Challenge

Introduction to Encapsulation and Data Abstraction

Online Banking

Today, "Life at your doorstep" has become a way of life. Performing routine tasks has become quite simple as many companies have started providing services online. Banking services are also mainly online, but to open a bank account, one must visit a bank in person. Many global banks have ventured into the new era of banking.

They allow customers to open a bank account from the comfort of their homes. Coast State Bank now provides the option to open an account on its online platform. The bank provides this service to individuals who are 18 or older. However, not all types of accounts can be opened online. Currently, the bank allows customers to only open a savings account. Create objects and define getter/setter for the savings account class.

CHALLENGE

Tasks

- Define the `SavingsAccount` class.
- Some attributes that can be modelled in the `SavingsAccount` class are account holder name, account number, account opening date, account status, available balance, total balance, internet and mobile banking enabled, interest rate, and the mode of operation, such as self-operated or joint account.
- In the `SavingsAccount` class, define all the variables `private`.
- Create getters and setters for all the `private` variables.
- In the methods to retrieve balance, debit, and credit amounts, change the lines of code to accommodate setter methods to modify the values of the variables.

Task Details (cont'd)

- Create an implementation class called `SavingsAccountImpl`.
- Declare and initialize objects of the `SavingsAccount` class in the main method of the `SavingsAccountImpl` class, and call the methods to retrieve balance, debit, and credit amounts.
- Initialize values to the variables of the `SavingsAccount` class by using getters and setters.
- Display the account details.
- Display the statement after a debit or credit of an amount from the account.