Reason Theme/Graphics

Anil

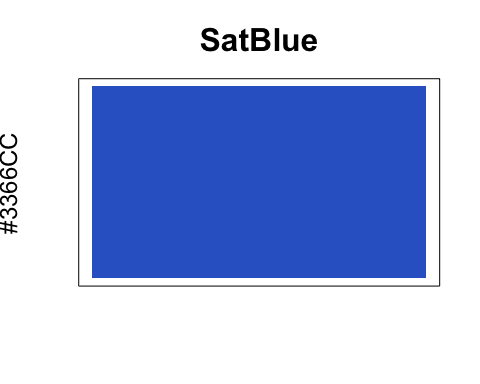
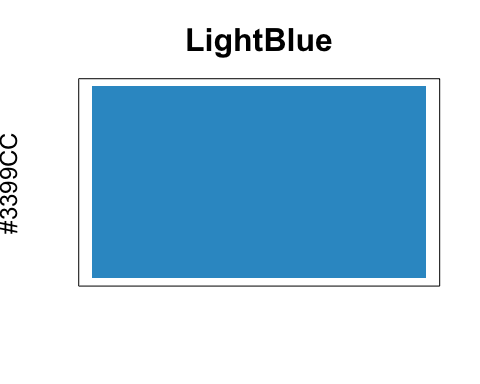
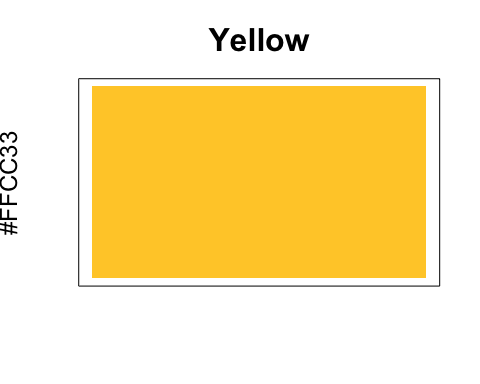
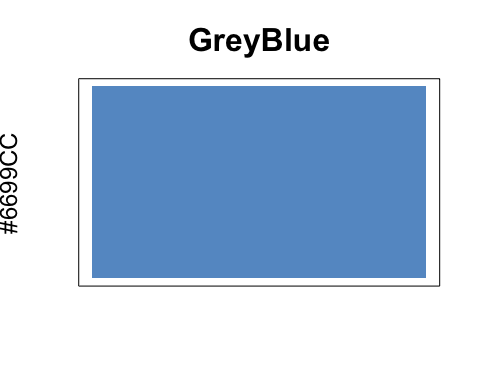
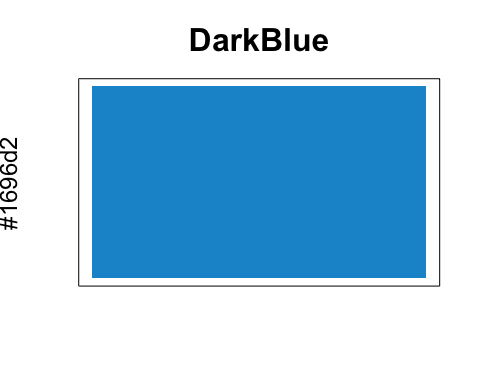
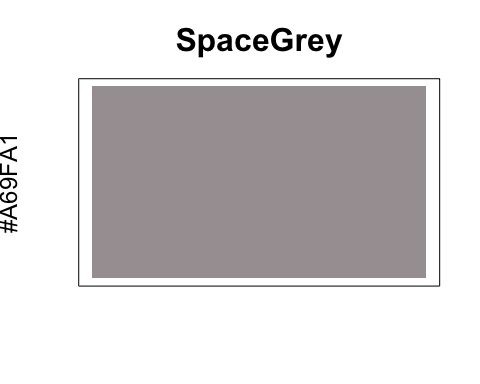
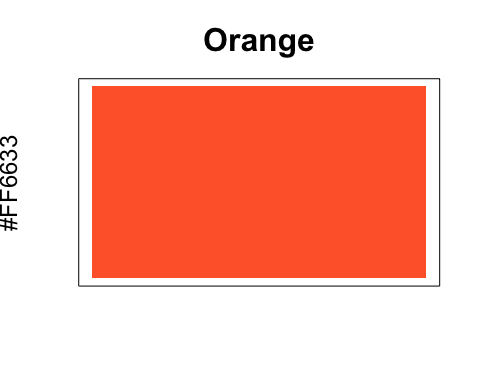
6/30/2020

## R Markdown

This is an R Markdown document that describes Reason graphics style in R. Packages: pensionviewr & reasonTheme

##Defining - Colors - ggplot() themes, labels, and margins

# All images should use web safe colors — this gives us a range of orange and blue  
# colors that fit with Reason’s branding, as well as reds and greens that we can use to  
# indicate positive or negative data patterns. The following colors are most suitable:  
  
palette\_reason <- data.frame(  
 Orange = "#FF6633",   
 DarkGrey = "#333333",   
 SpaceGrey = "#A69FA1",  
 DarkBlue = "#1696d2",  
 GreyBlue = "#6699CC",   
 Yellow = "#FFCC33",   
 LightBlue = "#3399CC",   
 SatBlue = "#3366CC",   
 Green = "#669900",   
 Red = "#CC0000")  
##Convert color code to RedGreenBlue palette (with rgb())  
#rgb1 <- col2rgb(colors$SatBlue, alpha = FALSE)/255  
#rownames(rgb1) <- c("red", "green", "blue")  
#ColorName <- rgb(rgb1[1],rgb1[2],rgb1[3])  
#######  
for (i in (1:8)){  
x <- plot(c(5, 10), c(15, 30), type= "n", main=c(colnames(palette\_reason[i])), xlab = "",   
ylab = c(as.character(palette\_reason[1,i])), xaxt="n", yaxt="n",cex.lab=1.5, cex.main=2)  
rect(5, 15, 10, 30, col = as.character(palette\_reason[1,i]), border = "transparent")  
## Standard Colors for graphics in R  
}



## Including Plots

## Standardized Font: “Calibri”

## Standardized graphics: ggpot()

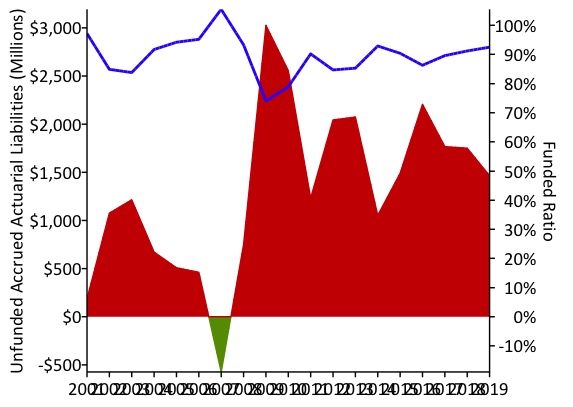
## Standardized Theme: reasonTheme (

##Main elements: line/rectangle/text  
 line = ggplot2::element\_line(  
 rect = ggplot2::element\_rect(  
 text = ggplot2::element\_text(  
   
 ##Plot elements: title/subtitle/caption/background/margin  
 plot.title = ggplot2::element\_text(  
 plot.subtitle = ggplot2::element\_text(  
 plot.caption = ggplot2::element\_text(  
 plot.background =   
 plot.margin =   
 ###Adjustable: text(size, angle,face(bold), margin)

## What you have to specify in ggplo():

##Data to graph ##Y-axis & X-axis scales ##Title

## Original Mountain of Debt Plot using deptPlot() from pensionviewr



Original Debt Plot - PERSI

##Latest Mountain of Debt Plot using deptPlot() ## Modified colors & year labels Latest Modified Debt Plot - PERSI

Note that the echo = FALSE parameter was added to the code chunk to prevent printing of the R code that generated the plot.