# Surpass and XLWT Manual

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## 1 Hello World

Let's do a minimal "Hello World" script. We'll need to take care of any imports, initialize a Workbook object, create a Worksheet within the workbook, then write some text. Here's how.

## 1.1 Surpass

```
require 'rubygems'
require 'surpass'

book = Workbook.new
sheet = book.add_sheet

sheet.write(0, 0, "Hello World!")

book.save("output/examples/hello-world.xls")

1.2 XLWT
from xlwt import *

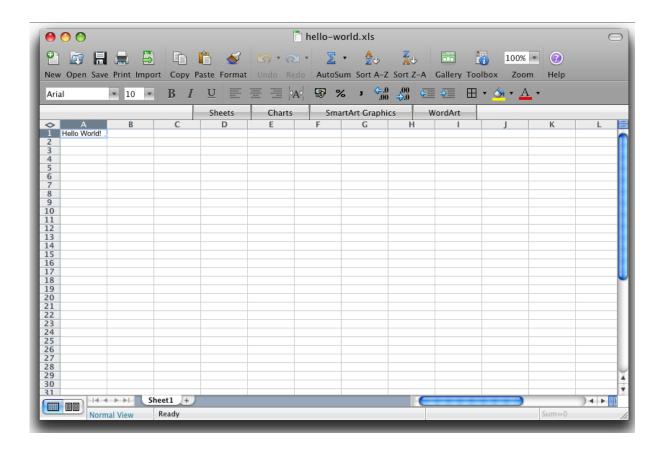
book = Workbook()
sheet = book.add_sheet("Sheet1")

sheet.write(0, 0, "Hello World!")

book.save("output/examples/hello-world-python.xls")
```

#### 1.3 Result

And, here's how it looks.



### 2 A Demo

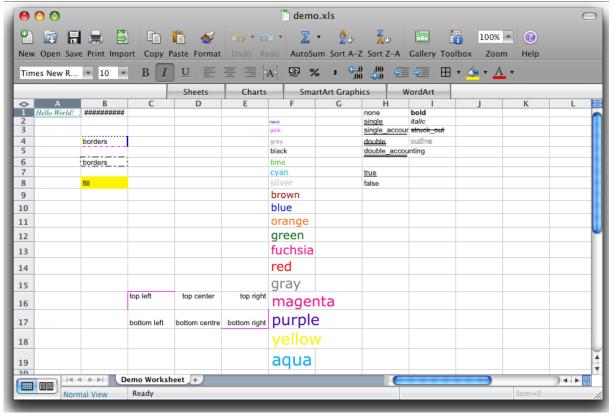
If you are the sort of person who prefers to learn by example, here is a rather comprehensive demo showing most of the basics you might want to do.

#### 2.1 Surpass

```
require 'rubygems'
   require 'surpass'
   book = Workbook.new("output/examples/demo.xls") # You can pass a filename here too.
   sheet = book.add_sheet("Demo Worksheet") # You can name your worksheets.
   # Let's set up some formatting.
   # Remember to use Excel-style formatting directives, not sprintf.
   date_format = StyleFormat.new(:number_format_string => "DDDD DD MMM YYYY")
10
11
   fancy_format = StyleFormat.new(
12
     :font_name => 'Times New Roman',
13
     :font_colour => 'green',
14
     :font_italic => true
15
16
17
   sheet.write(0, 0, "Hello World!", fancy_format)
18
   sheet.write(0, 1, Date.today, date_format)
19
   # You can also set up formatting by passing attributes directly to the constituents of StyleFormat
```

```
22
   # Font colours.
23
   Formatting::COLOURS.keys.each_with_index do |c, i|
     format = StyleFormat.new
25
     format.font.name = 'Verdana'
26
     format.font.color = c
     format.font.size = i + 5
28
     sheet.write(i, 5, c, format)
29
   end
30
31
    # Font underlining.
32
33
    [:none, :single, :single_accounting, :double, :double_accounting, nil, true, false].each_with_index
34
     format = StyleFormat.new
      format.font.underline = u
36
      sheet.write(i, 7, u.to_s, format)
37
38
    # Font bold, italic, strikethrough, outline are simple booleans.
40
    [:bold, :italic, :struck_out, :outline].each_with_index do |s, i|
41
     attribute = ("font_" + s.to_s).to_sym
42
     sheet.write(i, 8, s.to_s, StyleFormat.new(attribute => true))
43
44
45
46
    # Cell alignment.
47
   # You can pass a hash of style attributes directly to sheet.write, but
48
   # remember this creates a new StyleFormat object each time, so don't
49
   # do this if you are going to re-use a style for multiple cells. If you
   # are going to use a format more than once, then create a StyleFormat and
51
   # pass a reference to that.
52
   sheet.write(15, 2, "top left", :text_align => 'top left', :border_top => 'pink', :border_left => 'pi
53
   sheet.write(15, 3, "top center", :text_align => 'top center')
   sheet.write(15, 4, "top right", :text_align => 'top right')
55
   sheet.write(16, 2, "bottom left", :text_align => 'bottom left')
56
   sheet.write(16, 3, "bottom centre", :text_align => 'bottom centre')
57
   sheet.write(16, 4, "bottom right", :text_align => 'bottom right', :border_bottom => 'pink', :border_
58
59
60
   # Borders
61
   sheet.write(3, 1, "borders",
62
      :border_right => 'medium blue',
63
      :border_left => 'thin yellow',
64
      :border_top => 'dotted purple',
65
      :border_bottom => 'dashed pink'
66
67
68
   # Or the hash-free option.
69
   crazy_border_format = StyleFormat.new
70
   crazy_border_format.borders.all = 'slanted-medium-dash-dotted grey'
71
72
   sheet.write(5, 1, "borders", crazy_border_format)
73
74
   sheet.write(7, 1, "fill", :fill_color => 'yellow')
75
76
   book.save
```

And, here's how it looks.



## 3 Formats

The StyleFormat class is a wrapper for the various types of formatting you can apply to a cell. StyleFormat has attributes:

- $\bullet$  number\_format\_string
- $\bullet$  font
- $\bullet$  alignment
- $\bullet$  borders
- pattern
- protection

Each of these attributes has a corresponding class.