

Hands-on lab

Lambdas

September 2017

Create Console programs for the following exercises:

Exercise 1

Rewrite the LightBulb – Switch exercise from the previous module using *anonymous methods*.

Exercise 2

Rewrite the LightBulb – Switch exercise from the previous module using *lambdas*.

Exercise 3

Rewrite the LightBulb – Switch exercise from the previous module using *Action<T>* and/or *Func<T, TResult>*.

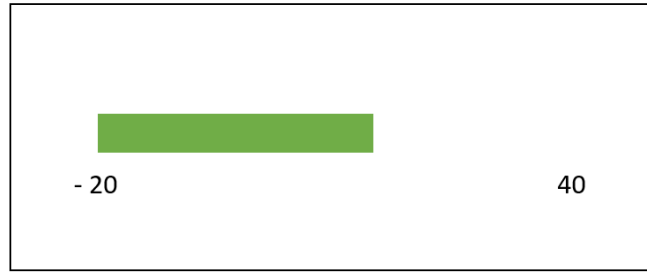
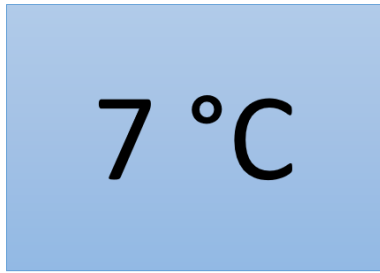
Create WPF programs for the following exercise:

Exercise 4

Using the *TemperatureSensor* from the previous module, write a WPF app that updates at least two *views* on the sensor.

Generate a new measurement every 1000 msec and update the views. Use the mediator pattern and *BackgroundWorker*.

A possible layout could be the following:



Two "Views" on a temperature sensor:

- TextBasedView
- ProgressBasedView

Use a BackgroundWorker to generate Random temperatures.

Use the Mediator pattern

Experiment with other variations:

- the color of the text based view changes according to the temperature: blue if temp is below 10 °C, orange between 10 °C and 25 °C and red above 25 °C;
- add other views for Avg, Min, Max and verify they are loosely coupled thanks to the mediator