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1  /*
2  -----
3  Laboratory   : labo_01
4  File        : color.h
5  Author(s)   : Emmanuelle Comte et David Gallay
6  Date        : 20.02.2020
7
8  Purpose     : Declare class Color and functions useful for it
9  Remark(s)   :
10
11              There is the github repository:
12              https://github.com/dgheig/Ba2-labo01
13
14  Compiler     : MinGW-g++ 6.3.0 and g++ 7.4.0
15  -----*/
16  #ifndef COLOR_H
17  #define COLOR_H
18
19  #include <iostream>
20  #include <string>
21
22  class Color {
23
24      public:
25          enum class Code {
26              WHITE,
27              BLUE,
28              GREEN,
29              RED,
30              BLACK
31          };
32
33          /**
34           * @brief Create a color with a color by code (enum) or with nothing
35           * @param code default value WHITE
36           */
37          Color(Code code = Code::WHITE);
38
39          /**
40           * @brief Get the color
41           * @return The code of the color (enum)
42           */
43          Code getColorCode() const;
44
45          /**
46           * @brief Change the color
47           * @param code
48           * @return The color
49           */
50          Color& setColor(Code code);
51
52          /**
53           * @brief Get the name of the color
54           * @return The name of the color
55           */
56          std::string getName() const;
57
58          /**
59           * @brief Display a color
60           * @param stream
61           * @return The srteam
62           */
63          std::ostream& display(std::ostream& stream = std::cout) const;
64
65      private:
66          Code mCode;
67  };
68
69  /**
70   * @brief Convert the code color in a string
71   * @param code

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```
72  * @return The color in string
73  */
74  std::string toString(const Color::Code& code);
75
76  /**
77   * @brief Overload of the output stream to display a color
78   * @param stream
79   * @param color
80   * @return The stream
81   */
82  std::ostream& operator<<(std::ostream& stream, const Color& color);
83
84  #endif // COLOR_H
85
```