

ENSE 374 Lab 3

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1 Background

1.1 Checking Accounts

A checking account is the most accessible type of bank account, allowing you to deposit and withdraw money as often as you want. Most checking accounts come with debit cards, which you can use to make purchases and withdraw money from ATMs, as well as paper checks. In addition, most allow you to pay bills electronically. Only some checking accounts earn interest, and many charge fees for maintenance, ATM withdrawals and minimum balance violations. Comparing options can help you find a checking account with the lowest fees and best terms for your situation.

1.2 Savings Accounts

A savings account allows you to earn interest on your deposits, and are good tools for emergency funds or for keeping money you otherwise don't want to spend right away. They don't come with debit cards, and there is usually a limit to the number of withdrawals you can make per month. Savings accounts differ in interest rates, method of compounding interest, service fees and minimum opening deposits, so search for the one that's right for the amount of money you plan to save and how you intend to use the account.

As with other types of bank accounts, a bank may assess various fees on savings accounts, such as minimum balance fees.

1.3 Money Market Accounts

These accounts earn more interest than savings accounts, but they require a higher minimum balance, usually between \$5,000 and \$10,000. Additionally, there is no fixed interest rate for money market accounts: Instead, the interest rate varies based on money markets. Some offer the option of checks, but there is often a minimum check amount and a limit to the number of checks you can write each month. The number of withdrawals allowed is also limited.

2 Objective

Based on the account descriptions develop a Java application that allows a user to choose an account that best suits their requirements. The application will ask the user a number of questions about their requirements and then choose the appropriate account. You will also write some code to test your application.

3 Phase 1

Read the different type of accounts and pull the relevant information out. Develop a Class Diagram detailing how you will organize your application.

4 Phase 2

Develop the Java application based on the UML diagram you have created. Use JavaDocs to document your design. This includes documenting your algorithm for deciding on the best account for the user.

5 Phase 3

Savings accounts vary how they compound interest. Test your savings account functionality by giving the account an opening balance, depositing \$500 each month, compound interest monthly and biweekly. Simulate 12 months and indicate the resulting balances in each case.

6 What to submit?

Your application as well as the JavaDocs.