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CPS406 - Group 6
Introduction to Software Engineering

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Introduction

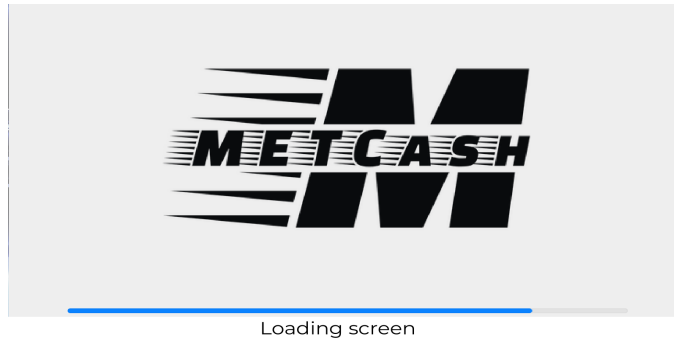
The ATM banking system project aims to design and develop a software application that will simulate the functions of an ATM machine. The system will be designed to be user-friendly, secure, and reliable, and it will offer a range of services that will allow users to carry out various banking operations with ease.

Installation

To start METcash, extract the zip folder containing the METcash.jar (Oracle Java Runtime Environment required) and run the program.

Welcome Start

Start: Begin software that takes the user to a Loading Screen .



Application Login Info

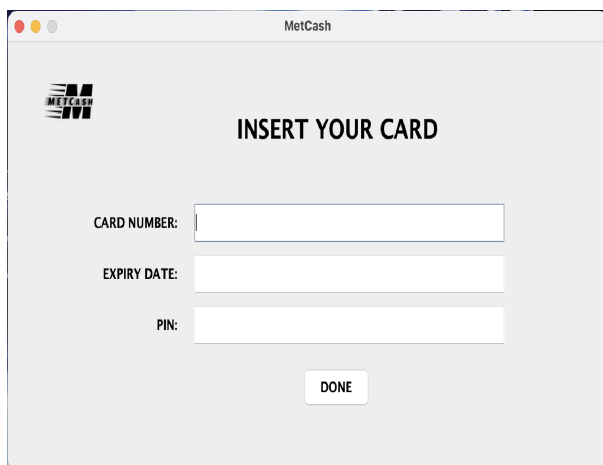
Displays the Insert Card User details such as :

Card details , Expiry Date and PIN

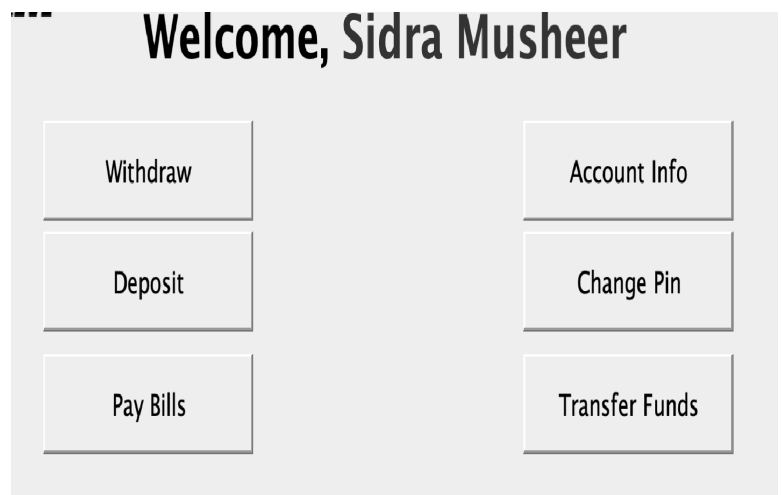
Displays the transaction menu for the User which has different activities sections :

Withdraw , Deposit, Pay Bills, Change Pin , Transfer Funds

Logout: Logs user out of session. Returns to Login page

The image shows a screenshot of the 'MetCash' application window. The title bar says 'MetCash'. The main content area has a header 'INSERT YOUR CARD' and a METCASH logo. Below the header, there are three input fields labeled 'CARD NUMBER:', 'EXPIRY DATE:', and 'PIN:'. At the bottom right, there is a 'DONE' button.

Insert Card: Insert Card Menu Screen

The image shows a screenshot of a user's welcome screen. The title is 'Welcome, Sidra Musheer'. Below the title, there are six buttons arranged in two columns. The left column contains 'Withdraw', 'Deposit', and 'Pay Bills'. The right column contains 'Account Info', 'Change Pin', and 'Transfer Funds'.

Account Info

Name: this section contains

the user's First name & Last name

Address: this section contains the address used to log into the system.

Account Balance: Enter the initial balance for the chosen account(s).

Account Type: Choose the type of account - Saving Account, Checking Account, or both.

Account Number: Enter the account number for the chosen account(s)

Option Menu: Click to access

the other system account informations

Account Information Page

Withdraw

Insert your card and enter your PIN.

Select "Withdraw" from the main menu.

Choose the desired amount from options :
20, 40, 80, 100, 200, or 300 units.

Confirm the amount and account (if prompted).

The ATM will dispense the cash
in the selected denominations.

The user will be sent back to the option menu
or will be logged out

Withdraw: Error if Confirm button clicked without choosing amount

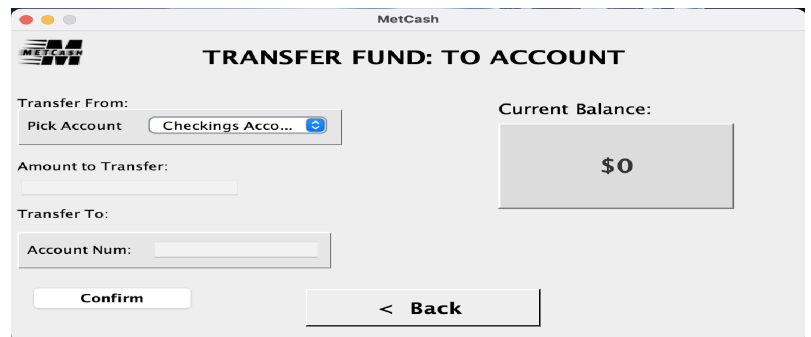
Transfer Funds Menu :

The ATM offers two types of transactions in the Transaction Menu: **"Transfer Funds: To Account"** and **"Transfer Funds: Between Checking/Savings."** These options provide users with flexibility to transfer funds between different accounts within their banking relationship.

Transfer Funds : To Account

The "Transfer Funds: To Account" feature prompts users to specify the source and destination accounts for the transfer.

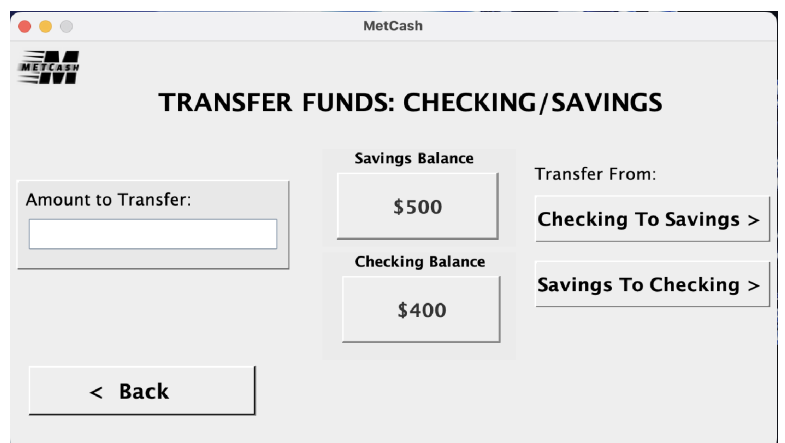
This can be done by entering account numbers or selecting accounts from provided options, ensuring users have control over the transaction accurate and secure fund transfers between designated accounts.



Transfer Funds: Transfer Funds to different account screen

Transfer Funds : Checking/savings

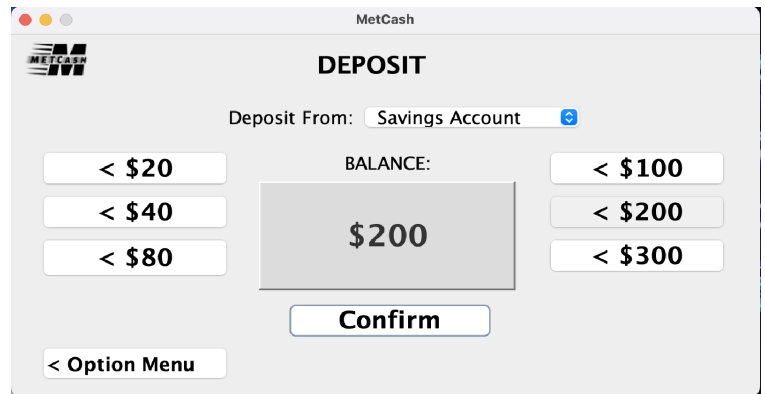
To transfer funds between checking and savings accounts at an ATM, follow the ATM's prompts to select the "Transfer Funds: Between Checking/Savings" option, choose the appropriate checking and savings accounts, enter the desired transfer amount, verify the details, confirm the transaction, and obtain a confirmation receipt from the ATM.



Transfer Funds: Checking and Savings Transfers screens

Deposit :

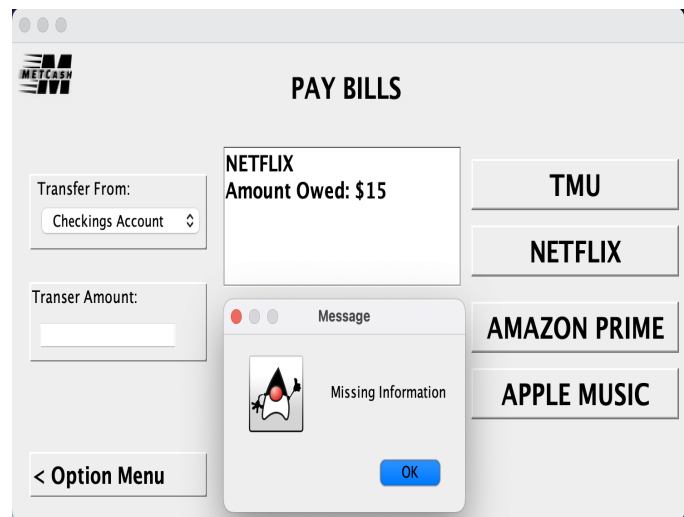
The "Deposit" feature in an ATM allows users to deposit funds into their bank account. Users typically need to insert their bank card, choose the "Deposit" option, select the desired account, deposit cash or checks, verify the details, and complete the transaction. It's important to follow the specific instructions provided in the ATM user manual



Deposit: Adding Money to Savings Account

Pay Bills:

Modern ATMs offer the convenience of paying bills directly from your checking or savings account, eliminating the need to visit physical locations or use online banking. To pay bills at an ATM, follow the provided steps, which typically involve choosing the "Pay Bills" option, selecting the service provider, entering necessary information such as account number, verifying the payment amount, confirming the transaction, and obtaining a confirmation receipt from the ATM.

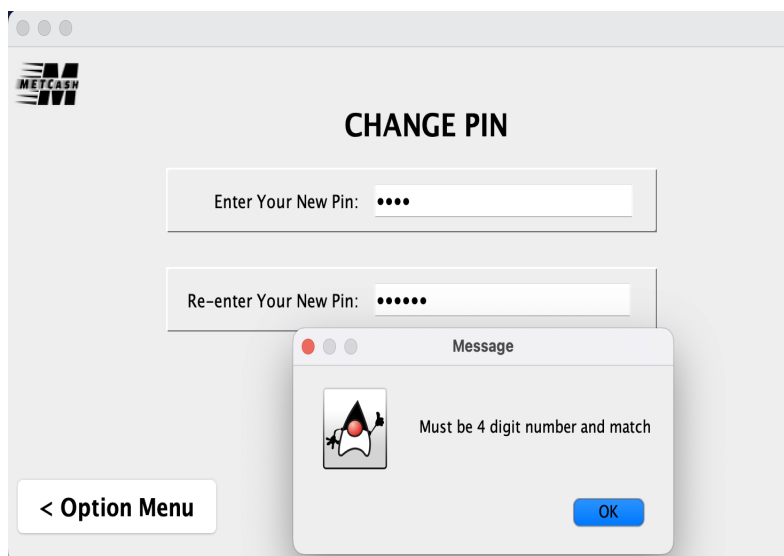


Change Pin:

To change your ATM PIN, refer to the user manual and follow these steps:

- Enter your current 4-digit PIN when prompted.
- Select the "Change PIN" option from the menu.
- Enter your new 4-digit PIN, choosing a unique and secure number.
- Confirm your new PIN by entering it again when prompted.

If accepted, the ATM will display a confirmation message. Keep your new PIN confidential and do not share it for security reasons.

**Transaction History:**

ATM services provide a comprehensive transaction history feature that securely records all transactions, even across multiple sessions, for convenient review. You can receive a text file at the end of each session with detailed transaction records. Your transaction history is private, stored securely, and compliant with industry regulations. With this feature, you can confidently track and manage your ATM transactions, ensuring a complete and accurate record of your financial activities.

TRANSACTION HISTORY

Transaction Type	Amount	From Account	Date
Deposited	\$300	Checkings	07-04-2023
Deposited	\$300	Checkings	07-04-2023
Deposited	\$200	Checkings	07-04-2023
Deposited	\$300	Checkings	07-04-2023
Withdrawn	\$300	Checkings	07-04-2023
Bill Payment	\$5	Checkings	07-04-2023
Bill Payment	\$6	Checkings	07-04-2023
Account Transfer	\$100	Checkings	07-04-2023
Pin Change	---	---	07-04-2023
Savings Transfer	\$68	Checkings	07-04-2023

< Option Menu

