eclipse-workspace - Practice/src/Practice/TrafficLightChecker.java - Eclipse IDE

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Package Explorer

- dharshini
  - JRE System Library [JavaSE-15]
  - src
- dj
- Practice
- TEST
- TrafficSignalOptimization

Main.java | Main1.java | ComputeMethods.java | ProcessName.java | TrafficLightChecker.java

```
1  package Practice;
2  //Problem 5-3: Determining the next color for a stop light using switch
3  import java.util.Scanner;
4  public class TrafficLightChecker {
5      public static void main(String[] args) {
6          Scanner scanner = new Scanner(System.in);
7          System.out.print("Enter a color code (1 for Red, 2 for Green, 3 for Yellow): ");
8          int currentColor = scanner.nextInt();
9          String nextColor;
10         switch (currentColor) {
11             case 1:
12                 nextColor = "Green";
13                 break;
14             case 2:
15                 nextColor = "Yellow";
16                 break;
17             case 3:
18                 nextColor = "Red";
19                 break;
20             default:
21                 nextColor = null;
22                 break;
23         }
24         if (nextColor != null) {
25             System.out.println("Next Traffic Light is " + nextColor.toLowerCase());
26         } else {
27             System.out.println("Invalid color");
28         }
29     }
30 }
31
```

Task List

Outline

- Practice
- TrafficLightChec
- main(String[]

Problems | Javadoc | Declaration | Console

<terminated> TrafficLightChecker [Java Application] C:\Users\rjana\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_22.0.1.v20240426-1149\jre\bin\javaw.exe (2 Aug 2024, 6:49:32 pm – 6:49:35 pm) [pid: 1972]

```
Enter a color code (1 for Red, 2 for Green, 3 for Yellow): 2
Next Traffic Light is yellow
```

32°C Haze

Search

ENG IN

18:49 02-08-2024

eclipse-workspace - Practice/src/Practice/TrafficLightCheaker.java - Eclipse IDE

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Package Explorer

- dharshini
  - JRE System Library [JavaSE-15]
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Main.java | Main1.java | ComputeMethods.java | ColorRange.java | TrafficLightCheaker.java | ProcessName.java | TrafficLightChecker.java

```
1  package Practice;
2  //Problem 5-2: Determining the next color for a stop light
3  import java.util.Scanner;
4
5  public class TrafficLightCheaker {
6      public static void main(String[] args) {
7          Scanner scanner = new Scanner(System.in);
8           System.out.print("Enter a color code (1 for Red, 2 for Green, 3 for Yellow): ");
9          int currentColor = scanner.nextInt();
10
11          String nextColor;
12         if (currentColor == 1) {
13             nextColor = "Green";
14         } else if (currentColor == 2) {
15             nextColor = "Yellow";
16         } else if (currentColor == 3) {
17             nextColor = "Red";
18         } else {
19             nextColor = null;
20         }
21
22          if (nextColor != null) {
23             System.out.println("Next Traffic Light is " + nextColor.toLowerCase());
24         } else {
25             System.out.println("Invalid color");
26         }
27     }
28 }
```

Task List

Outline

- Practice
- TrafficLightChea
- main(String[])

Problems | Javadoc | Declaration | Console

<terminated> TrafficLightCheaker [Java Application] C:\Users\rjana\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_22.0.1.v20240426-1149\jre\bin\javaw.exe (2 Aug 2024, 6:47:18 pm – 6:47:24 pm) [pid: 3744]

```
Enter a color code (1 for Red, 2 for Green, 3 for Yellow): 3
Next Traffic Light is red
```

Battery status: 74% available (plugged in)

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Search

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18:47 02-08-2024

eclipse-workspace - Practice/src/Practice/ColorRange.java - Eclipse IDE

File Edit Source Refactor Source Navigate Search Project Run Window Help

Package Explorer

- dharshini
  - JRE System Library [JavaSE-15]
  - src
- dj
- Practice
- TEST
- TrafficSignalOptimization

Main.java | Main1.java | ComputeMethods.java | ColorRange.java | TrafficLightCheaker.java | ProcessName.java | TrafficLightChecker.java

```java
package Practice;
//Practice 5-1: Determining color in the visible spectrum
import java.util.Scanner;
public class ColorRange {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter a color code: ");
        double wavelength = scanner.nextDouble();
         String color;
        if (wavelength >= 380 && wavelength < 450) {
            color = "Violet";
        } else if (wavelength >= 450 && wavelength < 495) {
            color = "Blue";
        } else if (wavelength >= 495 && wavelength < 570) {
            color = "Green";
        } else if (wavelength >= 570 && wavelength < 590) {
            color = "Yellow";
        } else if (wavelength >= 590 && wavelength < 620) {
            color = "Orange";
        } else if (wavelength >= 620 && wavelength <= 750) {
            color = "Red";
        } else {
            color = null;
        }

         if (color != null) {
            System.out.println("The color is " + color);
        } else {
            System.out.println("The entered wavelength is not a part of the visible spectrum");
        }
    }
}
```

Task List

Outline

- Practice
- ColorRange
- main(String[])

Problems | Javadoc | Declaration | Console

<terminated> ColorRange [Java Application] C:\Users\rjana\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_22.0.1.v20240426-1149\jre\bin\javaw.exe (2 Aug 2024, 6:46:16 pm – 6:46:20 pm) [pid: 4784]

```
Enter a color code: 450
The color is Blue
```

32°C Haze

Search

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18:46 02-08-2024