1002,A1004,10/23/2012,Deposit,100**

**7.2 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 50.00 and the last deposit transaction ID used is D1002 and we are making a deposit**

**When we enter Account Owner O1002, Password P\$2222, Account ID A1004 and deposit amount -100 and the system date is 10/23/2012**

**Then the No Transaction Record should be written to the database.**

**8.1 Given that Account Owner ID O1002 exists and the account owner name is Fred G and the Password is P\$2222 and account ID A1004 exists and the balance is 50.00 and we are logging in and making a deposit**

**When we enter Account Owner O1002, Password P\$2222 and press LOG IN**

**Then Fred G is in the Name field**

**When we press Deposit button**

**Then the Deposit panel is active, The Account Owner ID in the Deposit panel is O1002**

**When Account ID is A1004 and deposit amount is 100 and we press Submit and we close the Deposit panel**

**Then we return to the Login Menu panel**

**8.2 Given that Account Owner ID O1002 exists and the account owner name is Fred G and the Password is P\$2222 and we are logging in**

**When we enter Account Owner O1002, Password P\$2222 and press LOG IN**

**Then Fred G is in the Name field**

**When we press LOG OUT**

**Then the Owner ID is empty and the Password is empty and the Name is empty and we are in the Login Menu panel**

**8.3 Given that Account Owner ID O1002 exists and the account owner name is Fred G and the Password is P\$2222 and we are logging in**

**When we enter Account Owner O1002, Password P\$2222 and press LOG OUT**

**Then the error message is = You are not logged in**

**8.4 Given that Account Owner ID O1002 does not exist and we are logging in**

**When we enter Account Owner O1002, Password P\$2222 and Press LOG IN**

**Then we should get an error message = Invalid Account Owner ID**

**8.5 Given that Account Owner ID O1002 exists and the Password is P\$2222 and we are logging in**

**When we enter Account Owner O1002, Password P\$2223 and press LOG IN**

**Then we should get an error message = Invalid Password**

**8.6 Given that Account Owner ID O1002 exists and the Password is P\$2222 and we are logging in**

**When we enter an empty Account Owner and Password P\$2222 and press LOG IN**

**Then we should get an error message = You must enter an Account Owner ID**

**8.7 Given that Account Owner ID O1002 exists and the Password is P\$2222 and we are logging in**

**When we enter a blank (spaces) Account Owner and Password P\$2222 and press LOG IN**

**Then we should get an error message = You must enter an Account Owner ID**

**8.8 Given that Account Owner ID O1002 exists and the Password is P\$2222 and we are logging in**

**When we enter Account Owner ID O1002 and an empty Password and press LOG IN**

**Then we should get an error message = You must enter a password**

**8.9 Given that Account Owner ID O1002 exists and the Password is P\$2222 and we are logging in**

**When we enter Account Owner ID O1002 and a blank (spaces) Password and press LOG IN**

**Then we should get an error message = You must enter a password**

**8.10 Given that Account Owner ID O1002 exists and the account owner name is Fred G and the Password is P\$2222 and we are logging in**

**When we enter Account Owner O1002, Password P\$2222 and press LOG IN**

**Then Fred G is in the Name field**

**When we press LOG IN**

**Then we should get an error message = You are already logged in**

**8.11 Given that we are logging in**

**When we press Deposit**

**Then we should get an error message = You are not logged in**

**9.1 Given that Account Owner ID O1002 exists and the Password is P\$2222 and we are creating a new checking account**

**When we enter Account Owner O1002, Password P\$2223, Account Type Checking and Balance 50.00**

**Then we should get an error message = Invalid Password**

**When we enter Account Owner O1002, Password P\$2223, Account Type Checking and Balance 50.00**

**Then we should get an error message = Two failed login attempts – contact bank for password reset**

**9.2 Given that Account Owner ID O1002 exists and the Password is P\$2222 and we are creating a new checking account**

**When we enter Account Owner O1002, Password P\$2223, Account Type Checking and Balance 50.00**

**Then we should get an error message = Invalid Password**

**When we enter Account Owner O1002, Password P\$2222, Account Type Checking and**

Balance 50.00<sup>[L][SEP]</sup> Then the new account should be – Account Owner ID = O1002, Account ID = A1005, Account Type = Checking, Balance = 50.00

When we enter Account Owner O1002, Password P\$2223, Account Type Checking and Balance 50.00

Then we should get an error message = Invalid Password

**9.3** Given that Account Owner ID O1002 exists and the Password is locked and the and we are creating a new checking account

When we enter Account Owner O1002, Password P\$2222, Account Type Checking and Balance 50.00

Then we should get an error message = Contact bank for password reset

**9.4** Given that Account Owner ID O1002 exists and the Password is locked and the and we are creating a new checking account

When we enter Account Owner O1002, Password P\$2223, Account Type Checking and Balance 50.00

Then we should get an error message = Contact bank for password reset

**10.1** Given that Account Owner ID O1002 exists and we are resetting the password<sup>[L][SEP]</sup> When we enter Account Owner O1002, Unlock password U\$U\$, Password P\$1234<sup>[L][SEP]</sup> Then Password is reset to P\$1234

Given that Account Owner ID O1002 exists and the Password is P\$1234 and the last account ID for this owner is A1004 and we are creating a new checking account

When we enter Account Owner O1002, Password P\$1234, Account Type Checking and Balance 50.00

Then the new account should be – Account Owner ID = O1002, Account ID = A1005,

**Account Type = Checking, Balance = 50.00**

**[[SEP]] When we enter Account Owner O1002, Password P\$2222, Account Type Checking and Balance 50.00**

**Then we should get an error message = Invalid Password**

**10.2 Given that Account Owner ID O1002 exists and we are resetting the password[[SEP]] When we enter Account Owner O1002, Unlock password Q\$U\$, Password P\$1234**

**Then we should get an error message = Invalid Unlock Password**

**11.1 Given that we are resetting a password and Account Owner ID is O1002**

**When we enter Account Owner O1002, Unlock password U\$U\$, Password P\$12345**

**Then we should get an error message = Password maximum 6 characters**

**11.2 Given that we are resetting a password and Account Owner ID is O1002**

**When we enter Account Owner O1002, Unlock password U\$U\$, Password P12345**

**Then we should get an error message = Password must contain at least 1 non-alphanumeric character**

**11.3 Given that we are resetting a password and Account Owner ID is O1002**

**When we enter Account Owner O1002, Unlock password U\$U\$, Password J\$**

**Then new Password = J\$**

**11.4 Given that we are resetting a password and Account Owner ID is O1002**

**When we enter Account Owner O1002, Unlock password U\$U\$, Password \$\$\$,**

**Then we should get an error message = Password must contain at least 1 alphanumeric character**

**11.5 Given that we are resetting a password and Account Owner ID is O1002**

**When we enter Account Owner O1002, Unlock password U\$U\$, Password J,**

**Then we should get an error message = Password minimum 2 characters**



**12.1 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 50.00 and we are making a deposit**

**When we enter Account Owner O1002, Password P\$2223, Account ID = A1004, Account Type Checking and deposit amount 50.00**

**Then we should get an error message = Invalid Password**

**When we enter Account Owner O1002, Password P\$2223, Account ID = A1004, Account Type Checking and deposit amount 50.00**

**Then we should get an error message = Two failed login attempts – contact bank for password reset**

**12.2 Given that Account Owner ID O1002 exists and the Password is P\$2222 and account ID A1004 exists and the balance is 50.00 and we are making a deposit**

**When we enter Account Owner O1002, Password P\$2223, Account ID = A1004, Account Type Checking and deposit amount 50.00**

**Then we should get an error message = Invalid Password**

**When we enter Account Owner O1002, Password P\$2222, Account ID = A1004, Account Type Checking and deposit amount 50.00**

**Then the account should be – Account Owner ID = O1002, Account ID = A1004, Account Type = Checking, Balance = 100.00**

**When we enter Account Owner O1002, Password P\$2223, Account ID = A1004, Account Type Checking and deposit amount 50.00**

**Then we should get an error message = Invalid Password**

**12.3 Given that Account Owner ID O1002 exists and the Password is locked and we are making a deposit**

**When we enter Account Owner O1002, Password P\$2222, Account ID = A1004, Account Type Checking and deposit amount 50.00**

**Then we should get an error message = Contact bank for password reset**