

```
1: /**
2:  * @file main.cpp - Implementation of SFML Sprite
3:  * @brief Press arrow keys to move and Num1 and Num2 keys to rotate.
4:  * @version 0.1
5:  * @date 2022-01-24
6:  *
7:  * @copyright Copyright (c) 2022
8:  *
9:  */
10:
11: #include <SFML/Graphics.hpp>
12: #include <iostream>
13:
14: int main()
15: {
16:     const unsigned WINDOW_WIDTH = 600;
17:     const unsigned WINDOW_HEIGHT = 600;
18:
19:     sf::RenderWindow window(sf::VideoMode(600, 600), "SFML window");
20:     sf::Texture texture;
21:
22:     if (!texture.loadFromFile("sprite.png"))
23:         return EXIT_FAILURE;
24:
25:     sf::Sprite sprite(texture);
26:
27:     sprite.scale(sf::Vector2f(.12, .12));
28:
29:     while (window.isOpen()) {
30:         sf::Event event;
31:         while (window.pollEvent(event)) {
32:             if (event.type == sf::Event::Closed)
33:                 window.close();
34:         }
35:
36:         window.clear();
37:         window.draw(sprite);
38:         window.display();
39:
40:         if (sf::Keyboard::isKeyPressed(sf::Keyboard::Left)) {
41:             sprite.move(-.25, 0);
42:         } else if (sf::Keyboard::isKeyPressed(sf::Keyboard::Right)) {
43:             sprite.move(.25, 0);
44:         } else if (sf::Keyboard::isKeyPressed(sf::Keyboard::Up)) {
45:             sprite.move(0, -.25);
46:         } else if (sf::Keyboard::isKeyPressed(sf::Keyboard::Down)) {
47:             sprite.move(0, .25);
48:         } else if (sf::Keyboard::isKeyPressed(sf::Keyboard::Num1)) {
49:             sprite.rotate(1);
50:         } else if (sf::Keyboard::isKeyPressed(sf::Keyboard::Num2)) {
51:             sprite.rotate(-1);
52:         }
53:
54:         if (sprite.getPosition().x < 0) {
55:             sprite.setPosition(0, sprite.getPosition().y);
56:         }
57:         if (sprite.getPosition().y < 0) {
58:             sprite.setPosition(sprite.getPosition().x, 0);
59:         }
60:         if (sprite.getPosition().x + sprite.getGlobalBounds().width > WIN
DOW_WIDTH) {
61:             sprite.setPosition(WINDOW_WIDTH - sprite.getGlobalBounds().wi
dth, sprite.getPosition().y);
62:         }
63:         if (sprite.getPosition().y + sprite.getGlobalBounds().width > WIN
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DOW_HEIGHT) {
    64:         sprite.setPosition(sprite.getPosition().x, WINDOW_HEIGHT - sp
rite.getGlobalBounds().height);
    65:     }
    66: }
    67:
    68:     return 0;
    69: }
```