

# SIMPLE X11 WINDOW API

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<https://github.com/CristianoSimao/Simple-X11-Window-API>

## Functions:

- **Sx11Init()** Configure the initial steps to create windows.

```
void Sx11Init()
```

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- **Sx11CreateWindow()** Create a basic window.

```
int Sx11CreateWindow(int sizeX,  
                    int sizeY,  
                    char windowtitle[],  
                    unsigned long int backgroundColor)
```

This function return 0 if all is OK.

**sizeX** is the width of window.

**sizeY** is the height of the window.

**windowtitle** is the string displayed in the window title bar.

**backgroundColor** is the background color of the window in hex format.

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- **Sx11SetFullScreen()** Make the window fullscreen.

```
void Sx11SetFullScreen()
```

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- **Sx11SetScreenResolution()** Change the resolution of the screen monitor to other modes.

```
int Sx11SetScreenResolution(char resolution[])
```

This function return 0 if all is OK.

**resolution** is the string specifying the new resolution to the screen. You need inform the resolution in pixels and add a "x" between width and height.

Examples: "800x600", "640x480", "1280x720", "1920x1080"

If the hardware not support the resolution the function will print a error message in the console, and the function reurn the value 1.

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- **Sx11DrawString()** Print text to the window.

```
void Sx11DrawString(int x, int y, unsigned long int sx11Color, char sx11text[])
```

**x** is the horizontal coordinate.

**y** is the vertical coordinate.

**sx11Color** is the color of the text in hex format.

**sx11text** is the string to be printed

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- **Sx11DrawLine()** Draw a line in the window.

```
void Sx11DrawLine(int x, int y, int fx, int fy, unsigned long int sx11Color)
```

**x** is the initial horizontal coordinate.  
**y** is the initial vertical coordinate.  
**fx** is the final horizontal coordinate.  
**fy** is the final vertical coordinate.  
**sx11Color** is the color of the text in hex format.

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- **Sx11DrawPixel()** Draw a pixel in the window.

```
void Sx11DrawPixel(int x, int y, unsigned long int sx11Color)
```

**x** is the horizontal coordinate.  
**y** is the vertical coordinate.  
**sx11Color** is the color of the text in hex format.

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- **Sx11GetEvents()** Capture keyboard and mouse events.

```
int Sx11GetEvents()
```

You need call this function every frame to capture mouse and keyboard events. Also this function receive the messages from Window Manager when the user click in the "X" button to close the window and also the Alt+F4 close event.

*To do ... keyboard and mouse events...*

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- **Sx11End()** Close the window and delete all resources.

```
void Sx11End()
```

Close the conection to X Window System and return the monitor resolution to the original value if changed.