

MySavings Mastery ErrorLog

Foreword: Screenshots were taken on both my home and school computer, hence the difference between the package in some of the screenshots.

The first rendition of my code is pictured below:

```
package skibidi;

import java.util.Scanner;

public class TestMySavings {

    public static int input() {
        @SuppressWarnings("resource")
        //Prepare for user input
        Scanner userInput = new Scanner(System.in);
        //Record user input
        int choice = userInput.nextInt();
        //Returns user input
        return choice;
    }

    public static void main(String[] args) {

        do {

            //Prompt user for input
            System.out.println("1. Show total in bank.");
            System.out.println("2. Add a penny.");
            System.out.println("3. Add a nickel.");
            System.out.println("4. Add a dime.");
            System.out.println("5. Add a quarter.");
            System.out.println("6. Take money out of bank.");
            System.out.println("Enter 0 to quit.");
            System.out.println("Enter your choice: ");

            //Calls PiggyBank Object from MySavings Class with the user input
            MySavings.PiggyBank(input());

        } while (input() != 0);
        //Loops while user input != 0

    }

}
```

```

package skibidi;

public class MySavings {

    //Creates
    private static double totalValue = 0;

    public static void PiggyBank(int input) {
        switch (input) {
            case 0:
                break;
            case 1:
                System.out.println("You have " + totalValue + " in your piggybank.");
                break;
            case 2:
                System.out.println("Case2");
                totalValue += 0.01;
                break;
            case 3:
                System.out.println("Case3");
                totalValue += 0.05;
                break;
            case 4:
                System.out.println("Case4");
                totalValue += 0.1;
                break;
            case 5:
                System.out.println("Case5");
                totalValue += 0.25;
                break;
            case 6:
                System.out.println("Case6");
                totalValue = 0;
                break;
        }
    }
}

```

In the TestMySavings class I used a do while loop so that the print statement would repeat until the user inputted a zero, unfortunately this contained a logical error, as the call to the MySavings.PiggyBank(); object and the while loop condition used the input(); object. This meant that the user had to enter a number twice in order for the loop to cycle.

Example of error:

```
1. Show total in bank.
2. Add a penny.
3. Add a nickel.
4. Add a dime.
5. Add a quarter.
6. Take money out of bank.
Enter 0 to quit.
Enter your choice:
2
Case2
2
1. Show total in bank.
2. Add a penny.
3. Add a nickel.
4. Add a dime.
5. Add a quarter.
6. Take money out of bank.
Enter 0 to quit.
Enter your choice:
1
You have 0.01 in your piggybank.
2
1. Show total in bank.
2. Add a penny.
3. Add a nickel.
4. Add a dime.
5. Add a quarter.
6. Take money out of bank.
Enter 0 to quit.
Enter your choice:
5
Case5
1
1. Show total in bank.
2. Add a penny.
3. Add a nickel.
4. Add a dime.
5. Add a quarter.
6. Take money out of bank.
Enter 0 to quit.
Enter your choice:
1
You have 0.26 in your piggybank.
0
```

The second rendition of my code resolved my previous error. I declared a new variable, input, as 10, outside of the range of the loop condition. Then within the loop I initialized input to the now renamed selection(); object. This solved my error, albeit in an improper way.

The second rendition of my code:

```
package skibidi;

import java.util.Scanner;

public class TestMySavings {

    //Object that returns user input
    public static int selection() {
        @SuppressWarnings("resource")
        //Prepare for user input
        Scanner userInput = new Scanner(System.in);
        //Record user input
        int choice = userInput.nextInt();
        //Returns user input
        return choice;
    }

    public static void main(String[] args) {

        //Declares original input not as 0, so that the loop can begin
        int input = 10;

        //Loops while input is not 0
        while (input != 0) {

            //Prompt user for input
            System.out.println("1. Show total in bank.");
            System.out.println("2. Add a penny.");
            System.out.println("3. Add a nickel.");
            System.out.println("4. Add a dime.");
            System.out.println("5. Add a quarter.");
            System.out.println("6. Take money out of bank.");
            System.out.println("Enter 0 to quit.");
            System.out.println("Enter your choice: ");

            //Declares input variable as selection() object
            input = selection();

            //Calls PiggyBank Object from MySavings Class with the input variable
            MySavings.PiggyBank(input);

        }

    }

}
```

```
package skibidi;

public class MySavings {

    //Creates public variable which represents the total value in the piggybank
    private static double totalValue = 0;

    public static void PiggyBank(int input) {
        //Switch statement depending on user input
        switch (input) {
            //Breaks switch
            case 0:
                break;
            case 1:
                //Prints total value in piggybank
                System.out.println("You have " + totalValue + " in your piggybank.");
                break;
            case 2:
                //Adds 1 cent to the piggybank
                totalValue += 0.01;
                break;
            case 3:
                //Adds 5 cents to the piggybank
                totalValue += 0.05;
                break;
            case 4:
                //Adds 10 cents to the piggybank
                totalValue += 0.1;
                break;
            case 5:
                //Adds 25 cents to the piggybank
                totalValue += 0.25;
                break;
            case 6:
                //Removes all coins from the piggybank
                totalValue = 0;
                break;
        }
    }
}
```

Updated output:

```
1. Show total in bank.
2. Add a penny.
3. Add a nickel.
4. Add a dime.
5. Add a quarter.
6. Take money out of bank.
Enter 0 to quit.
Enter your choice:
2
1. Show total in bank.
2. Add a penny.
3. Add a nickel.
4. Add a dime.
5. Add a quarter.
6. Take money out of bank.
Enter 0 to quit.
Enter your choice:
1
You have 0.01 in your piggybank.
1. Show total in bank.
2. Add a penny.
3. Add a nickel.
4. Add a dime.
5. Add a quarter.
6. Take money out of bank.
Enter 0 to quit.
Enter your choice:
6
1. Show total in bank.
2. Add a penny.
3. Add a nickel.
4. Add a dime.
5. Add a quarter.
6. Take money out of bank.
Enter 0 to quit.
Enter your choice:
1
You have 0.0 in your piggybank.
1. Show total in bank.
2. Add a penny.
3. Add a nickel.
4. Add a dime.
5. Add a quarter.
6. Take money out of bank.
Enter 0 to quit.
Enter your choice:
0
```