

Mastery My Savings Error Log

Credit Name: CSE 2110 Procedural Programming 1

Assignment Name: Mastery My Savings

Describe the errors you've encountered while working on this assignment. What caused the error and how do you overcome the error?

Error

The error I made in this code was related to the switch statement in the PiggyBank class. As you can see below in the MySavings class I had the sixth option to remove the coins from the user's bank; however in PiggyBank I forgot to add case 6 to actually do this.

PiggyBank class

```
case 2:// Add a penny (user selects choice 2)
    pennies++; // Adds a penny to the penny variable
    return "Added a penny."; // Return message to confirm the user's choice

case 3: // Add a nickel (user selects choice 3)
    nickels++; // Adds a nickel to the nickel variable
    return "Added a nickel."; // Return message to confirm the user's choice

case 4: // Add a dime (user selects choice 4)
    dimes++; // Adds a dime to the dime variable
    return "Added a dime."; // Return message to confirm the user's choice

case 5: // Add a quarter (user selects choice 5)
    quarters++; // Adds a quarter to the quarter variable
    return "Added a quarter."; // Return message to confirm the user's choice

case 0: // Stops the program (this is done in MySavings)
    return "Exiting your bank account..."; // Return message to confirm the

default: // If a number 0-6 wasn't selected (for invalid options)
    return "Invalid choice. Please enter a number from the menu options.";
    // Return message to tell the user to enter a valid choice
```

MySavings class

```
System.out.println("1. Show total in bank");
System.out.println("2. Add a penny"); // 0
System.out.println("3. Add a nickel"); // 1
System.out.println("4. Add a dime"); // 0p
System.out.println("5. Add a quarter"); // 0
System.out.println("6. Remove all coins");
System.out.println("0. Quit"); // // Optio
```

Not doing this resulted in an error when the user wanted to remove all of their coins from the bank. As you can see below the program went to the default case since case 6 was non-existent, making the remove coin option useless.

Menu:

1. Show total in bank
2. Add a penny
3. Add a nickel
4. Add a dime
5. Add a quarter
6. Remove all coins
0. Quit

Enter your choice: 6

Invalid choice. Please enter a number from the menu options.

To fix this I added the sixth case to the Option methods switch statement in the PiggyBank class. (I just set each variable to 0 to remove all of the user's coins)

```
case 6: // Removes all of the coins from the user's bank (user s
    pennies = 0; // sets pennies variable equal to 0
    nickels = 0; // sets nickels variable equal to 0
    dimes = 0; // sets dimes variable equal to 0
    quarters = 0; // sets quarters variable equal to 0
    return "All coins have been removed from your piggy bank.";
```

This resulted in a working option that removed all of the user's coins when prompted as seen below.

2. Add a penny
3. Add a nickel
4. Add a dime
5. Add a quarter
6. Remove all coins
0. Quit

Enter your choice: 6