

C2P

The Bank System Specification

[THE BANK SYSTEM 3](#_TOC_250041)

[Start-Up Form 4](#_TOC_250040)

[Change Password Form 4](#_TOC_250039)

[Main Menu 5](#_TOC_250038)

[Lodgements 6](#_TOC_250037)

[Withdrawals 7](#_TOC_250036)

[Customer File Maintenance Menu 8](#_TOC_250035)

[Add a New Customer 8](#_TOC_250034)

[Delete a Customer 9](#_TOC_250033)

[Amend / View a Customer 9](#_TOC_250032)

[Account Maintenance Menu 10](#_TOC_250031)

[Deposit Account Menu 11](#_TOC_250030)

[Open a Deposit Account 11](#_TOC_250029)

[Close a Deposit Account 12](#_TOC_250028)

[View Deposit Account 12](#_TOC_250027)

[Loan Account Menu 13](#_TOC_250026)

[Open Loan Account 13](#_TOC_250025)

[Close a Loan Account 14](#_TOC_250024)

[Amend /View Loan Account 15](#_TOC_250023)

[Current Account Menu 16](#_TOC_250022)

[Open Current Account 16](#_TOC_250021)

[Close a Current Account 17](#_TOC_250020)

[Amend/View Current Account 18](#_TOC_250019)

[Management Menu 19](#_TOC_250018)

[Charge Interest on Overdrawn Current Accounts 19](#_TOC_250017)

[Calculate Interest on Deposit Accounts 20](#_TOC_250016)

[Calculate Interest on Current Accounts 20](#_TOC_250015)

[Change rate of interest for deposit accounts 20](#_TOC_250014)

[Change rate of interest for loan accounts 21](#_TOC_250013)

[Change Interest rate for current accounts 21](#_TOC_250012)

[Quotes Menu 22](#_TOC_250011)

[Quote Loan Repayments 22](#_TOC_250010)

[Quote Deposit Rate 23](#_TOC_250009)

[Quote Loan Rate 23](#_TOC_250008)

[Quote Current account rates 23](#_TOC_250007)

[Reports Menu 24](#_TOC_250006)

[Deposit account history 24](#_TOC_250005)

[Loan account History 25](#_TOC_250004)

[Current Account History 26](#_TOC_250003)

[Customer Report 27](#_TOC_250002)

[Current Account Interest Report 27](#_TOC_250001)

[Account Report 28](#_TOC_250000)

# The Bank System

This is a specification for a Second Year Computing project based on a Bank system. The project involves designing the interface and coding the functionality of the set of forms specified in this document. Details of the project time scale etc. are available from your tutor.

The Bank System caters for the following :

* Add, Delete, Amend/View Customer details
* Lodgements
* Withdrawals
* Open, update, close and query Deposit Accounts.
* Open, update, close and query Loan Accounts.
* Open, update, close and query Current Accounts.
* Calculate and charge interest
* Quote for a loan (i.e. quote the repayments on a fixed term loan).
* Producing some useful on-screen reports
* Change a password

### Notes:

You must decide if you are going to cater for:

* + more than one deposit account per person
  + more than one loan account per person
  + more than one current account per person and/or
  + more than one customer per account (joint accounts)

This decision should be taken in consultation with your project tutor.

The forms in this document are only used to demonstrate the required functionality. They are definitely not intended to suggest how the system should look. It is the task of the team to design a user interface which is as user-friendly as possible while still providing the required functionality.

**It is the team's responsibility to ensure that only valid data is keyed-in and stored. Therefore, appropriate prompts, warnings and error messages must be supplied by the system so that the user is made aware of the exact type of input that is required, its correct format, etc**.

On each data entry form (any form in which the user is asked to supply data), it must be possible for a user to change his / her mind about using the form even after supplying data. **Therefore, there must be some way of abandoning the form (e.g. an 'Escape' or ‘Cancel’ button)** without any changes being made to the stored data.

Once a user has finished entering data on a data entry form, they must be asked to confirm that the details supplied are correct. If so, the relevant database tables are updated as appropriate. If not, the user is given the opportunity to edit fields on the form.

**It is regarded as good programming practice to provide Help with all forms**.

## Start-Up Form

The opening form provides a welcome message and prompts the user for a password which should be set to a default value initially. The user is given three attempts at the correct password after which the system is exited (if the correct password has not yet been supplied).

Assuming the correct password has been entered, a Change Password option appears on the form. If the user decides to exercise this option, the Change Password Form appears.

## Change Password Form

In this form, the user is firstly asked to enter the old password. If this is correctly done, the user is asked to enter a new password and then to immediately re-enter it. For security purposes, password characters must never echo on the screen. If both attempts at the new password are identical, then the Password Table is updated to reflect the new situation.

If the old password is incorrectly entered, the user is not invited to enter a new password. Furthermore, if the two attempts at the new password do not match, then an appropriate message must be displayed and the process may be repeated.

## Main Menu

**Main Menu** Lodgements Withdrawals

Customer File Maintenance Account Maintenance Menu Management Menu

Quotes Reports

Change Password

## Lodgements

This form should be used for lodging money to either a deposit, current or loan account of a customer.

For simplicity, you should assume that the details of the customer wishing to lodge money is already on the database.

Notes:

1. this operation can only take place for existing accounts, hence existing customers.
2. a customer can have more than one account type.

The user should either be able to type in the customer number, account number or select the appropriate customer by name from a list of customers. If selection is done by customer name/ number , the account(s) details for that customer are then displayed and the user will ask which account the customer wishes to lodge money to.

**Further details of the customer are then displayed for confirmation purposes. For example:**

* + customer name
  + address
  + customer number
  + account number
  + balance

When these details are confirmed , the amount to be lodged must be entered and confirmed. (Maybe a Save button).

If transaction is confirmed correct, the date of the transaction should be stored. A standard double check (e.g. 'Are you sure (Y/N)'?) should be implemented by your system.

If a positive response, a short summary is printed unto paper, confirming the transaction details and given to the customer.

**Perhaps, the option could be given to perform more transactions for this customer before quitting.**

**The necessary changes should be reflected in the database.**

## Withdrawals

This form should be used for withdrawing money from either a deposit or current account of a customer.

For simplicity, you should assume that the customer wishing to withdraw money is already on file.

Notes:

1. this operation can only take place for existing accounts, hence existing customers.
2. a customer can have more than one account type.

The user should either be able to type in the customer number, account number or select the appropriate customer by name from a list of customers. If selection is done by customer name/ number , the account(s) details for that customer are then displayed and the user will ask which account the customer wishes to withdraw money from.

Further details of the customer are then displayed for confirmation purposes. For example:

* + customer name
  + address
  + customer number
  + account number
  + balance

When these details are confirmed , the amount to be withdrawn must be entered and the Balance on the account is checked to ensure that there are funds available to cover the withdrawal amount. (Don’t forget the overdraft limit for current accounts). If not ok, the user should notify the customer.

If transaction is confirmed correct, the date of the transaction should be stored. A standard double check (e.g. 'Are you sure (Y/N)'?) should be implemented by your system.

If a positive response, a short summary is printed unto paper, confirming the transaction details and given to the customer.

Perhaps, the option could be given to perform more transactions for this customer before quitting.

The necessary changes should be reflected in the database.

## Customer File Maintenance Menu

Choosing the first option on the Main Menu leads to this form which handles all aspects of customers:

**Customer File Maintenance Menu**

Add a New Customer Delete a Customer

Amend / View a Customer

## Add a New Customer

The bank user supplies the following details about the new customer:

* first name
* surname
* address
* Eircode
* date of birth
* telephone number
* occupation
* salary
* email address
* guarantor’s name (if applicable)

When the user confirms that the details are correct, a unique customer number is allocated and displayed on screen, and a new record is added to the Customer Table.

## Delete a Customer

The user can browse at will through all the bank's customers until they finds the correct one. Alternatively, the user can find the customer by typing in the customer name, All customers with matching names are displayed and the correct one is selected by the user.

Details displayed are:

* Customer id
* first name
* surname
* address
* Eircode
* date of birth
* telephone number
* customer number
* occupation

Once the correct customer has been found, the user causes him/ her to be ‘flagged’ for deletion. A customer should not be deleted if they has an account. You should include some kind of a double check to ensure that a customer isn't inadvertently deleted. This could be a simple question such as:

'Are you sure you want to delete this customer (Y/N) ?'

Once the user responds positively, a message is displayed confirming that the deletion has taken place.

## Amend / View a Customer

The user can browse at will through all the bank customers. Details displayed are:

* customer id (not editable)
* name
* surname
* address
* eircode
* date of birth
* telephone number
* occupation
* salary
* guarantor’s name

If the user decides to alter details of a particular customer, they must first select the correct customer and then choose the Amend option. A cursor now appears in the first editable field shown for the customer and the user may use arrow keys, backspace, delete, input keys etc. to change the field; tab to move to the next field, etc. Having made all the changes, they must indicate that the changes are to be carried through. This causes the Customer Table to be updated. A standard double check (e.g. 'Are you sure (Y/N)'?) should be implemented by your system.

## Account Maintenance Menu

Choosing the next option on the Main Menu leads to this form which is a submenu to all the maintenance of all account types:

**Account Maintenance Menu**

Deposit Account Menu Loan Account Menu Current Account Menu

## Deposit Account Menu

Choosing this option on the Account Maintenance Menu leads to this form which handles all aspects of deposit accounts:

**Deposit Account Menu**

Open an Account Close an Account View an Account

## Open a Deposit Account

This form should open a deposit account for a customer. The details will be stored in a separate table (for deposit accounts) in the database.

For simplicity, you should assume that the customer wishing to open a deposit account is already on file.

If a completely new customer (i.e. not already on file) wants to open an account, the user must first go to the Customer Menu and choose the Add a New Customer option. The user then returns to this form to open the deposit account.

If the customer does exist, the user should either be able to type in the customer number or select the appropriate customer by name from a list of customers. Further details of the customer are then displayed for confirmation purposes. For example:

* customer name
* address
* eircode
* date of birth
* customer number

When the user confirms that the details are correct, a unique account number is allocated and displayed on form. It should be possible for the customer to deposit money in the account if they wish.

The user should also request the first transaction i.e. a deposit of an opening balance. When all details are confirmed, a new record is added to the Deposit Accounts Table.

## Close a Deposit Account

This option is chosen from the Deposit Account menu if a customer wishes to close a Deposit Account.

The user should either be able to type in the customer number, account number or select the appropriate customer by name from a list of customers. Further details of the customer are then displayed for confirmation purposes. For example:

* customer name
* address
* eircode
* date of birth
* customer number
* account number

Note: that a customer may not close an account unless the balance is zero. Hence, if the account does contain funds, they must first be withdrawn. The user then returns to this form to close the deposit account.

Once the account has a balance of zero, the user causes it to be closed (flagged for closure). You should include some kind of a double check to ensure that the wrong account isn't inadvertently closed. This could be a simple question such as:

'Are you sure you want to close this account (Y/N) ?'

Once the user responds positively, a message is displayed confirming that the closure has taken place.

## View Deposit Account

This option is chosen from the Deposit Account menu if a customer wishes to view a Deposit Account.

The user should either be able to type in the customer number, account number or select the appropriate customer by name from a list of customers. Further details of the customer are then displayed for confirmation purposes. For example:

* customer name
* address
* eircode
* customer number
* account number
* balance

The last 10 transactions should be displayed.

There could also be an option to browse through other deposit accounts of other customers ,etc.

## Loan Account Menu

Choosing the next option on the Account Maintenance Menu leads to this form which handles all aspects of loan accounts:

**Loan Account Menu** Open an Account Close an Account

Amend/View an Account

## Open Loan Account

This form should open a loan account for a customer.

For simplicity, you should assume that the customer wishing to open a loan account is already on file.

If a completely new customer (i.e. not already on file) wants to open an account, the user must first go to the Customer Menu and choose the Add a New Customer option. The user then returns to this form to open the loan account.

If the customer does exist, the user should either be able to type in the customer number or select the appropriate customer by name from a list of customers. Further details of the customer are then displayed for confirmation purposes. For example:

* customer name
* address
* date of birth
* customer number

When the user confirms that the details are correct, a unique account number is allocated and displayed on form.

The user will enter details like amount requested for loan, term and the monthly repayments are then calculated. (Referring to the Loan rate table)

The user should also request the first transaction i.e. a withdrawal.

When all details are confirmed, a new record is added to the Loan Accounts Table, end details of the transaction should be recorded.

## Close a Loan Account

This option is chosen from the Loan Account menu if a customer wishes to close a Loan Account.

The user should either be able to type in the customer number, account number or select the appropriate customer by name from a list of customers. Further details of the customer are then displayed for confirmation purposes. For example:

* customer name
* address
* eircode
* date of birth
* customer number
* account number
* balance on loan account

Note: that a customer may not close an account **unless the balance is zero** i.e. there is nothing owed on the loan. Hence, if the loan isn’t cleared, they must first clear it. The user then returns to this form to close the loan account..

Once the account has a balance of zero, the user causes it to be closed (flagged for closure). You should include some kind of a double check to ensure that some other account isn't inadvertently closed. This could be a simple question such as:

'Are you sure you want to close this account (Y/N) ?'

Once the user responds positively, a message is displayed confirming that the closure has taken place.

## Amend /View Loan Account

This option is chosen from the Loan Account menu if a customer wishes to amend/view a Loan Account.

The user should either be able to type in the customer number, account number or select the appropriate customer by name from a list of customers. Further details of the customer are then displayed for confirmation purposes. For example:

* customer name
* address
* eircode
* date of birth
* customer number
* account number
* balance on loan
* term
* amount of loan
* monthly repayments

If the user decides to alter details of a particular loan, they must choose the Amend option. A cursor now appears in the first field shown for the account and the user may use arrow keys, backspace, delete, input keys etc. to change the field; tab to move to the next field, etc.

Note: that not all the fields should be allowed to be altered. It should be possible to change the term and amount of the loan.

Having made all the changes, they must indicate that the changes are to be carried through. This causes the Loan Account Table to be updated. A standard double check (e.g. 'Are you sure (Y/N)'?) should be implemented by your system.

## Current Account Menu

Choosing the next option on the Account Maintenance Menu leads to this form which handles all aspects of current accounts:

**Current Account Menu**

Open an Account Close an Account

Amend/View an Account

## Open Current Account

This form should open a current account for a customer. This form should open a current account for a customer.

For simplicity, you should assume that the customer wishing to open a current account is already on file.

If a completely new customer (i.e. not already on file) wants to open an account, the user must first go to the Customer Menu and choose the Add a New Customer option. The user then returns to this form to open the current account.

If the customer does exist, the user should either be able to type in the customer number or select the appropriate customer by name from a list of customers. Further details of the customer are then displayed for confirmation purposes. For example:

* customer name
* address
* eircode
* date of birth
* customer number

When the user confirms that the details are correct, a unique account number is allocated and displayed on form. The user must also enter the overdraft limit for this current account. It should be possible for the customer to put money in the account if they wish.

When all details are confirmed, a new record is added to the Current Accounts Table. The customer may then wish to perform a transaction.

## Close a Current Account

This option is chosen from the Current Account menu if a customer wishes to close a Current Account.

The user should either be able to type in the customer number, account number or select the appropriate customer by name from a list of customers. Further details of the customer are then displayed for confirmation purposes. For example:

* customer name
* address
* eircode
* date of birth
* customer number
* account number
* balance on current account (Indicate if it’s a credit or debit balance)

Note: that a customer may not close an account unless the balance is zero. If the account doesn’t have a balance of zero, they must first perform some transaction (Deposit / withdrawal) to make it so. The user then returns to this form to close the current account..

Once the account has a balance of zero, the user causes it to be closed (flagged for deletion). You should include some kind of a double check to ensure that some other account isn't inadvertently closed. This could be a simple question such as:

'Are you sure you want to close this account (Y/N) ?'

Once the user responds positively, a message is displayed confirming that the closure has taken place.

## Amend/View Current Account

This option is chosen from the Current Account menu if a customer wishes to amend/view a Current Account.

The user should either be able to type in the customer number, account number or select the appropriate customer by name from a list of customers. Further details of the customer are then displayed for confirmation purposes. For example:

* customer name
* address
* eircode
* date of birth
* customer number
* account number
* balance
* overdraft limit

The last ten transactions should be displayed.

If the user decides to alter the overdraft limit, they must choose the Amend option. A cursor now appears in the field and the user may use arrow keys, backspace, delete, input keys etc. to change the field; tab to move to the next field, etc.

Having made all the changes, they must indicate that the changes are to be carried through. This causes the Current Account Table to be updated. A standard double check (e.g. 'Are you sure (Y/N)'?) should be implemented by your system.

## Management Menu

Choosing the next option on the Main Menu leads to this form which handles options which are available to management only. These options are used for calculating and charging interest on accounts. **Access to these options is through a password form only (A Management password).**

**Management Menu**

Charge Interest on Overdrawn Current Accounts Calculate Interest on Deposit Accounts Calculate Interest on Current Accounts

Change rate of interest for deposit accounts Change rate of interest for loan accounts Change rate of interest for current accounts

## Charge Interest on Overdrawn Current Accounts

This option is available to all the managers to either manually or automatically proceed through all the current accounts which are overdrawn.

The manager should be able to choose an individual current account from a list of overdrawn current accounts **or** should be able to automatically charge interest to all overdrawn current accounts by pressing a button.

For each account in this category interest is to be calculated at the current rate (from the rate table) and the amount is to be debited from the account. That is, the current balance is to be updated.

Charging interest is to be shown as a transaction for that account. The date and the amount of the charge is to be recorded for that account along with the transaction type (interest charge).

## Calculate Interest on Deposit Accounts

This option is available to all the manager to either manually or automatically proceed through all the deposit accounts. For each account interest is to be calculated at the current rate (from the rate table) and the amount is to be credited to the account. That is, the current balance is to be updated.

Calculating interest is to be shown as a transaction for that account. The date and the amount of the charge is to be recorded for that account along with the transaction type (interest earned).

## Calculate Interest on Current Accounts

This option is available to all the manager to either manually or automatically proceed through all the current accounts. For each account in this category interest is to be calculated at the current rate (from the rate table) and the amount is to be credited to the account . That is, the current balance is to be updated.

Charging interest is to be shown as a transaction for that account. The date and the amount of the charge is to be recorded for that account along with the transaction type (interest earned).

## Change rate of interest for deposit accounts

The user should simply be prompted for the new deposit rate. Please note that this form will be used also to initialise the deposit rate.

A table should be set up to store this rate in the database.

Change the Deposit Rate

The Deposit Rate is Currently 99.99% Enter the New Deposit Rate: 99.99%

## Change rate of interest for loan accounts

The user should simply be prompted for the new interest rate. Please note that this form will be used also to initialise the loan rate.

A table should be set up to store this rate in the database.

Change the Interest Rate for Loans

The Interest Rate is Currently 99.99% Enter the New Interest Rate: 99.99%

## Change Interest rate for current accounts

The user should simply be prompted for the new interest rates - for credit and debit balances. Please note that this form will be used also to initialise the current account rates.

A table should be set up to store these rates in the database.

Change the Interest Rates for Current Accounts Which rate do you want to change, CR. or DR?: The Interest Rate is Currently 99.99%

Enter the New Interest Rate: 99.99%

## Quotes Menu

This is a menu which allows the user quick access to quotes for loan and current interest rates.

**Quotes Menu**

Quote Loan Repayments Quote Deposit rate Quote Loan rate

Quote Current Account rate

## Quote Loan Repayments

The user should be prompted for the amount being borrowed and the term of the loan. It should then access the table where the interest rate is stored to output to the form the interest rate. The amount of interest charged and the monthly payments on such a loan should be calculated and displayed.

Quoting the Repayments on a Loan

Enter the Details: Term (length of loan in months) Principal amount

Interest rate: XXX

The amount of interest charged: XXX

The Monthly Repayments are: £XXXX.XX

You should be able to change the interest rate from the one displayed and it should recalculate the amount of interest charged and the monthly payments on such a loan. The table where the interest rates are stored should not be changed.

There should be proper validation on this screen. The term of the loan cannot be less than 1 month. The principal amount cannot be less than or equal to zero. Etc.

## Quote Deposit Rate

There should be a separate table in the database to store interest rates.

Quoting the Bank’s Deposit Rate:

The Current Deposit Rate for loans with this Bank is: XX.XX%

## Quote Loan Rate

There should be a separate table in the database to store interest rates.

Quoting the Bank’s Loan Rate:

The Current Interest Rate for loans with this Bank is: XX.XX%

## Quote Current account rates

Quoting the Bank’s Current Account Rates:

The Current Interest Rate for current accounts with this Bank Interest on credit balances: XX.XX%

Interest on overdrawn balances charged at: XX.XX%

## Reports Menu

This is a menu which allows the user to generate simple on-screen reports.

**Reports Menu**

Deposit Account History Loan Account History Current Account History Customer Report

Current Account Interest Report Account Report

## Deposit account history

This form should list all the transactions that took place with this account. It should give the date, type and amount of each transaction. It should also state the current balance. In essence it should read like a normal bank statement. The user should be given the option to print out this screen.

|  |  |  |  |
| --- | --- | --- | --- |
| Deposit Account History  Account Number: 99999 Customer Name: XXXXXXXXXX | | | |
| Date | Transaction Type | Transaction Amount | Balance |
| 19/10/2023 | withdrawal | 100.00 | 300.00 |
| 20/10/2023 | lodgement | 50.00 | 350.00 |
| 20/10/2023 | interest earned | 1.58 | 351.58 |
| 0/10/2023 |  |  |  |
| Do you want to print statement? Y/N | | | |

Notes:

* First select the customer and account required. When confirmed, display the transactions - allow scrolling through transactions if there are more than a screen full.
* Perhaps you might allow user to suggest dates for the history, e.g. April 2023 - Aug. 2023.

## Loan account History

This form should give the history of the account that was selected. It should therefore list all the transactions that took place with this account. It should give the date, type and amount of each transaction. It should also state the balance. In essence it should read like a normal bank statement. The user should be given the option to print out this statement.

Loan Account History

Account Number: 99999

Customer Name: XXXXXXXXXX

Date

Transaction Type

Repayment Amount Balance

Do you want to print statement? Y/N

|  |  |  |  |
| --- | --- | --- | --- |
| 19/10/2023 | Withdrawal | 100.00 | -100.00 |
| 20/10/2023 | Payment | 50.00 | -50.00 |

Notes:

* First select the customer and account required. When confirmed, display the transactions - allow scrolling through transactions if there are more than a screen full.
* Perhaps you might allow user to suggest dates for the history, e.g. April 2023 - Aug. 2023.

## Current Account History

This form should give the history of the account that was selected. It should therefore list the transactions that took place with this account. It should give the date, type and amount of each transaction. It should also state the current balance. In essence it should read like a normal bank statement. The user should be given the option to print out this statement.

|  |  |  |  |
| --- | --- | --- | --- |
| 20/10/2023 | Deposit | 50.00 | 350.00 |
| 21/10/2023 | Withdrawal | 400.00 | 50.00 DR |
| 25/10/2023 | Withdrawal | 50.00 | 100.00 DR |
| 3/11/2023 | Deposit | 500.00 | 400.00 |
| Do you want to print statement? Y/N | | | |

Notes:

Current Account History

Account Number: 99999

Customer Name: XXXXXXXXXX

Date

Amount

Balance

19/10/2023

Withdrawal

100.00

300.00

Transaction Type

* First select the customer and account required. When confirmed, display the transactions - allow scrolling through transactions if there are more than a screen full.

Perhaps you might allow user to suggest dates for the history, e.g. April 2023 - Aug. 2023.

## Customer Report

This gives on-screen details about all the bank’s customers. It shows the following:

|  |  |  |  |
| --- | --- | --- | --- |
| **Customer Name** | **Address (first line)** | **Current Account Number** | **Current Balance** |
|  |  |  |  |

By default, this listing is presented in alphabetical order of customer surname. However, the user may choose to view the same details presented in order of account number.

Alternatively, the user may choose to view the same details in descending order of 'current balance' field. In this case, the customer with the largest outstanding balance is displayed first, etc.

The user can browse through any of these report variations using scroll bars or cursor movement keys.

There should be an **Account Information** button on this screen. To use this button, a customer is first selected. Clicking on the Account Information button then causes a window to appear showing the account details of all the loan and deposit accounts belonging to the customer.

## Current Account Interest Report

This report should allow the manager to see out how much interest has been charged on current accounts which were overdrawn between certain dates.

Report on Interest Charged on Overdrawn Current Accounts

Enter start date: DD/MM/YYYY

End date: DD/MM/YYYY

The current interest rate for current accounts: XX% The total interest charged on overdrawn accounts was:

XX.XX

There should be validation on this form. It should not be possible to enter an end date which is earlier than the start date.

## Account Report

The user should be able to select a customer from a list of customers. All current and loan accounts should be listed for this customer.

The user should be able to choose one of the accounts by clicking on it.

The user should then choose a start date and end date and all the transactions between those dates should be displayed. If no date is chosen all transactions for the last 6 months should be displayed.

An example report for a Current Account is shown below. A similar type report should be produced for a loan account.

|  |  |  |
| --- | --- | --- |
| Current Account |  | |
| Account Number: | 99999 Customer Name: | XXXXXXXXXX |
| Date | Transaction Type Amount | Balance |
| 19/11/2023 | Withdrawal 100.00 | 300.00 |
| 20/11/2023 | Deposit 50.00 | 350.00 |
| 21/11/2023 | Withdrawal 400.00 | 50.00 DR |
| 25/11/2023 | Withdrawal 50.00 | 100.00 DR |
| 27/11/2023 | Deposit 500.00 | 400.00 |