

```

1  #ifndef COLOR_H
2  #define COLOR_H
3
4  #include <iostream>
5  #include <string>
6
7  class Color {
8
9      public:
10         enum class Code {
11             WHITE,
12             BLUE,
13             GREEN,
14             RED,
15             BLACK
16         };
17
18         /**
19          * @brief Create a color with a color by code (enum) or with nothing
20          * @param code default value WHITE
21          */
22         Color(Code code = Code::WHITE);
23
24         /**
25          * @brief Get the color
26          * @return The code of the color (enum)
27          */
28         Code getColorCode() const;
29
30         /**
31          * @brief Change the color
32          * @param code
33          * @return The color
34          */
35         Color& setColor(Code code);
36
37         /**
38          * @brief Get the name of the color
39          * @return The name of the color
40          */
41         std::string getName() const;
42
43         /**
44          * @brief Display a color
45          * @param stream
46          * @return The stream
47          */
48         std::ostream& display(std::ostream& stream = std::cout) const;
49
50     private:
51         Code mCode;
52 };
53
54 /**
55  * @brief Convert the code color in a string
56  * @param code
57  * @return The color in string
58  */
59 std::string toString(const Color::Code& code);
60
61 /**
62  * @brief Overload of the output stream to display a color
63  * @param stream
64  * @param color
65  * @return The stream
66  */
67 std::ostream& operator<<(std::ostream& stream, const Color& color);
68
69 #endif // COLOR_H
70

```