

```
1  #include "Window.h"
2  #include <stdio.h>
3  Window* Window::window = NULL;
4
5  Window::Window() {
6      sdl_window = NULL;
7      renderer = NULL;
8      fullscreen = false;
9  };
10
11 Window* Window::getInstance() {
12     if (window == NULL) {
13         window = new Window();
14     }
15     return window;
16 }
17
18 bool Window::setWindowAndRenderer(SDL_Window* window, SDL_Renderer*
19     renderer) {
20     bool success = true;
21
22     this->sdl_window = window;
23     if (this->sdl_window != window) {
24         printf("Window.setWindow(..) failed to set up window\n");
25         success = false;
26     }
27
28     this->renderer = renderer;
29     if (this->renderer != renderer){
30         printf("Window.setWindow(..) failed to set up renderer\n");
31         success = false;
32     }
33
34     return success;
35 }
36
37 bool Window::setSize(int w, int h) {
38     bool success = false;
39
40     if (sdl_window == NULL) {
41         window_size_w = w;
42         window_size_h = h;
43         success = true;
44     }
45
46     return success;
47 };
48
49 bool Window::setFullscreen(bool fullscreen) {
50     bool success = false;
51
52     if (sdl_window == NULL) {
53         this->fullscreen = fullscreen;
```

```
53         success = true;
54     }
55
56     return success;
57 };
58
59 SDL_Window* Window::getSDL_Window() {
60     if (sdl_window != NULL) {
61         return sdl_window;
62     }
63     else {
64         printf("Window::window was not set up yet. Failure in      ↗
65             Window::getWindow());
66         return NULL;
67     }
68 };
69
70 SDL_Renderer* Window::getRenderer() {
71     if (renderer != NULL) {
72         return renderer;
73     }
74     else {
75         printf("Window::renderer was not set up yet. Failure in      ↗
76             Window::getRenderer());
77         return NULL;
78     }
79 }
80
81 bool Window::isFullscreen() {
82     return fullscreen;
83 };
84
85 int Window::getWindowSizeH() {
86     if (sdl_window != NULL) {
87         int width = 0, height = 0;
88         SDL_GetWindowSize(sdl_window, &width, &height);
89         return height;
90     }
91     else {
92         return window_size_h;
93     }
94 }
95
96 int Window::getWindowSizeW() {
97     if (sdl_window != NULL) {
98         int width = 0, height = 0;
99         SDL_GetWindowSize(sdl_window, &width, &height);
100         return width;
101     }
102     else {
103         return window_size_w;
104     }
105 }
106 };
107
```

```
104
105 Window::~~Window() {
106     //Destroy SDL Components
107     if (renderer != NULL) {
108         SDL_DestroyRenderer(renderer);
109         renderer = NULL;
110     }
111     if (sdl_window != NULL) {
112         SDL_DestroyWindow(sdl_window);
113         sdl_window = NULL;
114     }
115     //free window
116     Window::window = NULL;
117 };
```