**INTERFACE METHOD MODIFICATION**

As per <https://en.wikipedia.org/wiki/Electronic_color_code>, the calculation of Resistor Ohms is based on the first 3 bands. The tolerance defines the boundaries for which the resistance lies.

For example, a resistor with bands of yellow, violet, red, and gold has first digit 4 (yellow in table below), second digit 7 (violet), and followed by 2 (red) zeroes: 4700 ohms. Gold signifies that the tolerance is ±5%, so that the resistance could be between 4465 and 4935 ohms.

The posted challenge has defined 1 method interface signature as shown below.

  int CalculateOhmValue(string bandAColor, string bandBColor, string bandCColor, string bandDColor);

As explained above, the calculation of ohms is independent of the tolerance band, and tolerance limit will have lower and upper boundaries. Henceforth, I made modifications as follows:

int CalculateOhmValue(string bandAColor, string bandBColor, string bandCColor);

IList<double> CalculateTolerance(string bandColor, int ohmsValue);

**PROJECT SOLUTION**

The project solution resides in ResistorApp folder. The Solution has the following projects built using .NET Framework 4.6.2:

* ResistorService: The definition of interface and implementation
* StructureContainer: Dependency Injection Container using Structure Map Nuget package version 4.6.1
* ResistorTest: Unit tests to test implementations of ResistorService
* ResistorWebApp: MVC Web UI that consumes ResistorService. The project references StructureContainer project for DI

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