

Error Logs - Project [Mastery]

#1: Error

```
package Mastery;

import java.util.Scanner;

public class ProjectMastery {

    public static void main(String[] args)
    {
        Scanner userInput = new Scanner(System.in);

        System.out.print("How much time was spent designing the project application? ");
        int designing = userInput.nextInt();

        System.out.print("How much time was spent coding the project application? ");
        int coding = userInput.nextInt();

        System.out.print("How much time was spent debugging the project application? ");
        int debugging = userInput.nextInt();

        System.out.print("How much time was spent testing the project application? ");
        int testing = userInput.nextInt();

        int total_T = testing + debugging + coding + designing;

        int design_P = total_T / designing;
        int coding_P = total_T / coding;
        int debug_P = total_T / debugging;
        int testing_P = total_T / testing;
```

1. Here I have two logical errors. Each defined variable should be of type double to make the percentage calculations work properly.
2. The percentage calculations were calculated wrong, and instead of doing `total_T / designing`, to calculate percentage it's `designing / total_P` which is the correct calculation. I have also added `NumberFormat nf = NumberFormat.getPercentInstance();` which automatically will convert my answer automatically into percentage when I call the function.

#1: Fixed Code:

```
package mastery;

import java.text.NumberFormat;
import java.util.Scanner;

public class ProjectMastery {

    public static void main(String[] args)
    {
        Scanner userInput = new Scanner(System.in);

        NumberFormat nf = NumberFormat.getPercentInstance();

        System.out.print("How much time was spent designing the project application? ");
        double designing = userInput.nextInt();

        System.out.print("How much time was spent coding the project application? ");
        double coding = userInput.nextInt();

        System.out.print("How much time was spent debugging the project application? ");
        double debugging = userInput.nextInt();

        System.out.print("How much time was spent testing the project application? ");
        double testing = userInput.nextInt();

        System.out.print(" ");

        double total_T = testing + debugging + coding + designing;

        double design_P = designing / total_T;
        double coding_P = coding / total_T;
        double debug_P = debugging / total_T;
        double testing_P = testing / total_T;
```