

## LedApp Notes

The Classes/Test-functions have been separated into different files:

- the abstract class **Led** is defined into *Led.h/cpp* file; from specification requirement, few additional members have been added (the object name with his Getter method);
- the concrete class **LedWindows** is defined into *LedWindows.h/cpp* file (few additional members have been added like the led port number and the static object counter). For simplicity there isn't any saturation control on this static object counter member (*usedLedNum*)
- *TestLed*, *Init* and *Run* functions are defined into *TestLed.h/cpp* file and called by main (inside *LedApp.cpp*). The *TestLed* module uses support static functions (*testSwitchOn*, *testSwitchOff* and *testToggle*) to perform the unit test;
- In the *Run* function: is implemented also a display menu, when the user press -h key;
- In the *Run* function: the led toggling (last key pressed is 't') is stopped if any other key is pressed (also invalid key)

Here below a Test Console Output example:

```
Console di debug di Microsoft Visual Studio
Single led Test start!
Led_A: switched ON
Led_A switch ON test pass
Led_A: switched OFF
Led_A switch OFF test pass
Led_A: switched ON
Led_A Toggle test pass
Led_A: switched OFF
Led_A Toggle test pass
Led_A: switched OFF
Led_A switch OFF test pass
Led_A: switched ON
Led_A Toggle test pass
Led_A: switched OFF
Led_A Toggle test pass
Led_A: switched OFF

Run Test start!
Led_B: switched ON
Led_C: switched ON

Menu options:
e Exit
h Print this menu
f Switch off both led
n Switch on both led
t Set led 1 opposite to led 2
Led_B: switched OFF
Led_C: switched OFF
Led_B: switched ON
Led_C: switched ON
Led_B: switched OFF
Led_B: switched ON
Led_C: switched OFF
Led_B: switched OFF
Led_C: switched ON
Led_B: switched ON
Led_C: switched OFF
Led_B: switched OFF
Led_C: switched ON

Invalid option!
Menu options:
e Exit
h Print this menu
f Switch off both led
n Switch on both led
t Set led 1 opposite to led 2
Led_C: switched OFF
Led_B: switched OFF

Goodbye Test!

C:\Users\Federico\source\repos\LedApp\Debug\LedApp.exe (processo 1928) terminato. Codice restituito: 0.
Premere un tasto qualsiasi per chiudere questa finestra...
```