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1: # Integration of text and image examples, rendering to PDF
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3: # Begun 2021-09-22
4:
5: # https://zetcode.com/gfx/pycairo/backends/
6: # https://zetcode.com/gfx/pycairo/images/
7: # https://zetcode.com/gfx/pycairo/shapesfills/
8: # https://zetcode.com/gfx/pycairo/transparency/
9: # https://pycairo.readthedocs.io/en/latest/reference/surfaces.html
10:
11: from PIL import Image
12: import cairo, traceback
13:
14: def genSdgImgFn(sdgNum): return "images/unsdg/%0.2i.png" % sdgNum
15:
16:
17: def main():
18:     pageWidth = 72*7; pageHeight = 72*5 # 5x7" pages
19:     ps = cairo.PDFSurface("exSDG08.pdf", pageWidth, pageHeight)
20:     cr = cairo.Context(ps)
21:     s = .035
22:     cr.scale(s,s)
23:     cr.select_font_face("Arial", cairo.FONT_SLANT_NORMAL,
24:                         cairo.FONT_WEIGHT_BOLD)
25:     xImgOrig = xImg = 500; dxImg = 3500
26:     yImgOrig = yImg = 1000; dyImg = 3000
27:     pageNum = 1
28:
29:     for sdgNum in range(1,18):
30:         imageFn = genSdgImgFn(sdgNum)
31:
32:         if sdgNum % 12 == 1:
33:             cr.set_source_rgba(0.8, 0.6, 0, .95)
34:             cr.rectangle(0, 0, pageWidth*40, 1000)
35:             cr.fill()
36:
37:             cr.set_font_size(800); cr.move_to(700,700); cr.set_source_rgba(1,1,1,.7)
38:             cr.show_text('un sdg :: p%i' % pageNum); pageNum += 1
39:
40:         try:
41:             imgSurf = cairo.ImageSurface.create_from_png(imageFn)
42:             cr.set_source_surface(imgSurf, xImg, yImg)
43:             cr.paint()
44:         except: print("ignoring image:", imageFn); traceback.print_exc()
45:
46:         if sdgNum in [3,6,9,15]: xImg += dxImg; yImg = yImgOrig
47:         else: yImg += dyImg
48:         if sdgNum % 12 == 0: cr.show_page(); xImg = xImgOrig; yImg = yImgOrig # rende
r + new page
49:
50: if __name__ == "__main__":
51:     main()
52:
53: ### end ###
```