CalendR : : **CHEAT SHEET**

CalendR Basics

This package creates monthly and yearly calendars based on 'ggplot2' package. The function provided allows coloring the days, adding texts, customizing the font colors, styles and fonts and saving ready to print calendars to the working directory in PDF (in landscape or portrait A4 format).

Installation:

```
install.packages("calendR")
library(calendR)
```

Additional packages to install or load in:

```
library(ggplot2)
library(dplyr)
library(forcats)
library(suncalc)
library(ggimage)
library(gggibbous)
```

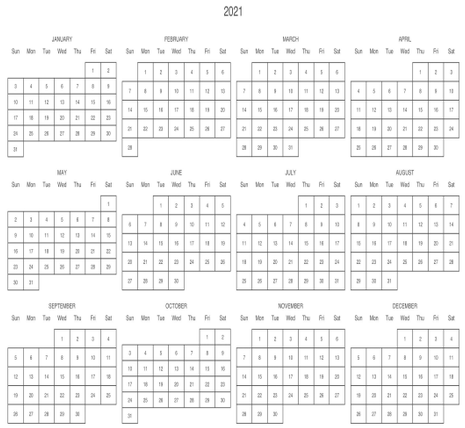
Arguments

year	Calendar year. uses current year by default.
month	Month of year or null for yearly calendar.
start_date	Custom start day of calendar. If start_date !=NULL, year and month arguments negated.
end_date	Custom end date of calendar.
start	"S" (default) for starting week on Sunday. "M" for Monday start.
title	Title of the calendar. If not given, title is the year or month, or simply year if month = NULL
subtitle	subtitle of calendar (italics, optional)
text	Character vector of texts to be added on the calendar. Only for monthly calendar.
special.days	Numeric vector indicating the days to color or "weekend' for coloring all weekends
weeknames	Character vector with the names of the days of the week starting on Mondays. uses system local by default.
legend.pos	Position of legend. default is "none". can be changed to "top", "bottom", "left", and "right".
lty	line type, no lines are drawn if lty = 0
margin	Numeric argument that controls calendar margins
lunar	Boolean. Adds lunar phases on monthly calendars when TRUE
pdf	Boolean. saves calendar in working directory (A4 format) if TRUE

Yearly Calendar

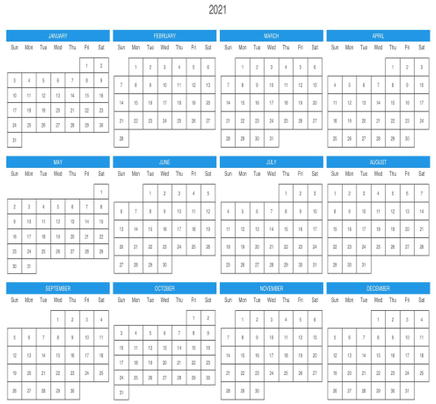
Current year is always the default

```
calendR()
```



Customizing the year and month name colour

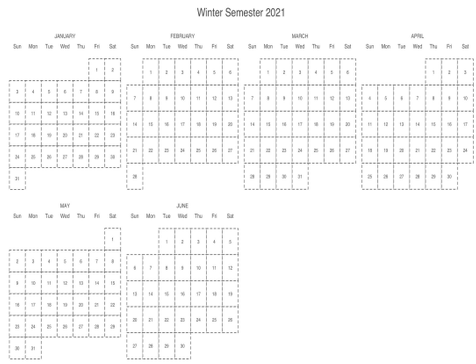
```
calendR(year = 2021,
        mbg.col = 4)
```



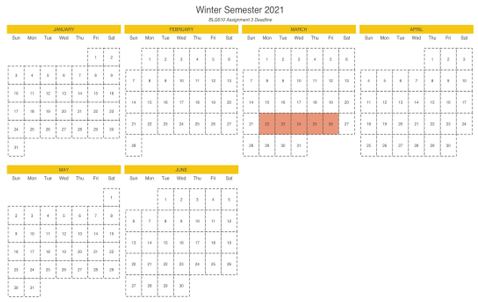
Start and End Dates

Customizing start and end dates

```
calendR(start_date = "2021-01-01",
    end_date = "2021-06-30",
    lty = 8,
    title = "Winter Semester 2021",
    start = "S")
```



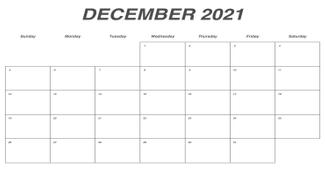

```
calendR(start_date = "2021-01-01",
    end_date = "2021-06-30",
    mbg.col = 7,
    lty = 8,
    title = "Winter Semester 2021",
    subtitle = "BLG610 Assignment 3
    Deadline",
    start = "S",
    special.days = c(81, 82, 83, 84, 85),
    special.col = c("darksalmon"),
    text = "Winter Break",
    text.pos = c(81, 82, 83, 84, 85))
```



Monthly Calendar

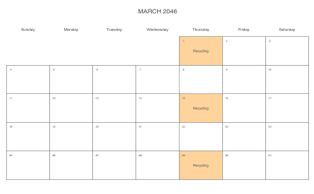
Single month calendar

```
calendR(month = 12,
    title.size = 60,
    font.style = "bold.italic")
```



Assigning special day(s)

```
calendR(year = 2046, month = 3,
    special.days = c(1, 15, 29),
    special.col = c("burlywood1"),
    text = "Recycling",
    text.pos = c(1, 15, 29))
```



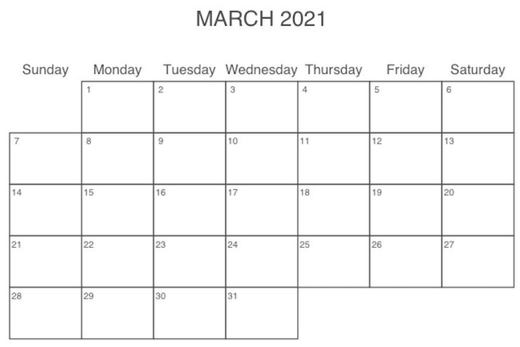
Customizing monthly calendar colours

```
calendR(month = 5,
    title.size = 60,
    title.col = "brown4",
    subtitle = "Life is beautiful.",
    subtitle.size = 20,
    subtitle.col = "brown2",
    days.col = "deepskyblue3",
    day.size = 6,
    font.family = "serif",
    font.style = "bold.italic",
    col = "forestgreen",
    weeknames.col = "forestgreen",
    bg.col = "bisque1")
```

Start of the Week

Week Start on Sunday

```
calendR(month = 3, start = "S")
```



Week Start on Monday

```
calendR(month = 3, start = "S")
```

Ryerson University

Package Source:https://github.com/R-CoderDotCom/calendR • **Author(s) of CalendR Package:** Jose Carlos Soage Gonzalez [aut, cre], Natalia Perez Veiga [aut] • **Package Published:** 2020-09-14

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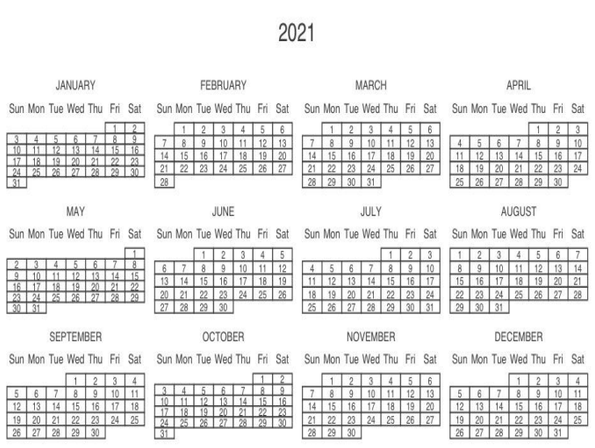
Calendar Orientation

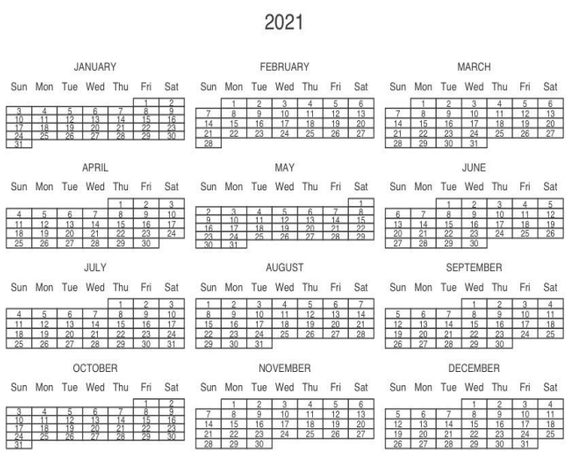
Landscape Calendar (Default)

```
calendR(year = 2021,
orientation = "landscape")
```



Portrait Calendar

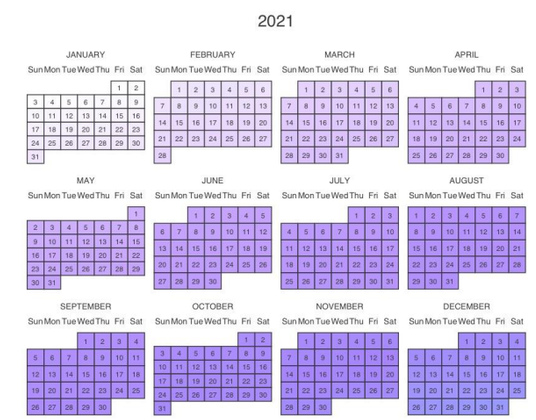
```
calendR(year = 2021,
orientation = "portrait")
```



Gradient

Calendar Heatmap (Entire Year)

```
calendR(year = 2021, special.days = 1:365,
gradient = TRUE,  special.col = rgb(0, 0, 1,
alpha = 0.4), low.col = "white")
```

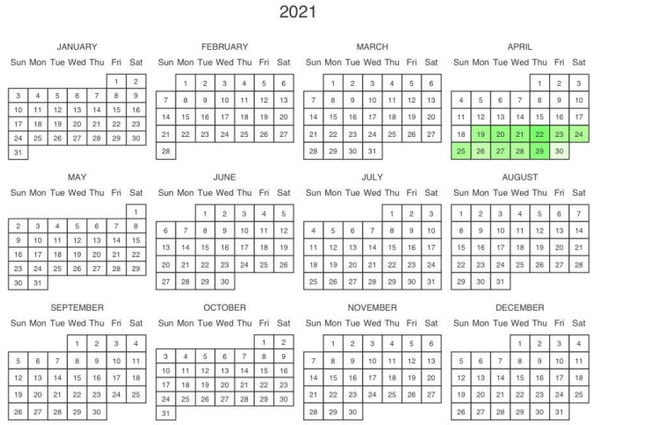


Calendar Heatmap (Entire Year)

```
#We must create a vector with values lower than the amount of years
my_data <- runif(20,10,20)
days <-rep(min(my_data)- 0.05, 365)

#Fill days with data
days[109:120] <- my_data

calendR(year = 2021, special.days = days, gradient = TRUE,
      special.col = rgb(0, 0, 1, alpha = 0.6), low.col = "white")
```



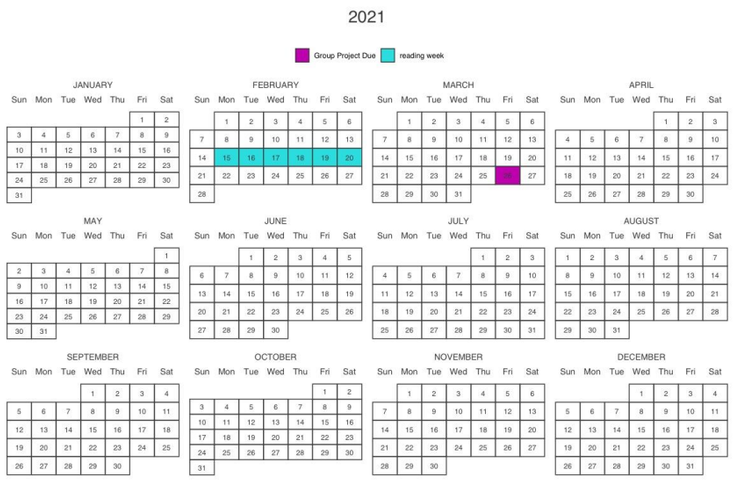
Adding Events

Adding Multiple Events

```
#Create an NA vector for entire
year
final <- rep(NA,365)

#Add events days of interest
final[46:51] <- "reading week"
final[85] <- "Group Project Due"

#Run the calendar
calendR(special.days = final,
      special.col = 2:3,
      legend.pos = "top")
```



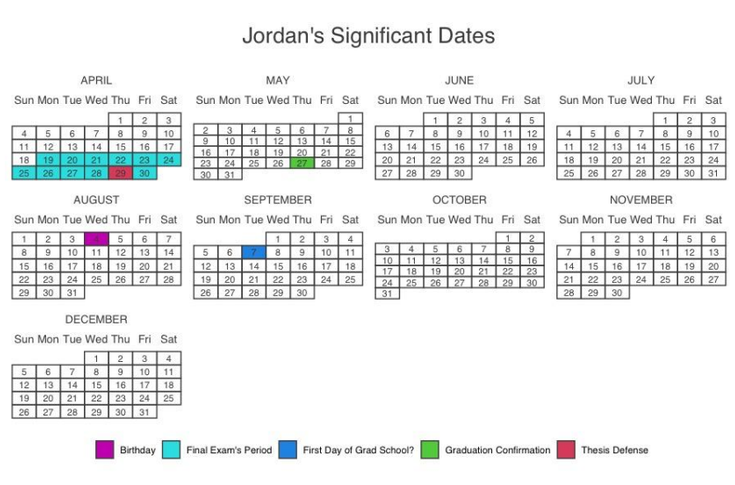
Adding Events within Defined Time periods

```
start_date <- "2021-04-01"
end_date <- "2021-12-31"
custom_dates <- seq(as.Date(start_date), as.Date(end_date), by =
"1 day")
events <- rep(NA, length(custom_dates))

# Time difference
dif <- 365 - length(custom_dates)
myfills <- rep(NA, length(custom_dates))

# Specify the dates as in a 365 days calendar and subtract the
time difference
myfills[c(109:120) - dif] <- "Final Exam's Period"
myfills[216 - dif] <- "Exam Period"
myfills[119 - dif] <- "Thesis Defense"
myfills[216 - dif] <- "Birthday"
myfills[250 - dif] <- "First Day of Grad School?"

calendR(start_date = start_date, end_date =  end_date,
      special.days = myfills, special.col = 6:5:4:3:2, legend.pos =
"bottom")
```



Ryerson University

Package Source:https://github.com/R-CoderDotCom/calendR • **Author(s) of CalendR Package:** Jose Carlos Soage Gonzalez [aut, cre], Natalia Perez Veiga [aut] • **Package Published:** 2020-09-14

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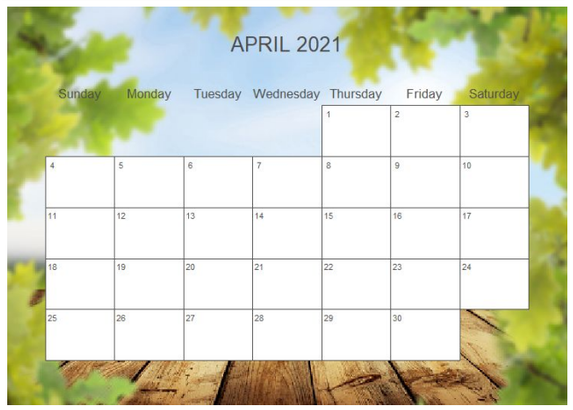
Background Image

Adding Background Image

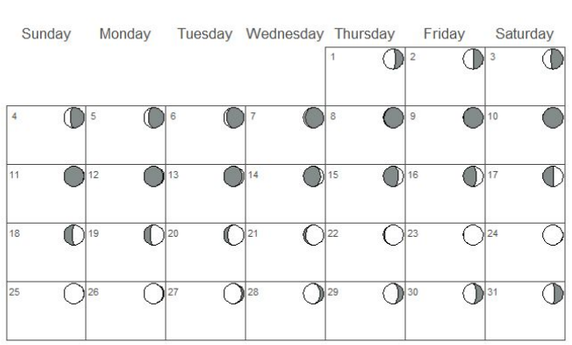
```
# Can use an image URL or image from local directory
calendR (month = 4,
        bg.img =
"https://media.istockphoto.com/photos/nature-background-picture-id654475732?k=6&m=654475732&s=170667a&w=0&h=34CtTwHu6ZUehmQpbu_hhsBd8b2B5r4_h3bkl9OZZLI=")
```



Lunar Calendar

Adding lunar phases

```
calendR (month = 7,
lunar = TRUE,
lunar.col = "azure4",
lunar.size = 8)
```



Save as PDF

Default is A4 size

```
calendR (year = 2021,
orientation = "portrait",
pdf = TRUE)
```

Set a paper size (from A6 to A0)

```
calendR (year = 2021,
orientation = "portrait",
pdf = TRUE,
papersize = "A6")
```

Customize document name

```
calendR(year = 2021,
orientation = "portrait",
pdf = TRUE,
doc_name = "BLG610_Calendar")
```

CalendR Example

```
# Create an NA vector for the entire year
myfills <- rep(NA, 365)

# Create special events using NA vector
myfills[c(1:14, 353:365)] <- "Winter Break"
myfills[15] <- "First Day of Winter 2021 Classes"
myfills[c(44:50)] <- "Winter 2021 Reading Week"
myfills[c(108:121)] <- "Winter 2021 Exam Period"
myfills[249] <- "First Day of Fall 2021 Classes"
myfills[c(282:288)] <- "Fall 2021 Reading Week"
myfills[c(341:352)] <- "Fall 2021 Exam Period"

calendR(year=2021,
        title = "Ryerson University 2021 Significant Dates",
        subtitle = "Winter 2021/Fall 2021",
        subtitle.col = "royalblue",
        subtitle.size = 12,
        mbg.col = "royalblue",
        months.col = "white",
        bg.col = "white",
        special.days = myfills,
        special.col = c("lightpink", "lightgreen",  "lightblue", "lightyellow",
                        "lightseagreen", "lightsalmon",  "lightgoldenrod"),
        weeknames = c("M", "T", "W", "T", "F", "S","S"),
        legend.pos = "bottom",
        bg.img =
"https://i.pinimg.com/originals/10/1e/f6/101ef6a9e146b23de28fa2cd568ad17b.jpg",
        orientation = "portrait")
```

Example Continued