Test	Type	Description	Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1	Functional	Issue Business Cheque Book. Verify that a valid Business Account can request a cheque book and that the system records it.	1. Find Customer (John Helix). 2. View Accounts. 3. Select Business Account. 4. Select "Issue Cheque Book".	Account: Business (Sole Trader) Action: Option 4 (Issue Cheque Book)	System displays "Success: Cheque book issued." The database updates the account flag to prevent duplicates.	Worked as intended. Display the message "Success: Cheque book issued"	Pass
2	Functional	Duplicate Cheque Book Prevention. Verify that the system prevents issuing a second cheque book to the same account.	1. Use the same account from Test 1. 2. Select "Issue Cheque Book" again.	Account: Business (Sole Trader) Action: Option 4 (Issue Cheque Book)	System displays error: "Error: A cheque book has already been issued". No changes made to the database.	Displays the correct error message. And no changes to the customer's database data.	Pass
3	Functional	Set up & Execute Standing Order (Immediate). Verify that a Standing Order set for today (or a past date) is	1. Select Personal Account.	Recipient: Landlord Amount: £10.00	System setups standing order and displays: "Success: Standing Order set for Landlord starting 26/01/2026"	System worked as intended, displaying the right message	Pass

		paid immediately during processing.	2. Set up Standing Order. 3. Return to Main Menu. 5. Run "End-of-Day Processing".	Date: 26/01/2026	Sender account balance decreases by £10.	and deducting the right amount. The data has been updated and shows the current balance. Note: The "End-of-Day Processing" takes payments due today or in the past.	
4	Functional	Future Direct Debit (No Payment). Verify a Direct Debit set for a future date is NOT paid when processing runs.	1. Select Personal Account. 2. Set up Direct Debit. 3. Run "End-of-Day Processing".	Recipient: Gym Amount: £50.00 Enter Date = 27/02/2026	Setup: "Success: Direct Debit set for Gym starting 27/02/2026." The system runs but skips this payment, and the balance remains unchanged because the payment is due in the future.	The system works as intended and correctly displays the right message.	Pass
5	Robustness	Scheduled Payment Insufficient Funds. Verify that the system handles a scheduled payment gracefully when the account has insufficient funds.	1. Select Personal Account. 2. Set up a Standing	Recipient: Mum Balance: £490 Amount: £1000.00	System shows: "> Account ID:4 FAILED: £1000.0 to Mum - Insufficient Funds" Account balance does not change.	The system works as intended and correctly displays the right message. The balance is the same, as	Pass

			Order for £1000 3. Run "End-of-Day Processing".	Date: 27/01/2026		there is an overdraft limit of £500 for the personal account	
6	Robustness	Scheduled Payment Insufficient Funds. Verify that the system handles a scheduled payment gracefully when the account has insufficient funds.	1. Select Personal Account. 2. Set up a Standing Order for £500 3. Run "End-of-Day Processing".	Recipient: Mum Balance: £490 Amount: £500.00 Date: 27/01/2026	System shows: "> Account ID:4 PAID: £500.00 to Mum" Account balance changes to negative £10.	The system works as intended and correctly displays the right message. The balance has changed to negative £10 as the overdraft limit of £500 for the personal account	Pass
7	Input Validation	Negative Payment Setup. Verify that a user cannot set up a Standing Order for a negative amount	1. Select Personal Account. 2. Set up Standing Order. 3. Enter a negative amount.	Recipient: Thief Amount: -£100.00	System displays "Amount must be positive" and asks the teller to enter to enter amount again. The database will not update.	The system worked as expected. Displaying the correct message and database did not update the balance.	Pass

Test 1

Step 1. Finding Customer (John Smith).

```
═ Acme Teller System ═
≡ Main Menu ≡
1. Find Customer
2. Sign Up Customer
3. Switch Customer
4. Run End-of-Day Processing (Trigger Standing Order/Direct Debit checks)
5. Help
0. Exit
```

```
≡ Find Customer ≡
Enter CustomerID: CUST001
```

```
Customer Found

-----------------
Customer ID: CUST001
-----------------
Name: John Smith
-----------------
National insurance number: AB123456C
-----------------
Photo Id: Passport123
-----------------
Address: UtilityBill456
-----------------
Customer has been with us since: 2026-01-18 16:24:08
```

Step 2. View the account(s) associated with this customer.

```
1. View Accounts
2. Open Account
3. Switch Customer
4. Help
0. Back to Main Menu

Select option: 1
≡ John Smith (CUST001) Accounts ≡
No | Type                | Account Number | Sort Code | Balance
----------------------------------------------------------------
1   | Personal           | 12345678       | 60-60-60  | £500.00
2   | ISA                | 87654321       | 60-60-70  | £1000.00
3   | Business           | 11223344       | 60-70-70  | £2500.00
1. Select Account
2. Help
0. Back
```

Step 3. Select the Business Account.

```
≡ John Smith (CUST001) Accounts ≡
No | Type                 | Account Number | Sort Code | Balance
-----------------------------------------------------------------
1   | Personal            | 12345678       | 60-60-60  | £500.00
2   | ISA                 | 87654321       | 60-60-70  | £1000.00
3   | Business            | 11223344       | 60-70-70  | £2500.00
1. Select Account
2. Help
0. Back


Select option: 1
Choose an account: 3
```

Step 4. Select "Issue Cheque Book".

```
≡ John Smith (CUST001) Accounts ≡
Account #3 (Business) | Account Number: 11223344 | Sort Code: 60-70-70 | Balance: £2500.00
1. Deposit
2. Withdraw
3. View Transactions
4. Issue Cheque Book
5. Help
0. Back to Accounts List
```

```
Select an option: 4
Success: Cheque book issued.
```

Database

```
≡ ACCOUNTS ≡
account_id       | customer_id     | account_type    | account_number   | sort_code       | balance         | opening_balance
----------------------------------------------------------------------------------------------------------------------------------
1                | CUST001         | Personal        | 12345678         | 60-60-60        | 500.0           | 500.0
2                | CUST001         | ISA             | 87654321         | 60-60-70        | 1000.0          | 1000.0
3                | CUST001         | Business        | 11223344         | 60-70-70        | 2500.0          | 2500.0
```

```
| has_overdraft_facility | created_at          | cheque_book_issued  |
--------------------------------------------------------------------------
| 1                      | 2026-01-18 16:15:30 | 0                   |
| 0                      | 2026-01-18 16:15:30 | 0                   |
| 1                      | 2026-01-18 16:15:30 | 1                   |
```

Test 2

Step 1. Use the same account from Test 1.

```
≡ John Smith (CUST001) Accounts ≡
No | Type                 | Account Number | Sort Code | Balance
-----------------------------------------------------------------
1   | Personal            | 12345678       | 60-60-60  | £500.00
2   | ISA                 | 87654321       | 60-60-70  | £1000.00
3   | Business            | 11223344       | 60-70-70  | £2500.00
1. Select Account
2. Help
0. Back

Select option: 1
Choose an account: 3
```

Step 2. Select "Issue Cheque Book" again.

```
≡ John Smith (CUST001) Accounts ≡
Account #3 (Business) | Account Number: 11223344 | Sort Code: 60-70-70 | Balance: £2500.00
1. Deposit
2. Withdraw
3. View Transactions
4. Issue Cheque Book
5. Help
0. Back to Accounts List
```

```
Select an option: 4
Error: A cheque book has already been issued for this account.
≡ John Smith (CUST001) Accounts ≡
Account #3 (Business) | Account Number: 11223344 | Sort Code: 60-70-70 | Balance: £2500.00
1. Deposit
2. Withdraw
3. View Transactions
4. Issue Cheque Book
5. Help
0. Back to Accounts List
```

Database

```
≡ ACCOUNTS ≡
account_id      | customer_id   | account_type  | account_number | sort_code   | balance   | opening_balance
------------------------------------------------------------------------------------------------------------------
1               | CUST001       | Personal      | 12345678       | 60-60-60    | 500.0     | 500.0
2               | CUST001       | ISA           | 87654321       | 60-60-70    | 1000.0    | 1000.0
3               | CUST001       | Business      | 11223344       | 60-70-70    | 2500.0    | 2500.0
```

```
| has_overdraft_facility | created_at          | cheque_book_issued  |
--------------------------------------------------------------------------
| 1                      | 2026-01-18 16:15:30 | 0                   |
| 0                      | 2026-01-18 16:15:30 | 0                   |
| 1                      | 2026-01-18 16:15:30 | 1                   |
```

New chequebook has not been issued.

Test 3

Step 1. Select Personal Account.

```
═══ Find Customer ═══
Enter CustomerID: CUST001
```

```
1. View Accounts
2. Open Account
3. Switch Customer
4. Help
0. Back to Main Menu

Select option: 1
═══ John Smith (CUST001) Accounts ═══
No | Type                | Account Number | Sort Code | Balance
------------------------------------------------------------------
1   | Personal            | 12345678       | 60-60-60  | £500.00
2   | ISA                 | 87654321       | 60-60-70  | £1000.00
3   | Business            | 11223344       | 60-70-70  | £2500.00
1. Select Account
2. Help
0. Back
```

```
Customer Found


----------------
Customer ID: CUST001
----------------
Name: John Smith
----------------
National insurance number: AB123456C
----------------
Photo Id: Passport123
----------------
Address: UtilityBill456
----------------
Customer has been with us since: 2026-01-18 16:24:08
```

```
Select option: 1
Choose an account: 1
≡ John Smith (CUST001) Accounts ≡
Account #1 (Personal) | Account Number: 12345678 | Sort Code: 60-60-60 | Balance: £500.00
1. Deposit
2. Withdraw
3. View Transactions
4. Set Up Direct Debit
5. Set Up Standing Order
6. View Scheduled Payments
7. Help
0. Back to Accounts List
```

Step 2. Set up a Standing Order.

```
--- Set Up Standing Order ---
(Enter '0' at any step to cancel
Select an option: 5
Enter Recipient Name: Landlord
Enter Amount: £10
Enter Frequency (e.g. Monthly): Monthly
```

Step 3. Enter Date: 26/01/2026

```
Enter Start Date (dd/mm/yyyy): 26/01/2026
```

```
Success: Standing Order set for Landlord starting 26/01/2026
```

Step 4. Return to the Main Menu and run "End-of-Day Processing".

```
≡ Main Menu ≡
1. Find Customer
2. Sign Up Customer
3. Switch Customer
4. Run End-of-Day Processing (Trigger Standing Order/Direct Debit checks)
5. Help
0. Exit
```

```
> Account ID:4 PAID: £10.00 to Landlord
```

New Account Balance:

```
≡ John Smith (CUST000001) Accounts ≡
Account #4 (Personal) | Account Number: 12628326 | Sort Code: 60-60-60 | Balance: £490.00
```

Scheduled Payments

```
--- Standing Orders ---
- Recipient: Landlord | Amount: £10.0 | Freq: Monthly | Next Payment: 2026-02-26
```

Test 4

Using the same Personal Account (John Smith)

1. Select Personal Account.

```
≡ John Smith (CUST000001) Accounts ≡
Account #4 (Personal) | Account Number: 28889894 | Sort Code: 60-60-60 | Balance: £490.00
1. Deposit
2. Withdraw
3. View Transactions
4. Set Up Direct Debit
5. Set Up Standing Order
6. View Scheduled Payments
7. Help
0. Back to Accounts List
```

2. Set up Direct Debit.

```
--- Set Up Direct Debit ---
[Enter '0' at any step to cancel)
Enter Recipient Name: Gym
Enter Amount: £50
Enter Start Date (dd/mm/yyyy): 27/02/2026
Success: Direct Debit set for Gym starting 27/02/2026
```

Scheduled Payments

```
≡ Scheduled Payments ≡
--- Direct Debits ---
- Recipient: Gym | Amount: £50.0 | Due: 2026-02-27


--- Standing Orders ---
- Recipient: Landlord | Amount: £10.0 | Freq: Monthly | Next Payment: 2026-02-26
```

Test 5

1. Select Personal Account.

```
≡ John Smith (CUST000001) Accounts ≡
Account #4 (Personal) | Account Number: 24234689 | Sort Code: 60-60-60 | Balance: £490.00
1. Deposit
2. Withdraw
3. View Transactions
4. Set Up Direct Debit
5. Set Up Standing Order
6. View Scheduled Payments
7. Help
0. Back to Accounts List
```

2. Set up a Standing Order for £1000

```
--- Set Up Standing Order ---
(Enter '0' at any step to cancel)
Select an option: 5
Enter Recipient Name: Mum
Enter Amount: £1000
Enter Frequency (Daily, Weekly, Monthly, Yearly): Weekly
Enter Start Date (dd/mm/yyyy): 27/01/2026
Success: Standing Order set for Mum starting 27/01/2026
```

3. Run "End-of-Day Processing".

```
≡ Processing Payments Due Today (2026-01-27) ≡
 > Account ID:4 FAILED: £1000.0 to Mum - Insufficient Funds
---------------------------------
Processed: 0 | Failed (No Funds): 1
≡ Main Menu ≡
1. Find Customer
2. Sign Up Customer
3. Switch Customer
4. Run End-of-Day Processing (Trigger Standing Order/Direct Debit checks)
5. Help
0. Exit
```

Test 6

Step 1. Select Personal Account.

```
≡ John Smith (CUST000001) Accounts ≡
Account #4 (Personal) | Account Number: 24234689 | Sort Code: 60-60-60 | Balance: £490.00
1. Deposit
2. Withdraw
3. View Transactions
4. Set Up Direct Debit
5. Set Up Standing Order
6. View Scheduled Payments
7. Help
0. Back to Accounts List
```

Step 2. Set up a Standing Order for £500

```
--- Set Up Standing Order ---
(Enter '0' at any step to cancel)

Select an option: 5
Enter Recipient Name: Mum
Enter Amount: £500
Enter Frequency (Daily, Weekly, Monthly, Yearly): Weekly
Enter Start Date (dd/mm/yyyy): 27/01/2026
Success: Standing Order set for Mum starting 27/01/2026
```

Step 3. Run "End-of-Day Processing".

```
≡ Processing Payments Due Today (2026-01-27) ≡
 > Account ID:4 PAID: £500.00 to Mum
```

Current account balance

```
≡ John Smith (CUST000001) Accounts ≡
No | Type              | Account Number | Sort Code | Balance
-----------------------------------------------------------------

1   | Personal          | 24234689       | 60-60-60  | £-10.00
1. Select Account
2. Help
0. Back
```

Test 7

Step 1. Select Personal Account.

```
≡ John Smith (CUST000001) Accounts ≡
No | Type                  | Account Number | Sort Code | Balance
------------------------------------------------------------------
1  | Personal              | 24234689       | 60-60-60  | £-10.00
1. Select Account
2. Help
0. Back
```

```
Account #4 (Personal) | Account Number: 24234689 | Sort Code: 60-60-60 | Balance: £-10.00
1. Deposit
2. Withdraw
3. View Transactions
4. Set Up Direct Debit
5. Set Up Standing Order
6. View Scheduled Payments
7. Help
0. Back to Accounts List
```

Step 2. Set up a Standing Order and enter a negative amount.

```
--- Set Up Standing Order ---
(Enter '0' at any step to cancel)
Enter Recipient Name: Thief
Enter Amount: £-100
Error: Amount must be positive.
Enter Amount: £
```

Will loop until the teller enters a positive value or until 0 is entered to exit.