

Palette Swatch

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Definition R/

```
#' Palette Swatch
#' 
#' Represent a color palette.
#' 
#' @param ... (`atomic`)\cr valid color(s) (according to grid)
#' @param draw (`logical`)
#' @export
#' @examples
#' 
#' palette_swatch("gray", "red", "gray", NA, "blue")
#' 
palette_swatch <- function(..., draw = TRUE) {

  colors <- list(...)
  lapply(colors, function(x) assertthat::assert_that(is.atomic(x)))

  colors <- unlist(colors)
  nm <- paste(colors, seq_along(colors), sep = "_")
  vp <- grid::vpTree(
    parent = grid::viewport(name = "page", width = 0.95, height = 0.95),
    children = do.call(
      grid::vpList,
      Map(
        nm = nm,
        x = seq_along(colors) / (length(colors)),
```

```

width = 1 / length(colors),
f = function(nm, x, width) {
  grid::viewport(
    name = nm,
    x = x,
    width = width,
    just = "right"
  )
}
)
)
)
)

gr <- do.call(
  grid::gList,
  Map(
    colors,
    nm,
    f = function(colors, nm) {
      grid::gTree(
        vp = nm,
        children = grid::gList(
          grid::rectGrob(gp = grid::gpar(fill = colors, col = colors))
        )
      )
    }
  )
)

gr <- grid::gTree(
  childrenvp = vp,
  children = grid::gList(
    grid::gTree(
      vp = "page",
      children = gr
    )
  )
)

if (draw) {
  grid::grid.newpage()
  grid::grid.draw(gr)
} else {
  invisible()
}
}

```

```
sessionInfo()
```

```
## R version 4.0.4 (2021-02-15)
## Platform: x86_64-pc-linux-gnu (64-bit)
## Running under: Debian GNU/Linux 10 (buster)
##
## Matrix products: default
## BLAS: /usr/lib/x86_64-linux-gnu/openblas/libblas.so.3
## LAPACK: /usr/lib/x86_64-linux-gnu/libopenblas-r0.3.5.so
##
## locale:
##  [1] LC_CTYPE=en_GB.UTF-8          LC_NUMERIC=C
##  [3] LC_TIME=en_GB.UTF-8          LC_COLLATE=en_GB.UTF-8
##  [5] LC_MONETARY=en_GB.UTF-8      LC_MESSAGES=en_GB.UTF-8
##  [7] LC_PAPER=en_GB.UTF-8         LC_NAME=C
##  [9] LC_ADDRESS=C                 LC_TELEPHONE=C
## [11] LC_MEASUREMENT=en_GB.UTF-8   LC_IDENTIFICATION=C
##
## attached base packages:
## [1] stats      graphics  grDevices  utils      datasets
##      methods   base
##
## loaded via a namespace (and not attached):
## [1] compiler_4.0.4    magrittr_2.0.1    tools_4.0.4
##      htmltools_0.5.1.1
## [5] yaml_2.2.1        stringi_1.5.3     rmarkdown_2.6
##      knitr_1.33
## [9] stringr_1.4.0     xfun_0.22         digest_0.6.27
##      rlang_0.4.11
## [13] evaluate_0.14
```