

ConTeXt

Presentation Environment 9

category: ConTeXt Style File

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date: August 7, 2001

I made this style when I had to give a presentation on the MAPS bibliography production for several user group meetings. This style is rather tuned for combinations of examples and explanations. The colors match the MAPS bibliography colors.

```
1 \startmode[asintended] \setupbodyfont[lbr] \stopmode
2 \setupbodyfont[14.4pt]
```

A couple of years later, in 2001 this style was documented and made public. While documenting, I also changed box building on top of overlays into the now available layer positioning. So, this styles demonstrates quite some tricks.

```
3 \setuppapersize
   [S6] [S6]
4 \setuplayout
   [topspace=0cm,
   backspace=0cm,
   header=0pt,
   footer=0pt,
   width=middle,
   height=middle]
```

Local environments can be set by using the setups commands. For downward compatibility, we keep supporting the `\dotsSettings` hooks. Using local environments is seldom needed.

```
5 \let\TextSettings \empty
   \let\SampleSettings\empty
6 \startsetups text \TextSettings \stopsetups
   \startsetups sample \SampleSettings \stopsetups
```

The dimensions are kind of fixed.

```
7 \def\FrameWidth {448pt}
   \def\FrameHeight {348pt}
   \def\FrameOffset {24pt}
   \def\FrameSkip {12pt}
```

But they *can* and *will* be changed.

```
8 \def\FrameWidth {408pt}
   \def\FrameHeight {318pt}
```

The funny values come from the 3 : 4 display aspect ratio.

```
9 \setupcolors
   [state=start]
10 \definecolor[PageColor] [s=.40]
   \definecolor[TextColor] [s=.90]
   \definecolor[InteractionColor] [r=.40]
   \definecolor[LineColor] [r=.60,g=.60]
```

Of course we go interactive and since we will probably open other documents, we make sure that the viewer opens a new window.

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```
11 \setupinteraction
    [color=InteractionColor,
     contrastcolor=LineColor,
     display=new,
     state=start]
```

```
12 \setupinteractionscreen
    [option=max]
```

Before we come to the real macros, we do a little bit of tuning.

```
13 \setupitemize
    [1] [packed]
```

```
14 \setuptyping
    [blank=medium]
```

Apart from the titlepage, the page gets a simple colored background. Later we will activate the background.

```
15 \setupbackgrounds
    [page]
    [backgroundcolor=PageColor]
```

Everything gets frames by a nice METAPOST frame.

```
16 \defineoverlay [background] [\uniqueMPgraphic{background}]
17 \startuniqueMPgraphic{background}
    path p ; color c, w, d ;
    c := \MPcolor{PageColor} ;
    w := \MPcolor{TextColor} ;
    d := \MPcolor{LineColor} ;
    p := unitsquare xscaled OverlayWidth yscaled OverlayHeight ;
    pickup pencircle scaled (1.5*\FrameSkip) ;
    draw p withcolor c ;
    pickup pencircle scaled \FrameSkip ;
    fill p withcolor w ;
    draw p withcolor d ;
\stopuniqueMPgraphic
```

We will present samples and explanation pair-wise, so we need a hyperlink that skips a page.

```
18 \defineoverlay [nextpage] [\overlaybutton{nextpage}]
\defineoverlay [previouspage] [\overlaybutton{previouspage}]
\defineoverlay [skippage] [\overlaybutton{page(+2)}]
```

Layers are normally used to position multiple content on a specific overlay. Here we will use them to position only and since the samples and text will swap place, we will use quite a few layers.

```
19 \defineoverlay [text] [\composedlayer{text}]
\defineoverlay [sample] [\composedlayer{sample}]
\defineoverlay [common] [\composedlayer{common}]
```

There are three positions. When combined, the sample and text windows overlap, otherwise the lone window is centered. We could have used one layer and reversed the order by setting the `direction` parameter, but this approach is more readable.

```
20 \definelaye
    [text]
    [x=\makeupwidth,y=\makeupheight,location=lt,
     hoffset=-\FrameSkip,voffset=-\FrameSkip]
```

```
21 \definelaye
    [sample]
    [hoffset=\FrameSkip,voffset=\FrameSkip]
```

```
22 \definelaye
    [common]
    [x=.5\makeupwidth,y=.5\makeupheight,location=c]
```

The topic is put in the lower right corner of the text window.

```
23 \defineoverlay [topic] [\composedlayer{topic}]
```

```
24 \definelaye
    [topic]
    [x=\FrameWidth,y=\FrameHeight,location=lt,
     hoffset=-\FrameOffset,voffset=-\FrameSkip]
```

The topic is put in a framed box. That way we can make sure that it gets a background, which looks better when it covers something else. Otherwise we could have stuct to:

```
\def\Topic#1%
  {\setlayer [topic]{\color [PageColor]{\bfb\setstrut#1}}}
```

But, we go for the nice alternative:

```
25 \def\Topic#1%
    {\doifsomething{#1}
     {\setlayer [topic]
      {\bfb\setstrut
       \inframed
        [frame=off,foregroundcolor=PageColor,offset=0pt,
         background=color,backgroundcolor=TextColor]
        {#1}}}}
```

The sample as well as the explanation will be collected in a buffer. That way we can reuse the content. We could have used a box instead, but can we be sure that the content is not adapting itself? So, buffers we use.

```
26 \resetbuffer [sample]
    \resetbuffer [text]
```

Both the sample and explanation are kind of windowed.

```
27 \defineframedtext
    [SampleText]
    [width=\FrameWidth,height=\FrameHeight,offset=\FrameOffset,
     frame=off,align=normal,strut=no,before=,after=,
     background={background,nextpage}]
```

We save some keying in by combining things in one macro.

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```
28 \def\DoSampleText#1#2#3% kind layer overlays
    {\setupframedtexts[SampleText][background={background,#3}]
     \setlayer[#2]
     {\startSampleText[none]
      \setups[#1]
      \getbuffer[#1]
      \stopSampleText}}
```

```
29 \def\StartSample{\dostartbuffer[sample][StartSample][StopSample]}
\def\StartText {\dostartbuffer[text][StartText][StopText]}
```

The following definitions apply at the outer level.

```
30 \def\StopSample
    {\startstandardmakeup
     \DoSampleText{sample}{common}{nextpage}
     \stopstandardmakeup
     \resetbuffer[sample]}
```

```
31 \def\StopText
    {\startstandardmakeup
     \DoSampleText{text}{common}{topic,nextpage}
     \stopstandardmakeup
     \resetbuffer[text]}
```

```
32 \setupbackgrounds[page][background={color,nextpage}]
\setupbackgrounds[text][background=common]
```

When we combine sample and text, we get slightly different definitions. As you can see we generate two pages. Watch how we manipulate the order of the overlays and the nature of the buttons. Here data abstraction really pays off.

```
33 \def\StartIdea
    {\bgroup
     \let\StopSample\relax
     \let\StopText \relax}
```

```
34 \def\StopIdea%
    {\setupbackgrounds[page][background={color,skippage}]
     \setupbackgrounds[text][background={text,sample}]
     \startstandardmakeup
     \DoSampleText{sample}{sample}{previouspage}
     \DoSampleText{text}{text}{topic,nextpage}
     \stopstandardmakeup
     \setupbackgrounds[page][background={color,nextpage}]
     \setupbackgrounds[text][background={sample,text}]
     \startstandardmakeup
     \DoSampleText{sample}{sample}{previouspage}
     \DoSampleText{text}{text}{topic,nextpage}
     \stopstandardmakeup
     \egroup}
```

The rest of the definitions takes care of the title page. Please don't steal this one for your own documents.

```

35 \defineoverlay[joke] [\useMPgraphic{joke}{n=0}] % not to be changed!
36 \startuseMPgraphic{joke}{n}
    StartPage ;
    path p, q ; numeric w ; pair xy ;
    set_grid(OverlayWidth,OverlayHeight,OverlayWidth/8,OverlayHeight/8) ;
    if \MPvar{n}=1 :
        p := fulldiamond ; fill Page withcolor \MPcolor{TextColor} ;
    else :
        p := fullsquare ; fill Page withcolor \MPcolor{PageColor} ;
    fi ;
    forever :
        xy := center Page randomized (OverlayWidth,OverlayHeight) ;
        if new_on_grid(xpart xy, ypart xy) :
            q := (p xyscaled (OverlayWidth/5,OverlayHeight/5))
                randomized (\FrameSkip,\FrameSkip)
                shifted xy ;
            w := (\FrameSkip) randomized (\FrameSkip/2) ;
            draw q withcolor \MPcolor{PageColor} withpen pencircle scaled (1.5w) ;
            fill q withcolor \MPcolor{TextColor} ;
            draw q withcolor \MPcolor{LineColor} withpen pencircle scaled ( w) ;
        fi ;
        exitif grid_full ;
    endfor ;
    StopPage ;
\stopuseMPgraphic

37 \defineoverlay[fuzzy] [\useMPgraphic{fuzzy}]
38 \startuseMPgraphic{fuzzy}
    path p ; numeric w ;
    p := (fullsquare xyscaled (OverlayWidth,OverlayHeight))
        randomized (\FrameSkip,\FrameSkip) ;
    w := (\FrameSkip) randomized (\FrameSkip/2) ;
    draw p withcolor \MPcolor{PageColor} withpen pencircle scaled (1.5w) ;
    fill p withcolor \MPcolor{TextColor} ;
    draw p withcolor \MPcolor{LineColor} withpen pencircle scaled ( w) ;
\stopuseMPgraphic

```

This time we use a fit window, but with a slightly randomized frame, our trademark so to say.

```

39 \def\StartTitlePage
    {\bgroup
     \setupbackgrounds[page][background={joke,nextpage}]
     \startstandardmakeup
     \switchtobodyfont[big]
     \setupframedtexts
     [SampleText]
     [background=fuzzy,
      foregroundcolor=PageColor,
      width=fit,
      height=fit,
      align=middle]
     \startSampleText[middle]

```

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```
\bfd\setupinterlinespace
\def\{\bfb\setupinterlinespace\vfil\def\{\vfil}}
40 \def\StopTitlePage
    {\stopSampleText
     \stopstandardmakeup
     \egroup}
41 \def\TitlePage#1%
    {\StartTitlePage#1\StopTitlePage}
```

Let's nill some error prone presentation macros.

```
42 \let\Subject \Topic
\let\Topics \gobbleoneargument
\let\Subjects \relax
```

We will avoid 'overfull' messages.

```
43 \dontcomplain
44 \doifnotmode{demo}{\endinput}

The (rather silly) demo section.

45 \starttext
46 \setupbodyfont[12pt]
47 \TitlePage{Quotes, Quotes\and more quotes}

48 \StartIdea
   \StartSample
     \input knuth \par
   \StopSample
   \StartText
     \Topic{Tufte}
     \input tufte \par
   \StopText
 \StopIdea

49 \StartIdea
   \StartSample
     \input materie \par
   \StopSample
   \StartText
     \input reich \par
   \StopText
 \StopIdea

50 \StartText
   \input tufte \par
 \StopText
```



```
51 \StartIdea
    \StartSample
      \input knuth \par
    \StopSample
    \StartText
      \input tufte \par
    \StopText
  \StopIdea
52 \stoptext
```

