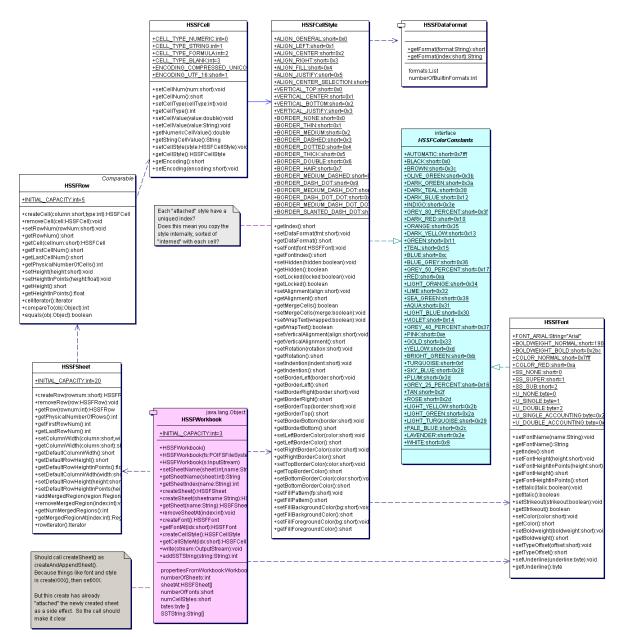# HSSF

Overview

by Andrew C. Oliver, Nicola Ken Barozzi

1. Usermodel Class Diagram by Matthew Young

HSSFCell

+CELL_TYPE_NUMERIC:int=0
+CELL_TYPE_STRING:int=1
+CELL_TYPE_FORMULA:int=2
+CELL_TYPE_BLANK:int=3
+ENCODING_COMPRESSED_UNICO
+ENCODING_UTF_16:short=1

+setCellNum(num:short):void
+getCellNum():short
+setCellType(cellType:int):void
+getCellType():int
+setCellValue(value:double):void
+setCellValue(value:String):void
+getNumericCellValue():double
+getStringCellValue():String
+setCellStyle(style:HSSFCellStyle):void
+getCellStyle():HSSFCellStyle
+getEncoding():short
+setEncoding(encoding:short):void

HSSFCellStyle

+ALIGN_GENERAL:short=0x0
+ALIGN_LEFT:short=0x1
+ALIGN_CENTER:short=0x2
+ALIGN_RIGHT:short=0x3
+ALIGN_FILL:short=0x4
+ALIGN_JUSTIFY:short=0x5
+ALIGN_CENTER_SELECTION:short=
+VERTICAL_TOP:short=0x0
+VERTICAL_CENTER:short=0x1
+VERTICAL_BOTTOM:short=0x2
+VERTICAL_JUSTIFY:short=0x3
+BORDER_NONE:short=0x0
+BORDER_THIN:short=0x1
+BORDER_MEDIUM:short=0x2
+BORDER_DASHED:short=0x3
+BORDER_DOTTED:short=0x4
+BORDER_THICK:short=0x5
+BORDER_DOUBLE:short=0x6
+BORDER_HAIR:short=0x7
+BORDER_MEDIUM_DASHED:short=
+BORDER_DASH_DOT:short=0x9
+BORDER_MEDIUM_DASH_DOT:shor
+BORDER_DASH_DOT_DOT:short=0x
+BORDER_MEDIUM_DASH_DOT_DO
+BORDER_SLANTED_DASH_DOT:sh

+getIndex():short
+setDataFormat(fmt:short):void
+getDataFormat():short
+setFont(font:HSSFFont):void
+getFontIndex():short
+setHidden(hidden:boolean):void
+getHidden():boolean
+setLocked(locked:boolean):void
+getLocked():boolean
+setAlignment(align:short):void
+getAlignment():short
+getMergeCells():boolean
+setMergeCells(merge:boolean):void
+setWrapText(wrapped:boolean):void
+getWrapText():boolean
+setVerticalAlignment(align:short):void
+getVerticalAlignment():short
+setRotation(rotation:short):void
+getRotation():short
+setIndention(indent:short):void
+getIndention():short
+setBorderLeft(border:short):void
+getBorderLeft():short
+setBorderRight(border:short):void
+getBorderRight():short
+setBorderTop(border:short):void
+getBorderTop():short
+setBorderBottom(border:short):void
+getBorderBottom():short
+setLeftBorderColor(color:short):void
+getLeftBorderColor():short
+setRightBorderColor(color:short):void
+getRightBorderColor():short
+setTopBorderColor(color:short):void
+getTopBorderColor():short
+setBottomBorderColor(color:short):vo
+getBottomBorderColor():short
+setFillPattern(fp:short):void
+getFillPattern():short
+setFillBackgroundColor(bg:short):void
+getFillBackgroundColor():short
+setFillForegroundColor(bg:short):void
+getFillForegroundColor():short

HSSFDataFormat

+getFormat(format:String):short
+getFormat(index:short):String

formats:List
numberOfBuiltinFormats:int

interface
HSSFColorConstants

+AUTOMATIC:short=0x7fff
+BLACK:short=0x0
+BROWN:short=0x3c
+OLIVE_GREEN:short=0x3b
+DARK_GREEN:short=0x3a
+DARK_TEAL:short=0x38
+DARK_BLUE:short=0x12
+INDIGO:short=0x3e
+GREY_80_PERCENT:short=0x3f
+DARK_RED:short=0x10
+ORANGE:short=0x35
+DARK_YELLOW:short=0x13
+GREEN:short=0x11
+TEAL:short=0x15
+BLUE:short=0xc
+BLUE_GREY:short=0x36
+GREY_50_PERCENT:short=0x17
+RED:short=0xa
+LIGHT_ORANGE:short=0x34
+LIME:short=0x32
+SEA_GREEN:short=0x39
+AQUA:short=0x31
+LIGHT_BLUE:short=0x30
+VIOLET:short=0x14
+GREY_40_PERCENT:short=0x37
+PINK:short=0xe
+GOLD:short=0x33
+YELLOW:short=0xd
+BRIGHT_GREEN:short=0xb
+TURQUOISE:short=0xf
+SKY_BLUE:short=0x28
+PLUM:short=0x3d
+GREY_25_PERCENT:short=0x16
+TAN:short=0x2f
+ROSE:short=0x2d
+LIGHT_YELLOW:short=0x2b
+LIGHT_GREEN:short=0x2a
+LIGHT_TURQUOISE:short=0x29
+PALE_BLUE:short=0x2c
+LAVENDER:short=0x2e
+WHITE:short=0x9

Comparable
HSSFRow

+INITIAL_CAPACITY:int=5

+createCell(column:short,type:int):HSSFCell
+removeCell(cell:HSSFCell):void
+setRowNum(rowNum:short):void
+getRowNum():short
+getCell(cellnum:short):HSSFCell
+getFirstCellNum():short
+getLastCellNum():short
+getPhysicalNumberOfCells():int
+setHeight(height:short):void
+setHeightInPoints(height:float):void
+getHeight():short
+getHeightInPoints():float
+cellIterator():Iterator
+compareTo(obj:Object):int
+equals(obj:Object):boolean

Each "attached" style have a
uniqued index?
Does this mean you copy the
style internally, sorted of
"interned" with each cell?

HSSFSheet

+INITIAL_CAPACITY:int=20

+createRow(rownum:short):HSSFR
+removeRow(row:HSSFRow):void
+getRow(rownum:int):HSSFRow
+getPhysicalNumberOfRows():int
+getFirstRowNum():int
+getLastRowNum():int
+setColumnWidth(column:short,wi
+getColumnWidth(column:short):s
+getDefaultColumnWidth():short
+getDefaultRowHeight():short
+getDefaultRowHeightInPoints():flo
+setDefaultColumnWidth(width:sho
+setDefaultRowHeight(height:shor
+setDefaultRowHeightInPoints(hei
+addMergedRegion(region:Region
+removeMergedRegion(index:int):v
+getNumMergedRegions():int
+getMergedRegionAt(index:int):Reg
+rowIterator():Iterator

java.lang.Object
HSSFWorkbook

+INITIAL_CAPACITY:int=3

+HSSFWorkbook()
+HSSFWorkbook(fs:POIFSFileSyste
+HSSFWorkbook(s:InputStream)
+setSheetName(sheet:int,name:Str
+getSheetName(sheet:int):String
+getSheetIndex(name:String):int
+createSheet():HSSFSheet
+createSheet(sheetname:String):HS
+getSheet(name:String):HSSFShee
+removeSheetAt(index:int):void
+createFont():HSSFFont
+getFontAt(idx:short):HSSFFont
+createCellStyle():HSSFCellStyle
+getCellStyleAt(idx:short):HSSFCell
+write(stream:OutputStream):void
+addSSTString(string:String):int

propertiesFromWorkbook:Workboo
numberOfSheets:int
sheetAt:HSSFSheet[]
numberOfFonts:short
numCellStyles:short
bytes:byte []
SSTString:String[]

HSSFFont

+FONT_ARIAL:String="Arial"
+BOLDWEIGHT_NORMAL:short=190
+BOLDWEIGHT_BOLD:short=0x2bc
+COLOR_NORMAL:short=0x7fff
+COLOR_RED:short=0xa
+SS_NONE:short=0
+SS_SUPER:short=1
+SS_SUB:short=2
+U_NONE:byte=0
+U_SINGLE:byte=1
+U_DOUBLE:byte=2
+U_SINGLE_ACCOUNTING:byte=0x2
+U_DOUBLE_ACCOUNTING:byte=0x

+setFontName(name:String):void
+getFontName():String
+getIndex():short
+setFontHeight(height:short):void
+setFontHeightInPoints(height:short)
+getFontHeight():short
+getFontHeightInPoints():short
+setItalic(italic:boolean):void
+getItalic():boolean
+setColor(color:short):void
+getColor():short
+setBoldweight(boldweight:short):voi
+getBoldweight():short
+setTypeOffset(offset:short):void
+getTypeOffset():short
+setUnderline(underline:byte):void
+getUnderline():byte

Should call createSheet() as
createAndAppendSheet().
Because things like font and style
is createXXX(), then setXXX.

But this create has already
"attached" the newly created sheet
as a side effect. So the call should
make it clear

Usermodel