

# Package ‘toastui’

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**Title** Interactive Tables, Calendars and Charts for the Web

**Version** 0.4.0

**Description** Create interactive tables, calendars, charts and markdown WYSIWYG editor with 'TOAST UI' <<https://ui.toast.com/>> libraries to integrate in 'shiny' applications or 'rmarkdown' 'HTML' documents.

**License** MIT + file LICENSE

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caes	<i>Construct aesthetic mappings</i>
------	-------------------------------------

---

### Description

Low-level version of `ggplot2::aes`.

### Usage

```
caes(x, y, ...)
```

### Arguments

`x, y, ...` List of name-value pairs in the form `aesthetic = variable`.

### Value

a list of quosure.

### Examples

```
caes(x = month, y = value)
caes(x = month, y = value, fill = city)
```

---

cal-demo-data	<i>Calendar demo data</i>
---------------	---------------------------

---

**Description**

Create calendar demo data for schedules and properties

**Usage**

```
cal_demo_data(view = c("month", "week", "day"))  
  
cal_demo_props()
```

**Arguments**

view                      Calendar view for which to use the data.

**Value**

a data.frame.

**Examples**

```
# Monthly schedule  
cal_demo_data("month")  
  
#' # Weekly schedule  
cal_demo_data("week")
```

---

calendar	<i>Create an interactive calendar</i>
----------	---------------------------------------

---

**Description**

Build interactive calendar with the JavaScript tui-calendar library.

**Usage**

```
calendar(  
  data = NULL,  
  view = c("month", "week", "day"),  
  defaultDate = NULL,  
  useDetailPopup = TRUE,  
  useCreationPopup = FALSE,  
  isReadOnly = TRUE,  
  navigation = FALSE,
```

```

    navOpts = navigation_options(),
    ...,
    width = NULL,
    height = NULL,
    elementId = NULL
  )

```

### Arguments

<code>data</code>	A data.frame with schedules data, see <a href="#">cal_demo_data()</a> .
<code>view</code>	Default view of calendar. The default value is 'week', other possible values are 'month' and 'day'.
<code>defaultDate</code>	Default date for displaying calendar.
<code>useDetailPopup</code>	Logical. Display a pop-up on click with detailed informations about schedules.
<code>useCreationPopup</code>	Logical. Allow user to create schedules with a pop-up.
<code>isReadOnly</code>	Calendar is read-only mode and a user can't create and modify any schedule. The default value is true.
<code>navigation</code>	Add navigation buttons to go to previous or next period, or return to 'today'.
<code>navOpts</code>	Options to customize buttons (only if <code>navigation = TRUE</code> ), see <a href="#">navigation_options()</a> .
<code>...</code>	Additional arguments passed to JavaScript method.
<code>width, height</code>	A numeric input in pixels.
<code>elementId</code>	Use an explicit element ID for the widget.

### Value

A calendar htmlwidget.

### Note

`taskView` and `scheduleView` arguments have been moved to [cal\\_week\\_options\(\)](#).

### See Also

[calendarOutput\(\)](#) / [renderCalendar\(\)](#) for usage in Shiny applications.

### Examples

```

# Default: monthly view
calendar()

# Weekly view
calendar(view = "week")

# Or only day:
calendar(view = "day")

```

```

# Add navigation buttons
calendar(navigation = TRUE)

# Add schedules data
ex_data <- cal_demo_data()
calendar(ex_data)

# By default detail popup is activated
# you can click on a schedule to view detail
calendar(useDetailPopup = TRUE) %>%
  cal_schedules(
    title = "My schedule",
    body = "Some detail about it",
    start = format(Sys.Date(), "%Y-%m-03"),
    end = format(Sys.Date(), "%Y-%m-04"),
    category = "allday"
  )

# to disable it use useDetailPopup = FALSE

# You can use HTML tags inside it:
library(htmltools)
calendar(useDetailPopup = TRUE) %>%
  cal_schedules(
    title = "My schedule",
    body = doRenderTags(tags$div(
      tags$h3("Title for my schedule"),
      tags$p(
        "Yan can write", tags$em("custom"), tags$b("HTML"),
        "in a popup !"
      ),
      tags$p(
        style = "color: firebrick;",
        "For example write in red !"
      ),
      tags$ul(
        tags$li("Or make a bullet list!"),
        tags$li("With another item"),
        tags$li("And one more")
      )
    )),
    start = format(Sys.Date(), "%Y-%m-03"),
    end = format(Sys.Date(), "%Y-%m-04"),
    category = "allday"
  )

```

## Description

Those functions allow to navigate in the calendar from the server in a Shiny application.

## Usage

```
cal_proxy_next(proxy)
cal_proxy_prev(proxy)
cal_proxy_today(proxy)
cal_proxy_date(proxy, date)
```

## Arguments

proxy	A <a href="#">calendar_proxy()</a> htmlwidget object.
date	A specific date to navigate to.

## Value

A `calendar_proxy` object.

## See Also

Other calendar proxy methods: [cal\\_proxy\\_clear\(\)](#), [cal\\_proxy\\_clear\\_selection\(\)](#), [cal\\_proxy\\_options\(\)](#), [cal\\_proxy\\_toggle\(\)](#), [cal\\_proxy\\_view\(\)](#), [calendar-proxy-schedule](#), [calendar\\_proxy\(\)](#)

## Examples

```
library(shiny)
library(toastui)

ui <- fluidPage(
  tags$h2("Navigate in calendar with actionButtons"),
  actionButton(
    inputId = "prev_date",
    label = "Previous",
    icon = icon("chevron-left")
  ),
  actionButton(
    inputId = "next_date",
    label = "Next",
    icon = icon("chevron-right")
  ),
  actionButton(
    inputId = "today",
    label = "Today"
  ),
  fluidRow(
    column(
      width = 9,
```

```

      calendarOutput(outputId = "my_calendar")
    ),
    column(
      width = 3,
      verbatimTextOutput("result")
    )
  )
)

server <- function(input, output, session) {

  output$my_calendar <- renderCalendar({
    calendar()
  })

  output$result <- renderPrint({
    input$my_calendar_dates
  })

  observeEvent(input$prev_date, cal_proxy_prev("my_calendar"))
  observeEvent(input$next_date, cal_proxy_next("my_calendar"))
  observeEvent(input$today, cal_proxy_today("my_calendar"))

}

if (interactive())
  shinyApp(ui, server)

```

---

calendar-proxy-schedule

*Create / Update / Delete schedule(s) with Proxy*

---

### Description

These functions allow to create new schedule(s), update existing ones and delete schedule in a calendar within the server in a Shiny application.

### Usage

```
cal_proxy_add(proxy, value)
```

```
cal_proxy_delete(proxy, value)
```

```
cal_proxy_update(proxy, value)
```

### Arguments

proxy	A <code>calendar_proxy()</code> htmlwidget object.
value	A list with schedules data.

**Value**

A `calendar_proxy` object.

**Note**

Those functions are intended to be used with corresponding input value:

- `input$<outputId>_add`: triggered when a schedule is added on calendar via creation popup.
- `input$<outputId>_update`: triggered when an existing schedule is edited.
- `input$<outputId>_deleted`: triggered when a schedule is deleted.

**See Also**

Other calendar proxy methods: [cal\\_proxy\\_clear\(\)](#), [cal\\_proxy\\_clear\\_selection\(\)](#), [cal\\_proxy\\_options\(\)](#), [cal\\_proxy\\_toggle\(\)](#), [cal\\_proxy\\_view\(\)](#), [calendar-proxy-navigate](#), [calendar\\_proxy\(\)](#)

**Examples**

```
library(shiny)
library(toastui)

ui <- fluidPage(
  tags$h2("Add, Update and Delete schedule interactively"),

  tags$p(
    "Click on the calendar to create a new schedule",
    "then you will be able to edit or delete it."
  ),

  calendarOutput("my_calendar")
)

server <- function(input, output) {

  output$my_calendar <- renderCalendar({
    cal <- calendar(
      defaultDate = Sys.Date(),
      navigation = TRUE,
      isReadOnly = FALSE,
      useCreationPopup = TRUE
    )
  })

  observeEvent(input$my_calendar_add, {
    str(input$my_calendar_add)
    cal_proxy_add("my_calendar", input$my_calendar_add)
  })

  observeEvent(input$my_calendar_update, {
    str(input$my_calendar_update)
    cal_proxy_update("my_calendar", input$my_calendar_update)
  })
}
```

```

observeEvent(input$my_calendar_delete, {
  str(input$my_calendar_delete)
  cal_proxy_delete("my_calendar", input$my_calendar_delete)
})

}

if (interactive())
  shinyApp(ui = ui, server = server)

```

---

calendar-shiny

*Shiny bindings for `calendar()`*


---

## Description

Output and render functions for using `calendar()` within Shiny applications and interactive Rmd documents.

## Usage

```

calendarOutput(outputId, width = "100%", height = "600px")

renderCalendar(expr, env = parent.frame(), quoted = FALSE)

```

## Arguments

<code>outputId</code>	Output variable to read from.
<code>width, height</code>	Must be a valid CSS unit (like 100%, 400px, auto) or a number, which will be coerced to a string and have px appended.
<code>expr</code>	An expression that generates a calendar
<code>env</code>	The environment in which to evaluate <code>expr</code> .
<code>quoted</code>	Is <code>expr</code> a quoted expression (with <code>quote()</code> )? This is useful if you want to save an expression in a variable.

## Value

Output element that can be included in UI. Render function to create output in server.

## Special inputs

The following input values will be accessible in the server:

- `input$outputId_add` : contain data about schedule added via the creation popup. Javascript event: `beforeCreateSchedule`.
- `input$outputId_schedules` : contain data about last schedule added. Javascript event: `afterRenderSchedule`.
- `input$outputId_click` : contain data about schedule user click on. Javascript event: `clickSchedule`.

- **input\$outputId\_delete** : contain data about schedule deleted by user via creation popup. Javascript event: beforeDeleteSchedule.
- **input\$outputId\_update** : contain data about schedule updated by user via creation popup. Javascript event: beforeUpdateSchedule.
- **input\$outputId\_dates** : start and end date represented in the calendar.

To use them you need to replace outputId by the id you've used to create the calendar. If you use one of the above javascript event in `cal_events()`, the input won't be accessible.

## Examples

```
library(shiny)
library(toastui)

ui <- fluidPage(
  tags$h2("calendar shiny example"),
  fluidRow(
    column(
      width = 8,
      calendarOutput("my_calendar")
    ),
    column(
      width = 4,
      tags$b("Dates:"),
      verbatimTextOutput("dates"),
      tags$b("Clicked schedule:"),
      verbatimTextOutput("click")
    )
  )
)

server <- function(input, output, session) {

  output$my_calendar <- renderCalendar({
    calendar(cal_demo_data(), navigation = TRUE) %>%
    cal_props(
      list(
        id = 1,
        name = "PERSO",
        color = "white",
        bgColor = "firebrick",
        borderColor = "firebrick"
      ),
      list(
        id = 2,
        name = "WORK",
        color = "white",
        bgColor = "forestgreen",
        borderColor = "forestgreen"
      )
    )
  })
}
```

```
output$dates <- renderPrint({
  input$my_calendar_dates
})

output$click <- renderPrint({
  input$my_calendar_click
})

}

if (interactive())
  shinyApp(ui, server)
```

---

calendar_properties	<i>Calendar properties</i>
---------------------	----------------------------

---

## Description

This dataset contains properties that can be used to set calendars properties in `cal_props()`.

## Usage

```
calendar_properties
```

## Format

A data.frame with 6 rows and 3 variables:

**Name** Name of property

**Type** Type

**Description** Description

## Source

Toast UI documentation (<https://nhn.github.io/tui.calendar/latest/CalendarInfo/>)

---

calendar_proxy	<i>Proxy for calendar htmlwidget</i>
----------------	--------------------------------------

---

## Description

Proxy for calendar htmlwidget

## Usage

```
calendar_proxy(shinyId, session = shiny::getDefaultReactiveDomain())
```

## Arguments

shinyId	single-element character vector indicating the output ID of the chart to modify (if invoked from a Shiny module, the namespace will be added automatically).
session	the Shiny session object to which the chart belongs; usually the default value will suffice.

## Value

A calendar\_proxy object.

## See Also

Other calendar proxy methods: [cal\\_proxy\\_clear\(\)](#), [cal\\_proxy\\_clear\\_selection\(\)](#), [cal\\_proxy\\_options\(\)](#), [cal\\_proxy\\_toggle\(\)](#), [cal\\_proxy\\_view\(\)](#), [calendar-proxy-navigate](#), [calendar-proxy-schedule](#)

## Examples

```
## Not run:

# Consider having created a calendar widget with
calendarOutput("my_calendar") # UI
output$my_calendar <- renderCalendar({}) # Server

# Then you can call proxy methods in observer:

# set calendar proxy then call a cal_proxy_* function
calendar_proxy("my_calendar") %>%
  cal_proxy_today()

# or directly
cal_proxy_today("my_calendar")

## End(Not run)
```

---

 cal\_events

*Calendar custom JavaScript events*


---

### Description

Currently only works in Shiny applications.

### Usage

```
cal_events(
  cal,
  afterRenderSchedule = NULL,
  beforeCreateSchedule = NULL,
  beforeDeleteSchedule = NULL,
  beforeUpdateSchedule = NULL,
  clickDayname = NULL,
  clickMorecalendar = NULL,
  clickSchedule = NULL,
  clickTimezonesCollapseBtncalendar = NULL,
  selectDateTime = NULL
)
```

### Arguments

cal	A calendar htmlwidget object.
afterRenderSchedule	Fire this event by every single schedule after rendering whole calendar.
beforeCreateSchedule	Fire this event when select time period in daily, weekly, monthly.
beforeDeleteSchedule	Fire this event when delete a schedule.
beforeUpdateSchedule	Fire this event when drag a schedule to change time in daily, weekly, monthly.
clickDayname	Fire this event when click a day name in weekly.
clickMorecalendar	Fire this event when click a schedule.
clickSchedule	Fire this event when click a schedule.
clickTimezonesCollapseBtncalendar	Fire this event by clicking timezones collapse button.
selectDateTime	Occurs when dragging and dropping a specific date or time then dropping.

### Value

A calendar htmlwidget object.

**Note**

All arguments must be JavaScript function wrapped in `htmlwidgets::JS()`.

**Examples**

```

library(shiny)
library(toastui)

calendarProps <- data.frame(
  id = paste0("cal_", 1:3),
  name = c("TODO", "Meetings", "Tasks"),
  color = c("#FFF", "#FFF", "#000"),
  backgroundColor = c("#E41A1C", "#377EB8", "#4DAF4A"),
  borderColor = c("#a90000", "#005288", "#0a7f1c")
)

n <- 20
date_start <- sample(
  seq(from = as.POSIXct(Sys.Date()-14), by = "1 hour", length.out = 24*7*4),
  n, TRUE
)
date_end <- date_start + sample(1:25, n, TRUE) * 3600
schedules <- data.frame(
  id = paste0("event_", 1:n),
  calendarId = paste0("cal_", sample(1:3, n, TRUE)),
  title = LETTERS[1:n],
  body = paste("Body schedule", letters[1:n]),
  start = format(date_start, format = "%Y-%m-%d %H:00:00"),
  end = format(date_end, format = "%Y-%m-%d %H:00:00"),
  category = sample(c("allday", "time", "task"), n, TRUE),
  stringsAsFactors = FALSE
)

ui <- fluidPage(
  tags$h2("Custom click event"),
  fluidRow(
    column(
      width = 8,
      calendarOutput(outputId = "cal")
    ),
    column(
      width = 4,
      verbatimTextOutput(outputId = "res_click")
    )
  )
)

server <- function(input, output, session) {

  output$cal <- renderCalendar({
    calendar(useDetailPopup = FALSE) %>%
      cal_props(calendarProps) %>%

```

```

    cal_schedules(schedules) %>%
    cal_events(
      clickSchedule = JS("function(event) {Shiny.setInputValue('click', event)}")
    )
  })

output$res_click <- renderPrint(input$click)

}

if (interactive())
  shinyApp(ui, server)

```

---

cal\_month\_options      *Calendar Month Options*

---

### Description

Options for monthly view.

### Usage

```

cal_month_options(
  cal,
  startDayOfWeek = NULL,
  daynames = NULL,
  narrowWeekend = NULL,
  visibleWeeksCount = NULL,
  isAlways6Week = NULL,
  workweek = NULL,
  visibleEventCount = NULL,
  ...
)

```

### Arguments

cal	A <code>calendar()</code> object.
startDayOfWeek	Numeric. The start day of week.
daynames	Vector. The day names in monthly. Default values are 'Sun', 'Mon', 'Tue', 'Wed', 'Thu', 'Fri', 'Sat'
narrowWeekend	Logical. Make weekend column narrow(1/2 width).
visibleWeeksCount	Numeric. The visible week count in monthly(0 or null are same with 6).
isAlways6Week	Logical. Always show 6 weeks. If false, show 5 weeks or 6 weeks based on the month.
workweek	Logical. Show only 5 days except for weekend.

visibleEventCount  
                   Numeric. The visible schedule count in monthly grid.  
 ...               Additional options.

**Value**

A calendar htmlwidget.

**Note**

Online JavaScript documentation: <https://github.com/nhn/tui.calendar/blob/main/docs/en/apis/options.md#month>

**Examples**

```
# Change option for monthly view
calendar(view = "month") %>%
  cal_month_options(
    startDayOfWeek = 1,
    daynames = c("Dim", "Lun", "Mar", "Mer", "Jeu", "Ven", "Sam"),
    narrowWeekend = TRUE
  )
```

---

 cal\_props

*Calendar properties*


---

**Description**

Define calendar properties for grouping schedules under common theme.

**Usage**

```
cal_props(cal, ...)
```

**Arguments**

cal               A `calendar()` object.  
 ...               Either named arguments to use as calendar properties or a `data.frame` with rows as calendars and columns as properties. See <https://nhn.github.io/tui.calendar/latest/CalendarInfo/> for options.

**Value**

A calendar htmlwidget.

## Examples

```
library(toastui)

# Define theme for schedules
calendar(cal_demo_data()[, -c(9, 10, 11)]) %>%
  cal_props(
    list(
      id = "1",
      name = "PERSO",
      color = "lightblue",
      backgroundColor = "purple",
      borderColor = "magenta"
    ),
    list(
      id = "2",
      name = "WORK",
      color = "red",
      backgroundColor = "yellow",
      borderColor = "orange"
    )
  )
)
```

---

cal\_proxy\_clear

*Clear calendar with Proxy*

---

## Description

This function allow to delete all schedules and clear view.

## Usage

```
cal_proxy_clear(proxy)
```

## Arguments

proxy            A [calendar\\_proxy\(\)](#) htmlwidget object.

## Value

A calendar\_proxy object.

## See Also

Other calendar proxy methods: [cal\\_proxy\\_clear\\_selection\(\)](#), [cal\\_proxy\\_options\(\)](#), [cal\\_proxy\\_toggle\(\)](#), [cal\\_proxy\\_view\(\)](#), [calendar-proxy-navigate](#), [calendar-proxy-schedule](#), [calendar\\_proxy\(\)](#)

## Examples

```
library(shiny)
library(toastui)

ui <- fluidPage(
  tags$h2("Clear all schedules"),
  actionButton("clear", "Clear all", class = "btn-block btn-danger"),
  calendarOutput("my_calendar")
)

server <- function(input, output, session) {

  output$my_calendar <- renderCalendar({
    calendar(cal_demo_data(), navigation = FALSE)
  })

  observeEvent(input$clear, cal_proxy_clear("my_calendar"))
}

if (interactive())
  shinyApp(ui, server)
```

---

cal\_proxy\_clear\_selection

*Clear selection from calendar with Proxy*

---

## Description

Removes all date/time selection elements currently displayed in the calendar.

## Usage

```
cal_proxy_clear_selection(proxy)
```

## Arguments

proxy            A [calendar\\_proxy\(\)](#) htmlwidget object.

## Value

A `calendar_proxy` object.

## See Also

Other calendar proxy methods: [cal\\_proxy\\_clear\(\)](#), [cal\\_proxy\\_options\(\)](#), [cal\\_proxy\\_toggle\(\)](#), [cal\\_proxy\\_view\(\)](#), [calendar-proxy-navigate](#), [calendar-proxy-schedule](#), [calendar\\_proxy\(\)](#)

---

cal\_proxy\_options      *Set calendar's options with Proxy*

---

### Description

This function allow to set options for a calendar.

### Usage

```
cal_proxy_options(proxy, ...)
```

### Arguments

proxy	A <a href="#">calendar_proxy()</a> htmlwidget object.
...	Options for the calendar, you can use arguments from <a href="#">calendar()</a> , <a href="#">cal_month_options()</a> (under the form month = list(...)), <a href="#">cal_week_options()</a> (under the form week = list(...))

### Value

A calendar\_proxy object.

### See Also

Other calendar proxy methods: [cal\\_proxy\\_clear\(\)](#), [cal\\_proxy\\_clear\\_selection\(\)](#), [cal\\_proxy\\_toggle\(\)](#), [cal\\_proxy\\_view\(\)](#), [calendar-proxy-navigate](#), [calendar-proxy-schedule](#), [calendar\\_proxy\(\)](#)

### Examples

```
library(shiny)
library(toastui)

ui <- fluidPage(
  fluidRow(
    column(
      width = 4,
      checkboxInput(
        inputId = "narrowWeekend",
        label = "narrowWeekend ?",
        value = FALSE
      ),
      checkboxInput(
        inputId = "workweek",
        label = "workweek ?",
        value = FALSE
      )
    ),
    column(
      width = 8,
```

```
        calendarOutput("mycal")
      )
    )
  )

server <- function(input, output, session) {

  output$mycal <- renderCalendar({
    calendar(cal_demo_data(), view = "month")
  })

  observeEvent(input$arrowWeekend, {
    cal_proxy_options("mycal", month = list(narrowWeekend = input$arrowWeekend))
  })

  observeEvent(input$workweek, {
    cal_proxy_options("mycal", month = list(workweek = input$workweek))
  })
}

if (interactive())
  shinyApp(ui, server)
```

---

cal\_proxy\_toggle

*Toggle schedules visibility with Proxy*

---

## Description

This function allow to show or hide schedules based on their calendar's ID.

## Usage

```
cal_proxy_toggle(proxy, calendarId, toHide = TRUE)
```

## Arguments

proxy	A <a href="#">calendar_proxy()</a> htmlwidget object.
calendarId	One or several calendar IDs to toggle.
toHide	Logical, show or hide schedules with provided calendar IDs.

## Value

A `calendar_proxy` object.

## See Also

Other calendar proxy methods: [cal\\_proxy\\_clear\(\)](#), [cal\\_proxy\\_clear\\_selection\(\)](#), [cal\\_proxy\\_options\(\)](#), [cal\\_proxy\\_view\(\)](#), [calendar-proxy-navigate](#), [calendar-proxy-schedule](#), [calendar\\_proxy\(\)](#)

**Examples**

```

library(shiny)
library(toastui)

ui <- fluidPage(
  fluidRow(
    column(
      width = 2,
      tags$h4("Checkbox logic :"),
      checkboxGroupInput(
        inputId = "calendarId",
        label = "Calendars to show:",
        choices = list(
          "Perso" = "1",
          "Work" = "2",
          "Courses" = "3"
        ),
        selected = 1:3
      ),
      tags$h4("Button logic :"),
      actionButton("cal_1", "Perso", class= "btn-block"),
      actionButton("cal_2", "Work", class= "btn-block"),
      actionButton("cal_3", "Courses", class= "btn-block")
    ),
    column(
      width = 10,
      tags$h2("Show / Hide schedules by calendarId"),
      calendarOutput(outputId = "cal"),
      uiOutput("ui")
    )
  )
)

server <- function(input, output, session) {

  output$cal <- renderCalendar({
    calendar(view = "month", taskView = TRUE, useDetailPopup = FALSE) %>%
      cal_props(cal_demo_props()) %>%
      cal_schedules(cal_demo_data())
  })

  # With checkbox
  observeEvent(input$calendarId, {
    cal_proxy_toggle("cal", input$calendarId, toHide = TRUE)
    cal_proxy_toggle("cal", setdiff(1:3, input$calendarId), toHide = FALSE)
  }, ignoreInit = TRUE, ignoreNULL = FALSE)

  # With buttons
  observeEvent(input$cal_1, {
    cal_proxy_toggle("cal", "1", toHide = input$cal_1 %% 2 == 1)
  }, ignoreInit = TRUE)
  observeEvent(input$cal_2, {

```

```

    cal_proxy_toggle("cal", "2", toHide = input$cal_2 %% 2 == 1)
  }, ignoreInit = TRUE)
  observeEvent(input$cal_3, {
    cal_proxy_toggle("cal", "3", toHide = input$cal_3 %% 2 == 1)
  }, ignoreInit = TRUE)
}

if (interactive())
  shinyApp(ui, server)

```

---

cal\_proxy\_view

*Change calendar view with Proxy*


---

## Description

This function allow to change the calendar view from the server in a Shiny application.

## Usage

```
cal_proxy_view(proxy, view)
```

## Arguments

proxy	A <a href="#">calendar_proxy()</a> htmlwidget object.
view	The new view for the calendar: "day", "week" or "month".

## Value

A calendar\_proxy object.

## See Also

Other calendar proxy methods: [cal\\_proxy\\_clear\(\)](#), [cal\\_proxy\\_clear\\_selection\(\)](#), [cal\\_proxy\\_options\(\)](#), [cal\\_proxy\\_toggle\(\)](#), [calendar-proxy-navigate](#), [calendar-proxy-schedule](#), [calendar\\_proxy\(\)](#)

## Examples

```

library(shiny)

ui <- fluidPage(
  tags$h2("Change calendar view"),
  radioButtons(
    inputId = "view",
    label = "Change view:",
    choices = c("day", "week", "month"),
    inline = TRUE
  ),
)

```

```

  calendarOutput(outputId = "my_calendar")
)

server <- function(input, output, session) {

  output$my_calendar <- renderCalendar({
    calendar(view = "day", scheduleView = "allday") %>%
      cal_schedules(
        title = "Today planning",
        start = Sys.Date(),
        end = Sys.Date(),
        category = "allday"
      )
  })

  observeEvent(
    input$view,
    cal_proxy_view("my_calendar", input$view),
    ignoreInit = TRUE
  )

}

if (interactive())
  shinyApp(ui, server)

```

---

cal\_schedules

*Add schedules to calendar*


---

## Description

Add schedules to calendar

## Usage

```
cal_schedules(cal, ...)
```

## Arguments

cal	A calendar htmlwidget.
...	Either named arguments to use as schedule properties or a data.frame with rows as schedules and columns as properties. See <a href="https://nhn.github.io/tui.calendar/latest/EventObject/">https://nhn.github.io/tui.calendar/latest/EventObject/</a> for options.

## Value

A calendar htmlwidget.

## Examples

```
# Add schedule data from a data.frame
ex_data <- cal_demo_data()
calendar() %>%
  cal_schedules(ex_data)

# Or add item by item
calendar() %>%
  cal_schedules(
    title = "R - introduction",
    body = "What is R?",
    start = format(Sys.Date(), "%Y-%m-03 08:00:00"),
    end = format(Sys.Date(), "%Y-%m-03 12:00:00"),
    category = "time"
  ) %>%
  cal_schedules(
    title = "R - visualisation",
    body = "With ggplot2",
    start = format(Sys.Date(), "%Y-%m-05 08:00:00"),
    end = format(Sys.Date(), "%Y-%m-05 12:00:00"),
    category = "time"
  ) %>%
  cal_schedules(
    title = "Build first package",
    body = "Build first package",
    start = format(Sys.Date(), "%Y-%m-12"),
    end = format(Sys.Date(), "%Y-%m-18"),
    category = "allday"
  ) %>%
  cal_schedules(
    title = "Lunch",
    body = "With friends",
    start = format(Sys.Date(), "%Y-%m-15 12:00:00"),
    end = format(Sys.Date(), "%Y-%m-15 14:00:00"),
    category = "time"
  )
)
```

---

cal\_template

*Set template for a calendar*

---

## Description

Template JS functions to support customer renderer

## Usage

```
cal_template(
```

```

    cal,
    milestoneTitle = NULL,
    taskTitle = NULL,
    alldayTitle = NULL,
    ...
)

```

### Arguments

cal	A <code>calendar()</code> object.
milestoneTitle	The milestone title (at left column) template function.
taskTitle	The task title (at left column) template function.
alldayTitle	The allday title (at left column) template function.
...	Additional arguments, see online documentation.

### Value

A calendar htmlwidget object.

### Note

Online JavaScript documentation: <https://github.com/nhn/tui.calendar/blob/main/docs/en/apis/template.md>. All arguments must be JavaScript function with `htmlwidgets::JS()`.

### Examples

```

calendar(view = "week", taskView = TRUE) %>%
  cal_template(
    milestoneTitle = "TODO",
    taskTitle = "Assignment",
    alldayTitle = "Full-time"
  )

```

---

cal\_theme

*Calendar theme options*

---

### Description

Full configuration for theme. "common" prefix is for entire calendar. "common" properties can be overridden by "week", "month". "week" prefix is for weekly and daily view. "month" prefix is for monthly view.

### Usage

```
cal_theme(cal, ..., .list = NULL)
```

**Arguments**

cal	A <code>calendar()</code> object.
...	Named arguments to customize appearance with CSS. See online documentation for full list of options.
.list	Alternative to ... for using a list.

**Value**

A calendar htmlwidget object.

**Note**

Online JavaScript documentation: <https://github.com/nhn/tui.calendar/blob/main/docs/en/apis/theme.md>

**Examples**

```
calendar(view = "month") %>%
  cal_theme(
    common.border = "2px solid #E5E9F0",
    month.dayname.borderLeft = "2px solid #E5E9F0",
    common.backgroundColor = "#2E3440",
    common.holiday.color = "#88C0D0",
    common.saturday.color = "#88C0D0",
    common.dayname.color = "#ECEFF4",
    common.today.color = "#333"
  )
```

---

cal\_timezone

*Calendar Timezone*


---

**Description**

Set a custom time zone. You can add secondary timezone in the weekly/daily view.

**Usage**

```
cal_timezone(
  cal,
  timezoneName = NULL,
  displayLabel = NULL,
  tooltip = NULL,
  extra_zones = NULL,
  offsetCalculator = NULL
)
```

**Arguments**

cal	A <code>calendar()</code> object.
timezoneName	timezone name (time zone names of the IANA time zone database, such as 'Asia/Seoul', 'America/New_York'). Basically, it will calculate the offset using 'Intl.DateTimeFormat' with the value of the this property entered.
displayLabel	The display label of your timezone at weekly/daily view(e.g. 'GMT+09:00')
tooltip	The tooltip(e.g. 'Seoul')
extra_zones	A list with additional timezones to be shown in left timegrid of weekly/daily view.
offsetCalculator	Javascript function. If you define the 'offsetCalculator' property, the offset calculation is done with this function.

**Value**

A calendar htmlwidget.

**Note**

Online JavaScript documentation: <https://github.com/nhn/tui.calendar/blob/main/docs/en/apis/options.md#timezone>

**Examples**

```
library(toastui)
calendar(view = "week", defaultDate = "2021-06-18") %>%
  cal_schedules(
    title = "My schedule",
    start = "2021-06-18T10:00:00",
    end = "2021-06-18T17:00:00",
    category = "time"
  ) %>%
  # Set primary timezone and add secondary timezone
  cal_timezone(
    timezoneName = "Europe/Paris",
    displayLabel = "GMT+02:00",
    tooltip = "Paris",
    extra_zones = list(
      list(
        timezoneName = "Asia/Seoul",
        displayLabel = "GMT+09:00",
        tooltip = "Seoul"
      )
    )
  )
)
```

---

cal_week_options	<i>Calendar Week Options</i>
------------------	------------------------------

---

### Description

Options for daily, weekly view.

### Usage

```
cal_week_options(
  cal,
  startDayOfWeek = NULL,
  daynames = NULL,
  narrowWeekend = NULL,
  workweek = NULL,
  showNowIndicator = NULL,
  showTimezoneCollapseButton = NULL,
  timezonesCollapsed = NULL,
  hourStart = NULL,
  hourEnd = NULL,
  eventView = TRUE,
  taskView = FALSE,
  collapseDuplicateEvents = NULL,
  ...
)
```

### Arguments

cal	A <a href="#">calendar()</a> object.
startDayOfWeek	Numeric. The start day of week.
daynames	Vector. The day names in weekly and daily. Default values are 'Sun', 'Mon', 'Tue', 'Wed', 'Thu', 'Fri', 'Sat'.
narrowWeekend	Logical. Make weekend column narrow(1/2 width).
workweek	Logical. Show only 5 days except for weekend.
showNowIndicator	Display or not the current time indicator in the weekly/daily view.
showTimezoneCollapseButton	Logical. Show a collapse button to close multiple timezones
timezonesCollapsed	Logical. An initial multiple timezones collapsed state.
hourStart	Numeric. Can limit of render hour start.
hourEnd	Numeric. Can limit of render hour end.
eventView	Show the all day and time grid in weekly, daily view. The default value is TRUE. If the value is a vector, it can be "allday", "time".

taskView            Show the milestone and task in weekly, daily view. The default value is FALSE. If the value is a vector, it can be "milestone", "task".

collapseDuplicateEvents  
                    Collapse duplicate events in the daily/weekly view.

...                 Additional options.

**Value**

A calendar htmlwidget.

**Note**

Online JavaScript documentation: <https://github.com/nhn/tui.calendar/blob/main/docs/en/apis/options.md#week>

**Examples**

```
# Change option for weekly view
calendar(view = "week") %>%
  cal_week_options(
    startDayOfWeek = 1,
    daynames = c("Dim", "Lun", "Mar", "Mer", "Jeu", "Ven", "Sam"),
    narrowWeekend = TRUE
  )
```

---

chart

*Interactive charts*

---

**Description**

Interactive charts

**Usage**

```
chart(
  data = list(),
  mapping = NULL,
  type = c("column", "bar", "area", "line", "scatter", "bubble", "boxPlot", "heatmap",
    "treemap", "radialBar", "pie", "gauge"),
  ...,
  options = list(),
  height = NULL,
  width = NULL,
  elementId = NULL
)
```

**Arguments**

data	A data.frame if used with mapping otherwise a configuration list.
mapping	Default list of aesthetic mappings to use for chart if data is a data.frame.
type	Type of chart.
...	Optional arguments (currently not used).
options	A list of options for the chart.
height, width	Height and width for the chart.
elementId	An optional id.

**Value**

A chart htmlwidget.

**See Also**

[chartOutput\(\)](#) / [renderChart\(\)](#) for usage in Shiny applications.

**Examples**

```
library(toastui)

# Some data
mydata <- data.frame(
  month = month.name,
  value = sample(1:100, 12)
)

# Chart using mapping
chart(mydata, caes(x = month, y = value), type = "bar")

# Otherwise:
chart(
  data = list(
    categories = mydata$month,
    series = list(
      list(
        name = "Value",
        data = mydata$value
      )
    )
  ),
  options = list(
    chart = list(title = "My title"),
    legend = list(visible = FALSE)
  ),
  type = "column"
)
```

chart-shiny

*Shiny bindings for `chart()`***Description**

Output and render functions for using `chart()` within Shiny applications and interactive Rmd documents.

**Usage**

```
chartOutput(outputId, width = "100%", height = "400px")
renderChart(expr, env = parent.frame(), quoted = FALSE)
```

**Arguments**

<code>outputId</code>	Output variable to read from.
<code>width, height</code>	Must be a valid CSS unit (like 100%, 400px, auto) or a number, which will be coerced to a string and have px appended.
<code>expr</code>	An expression that generates a calendar
<code>env</code>	The environment in which to evaluate <code>expr</code> .
<code>quoted</code>	Is <code>expr</code> a quoted expression (with <code>quote()</code> )? This is useful if you want to save an expression in a variable.

**Value**

Output element that can be included in UI. Render function to create output in server.

**Examples**

```
library(toastui)
library(shiny)

ui <- fluidPage(
  fluidRow(
    column(
      width = 8, offset = 2,
      tags$h2("Chart example"),
      selectInput("var", "Variable:", names(dimnames(Titanic))),
      chartOutput("mychart1"),
      chartOutput("mychart2")
    )
  )
)

server <- function(input, output, session) {
  output$mychart1 <- renderChart({
```

```

    Titanic %>%
      as.data.frame() %>%
      aggregate(as.formula(paste("Freq", input$var, sep = "~")), data = ., FUN = sum) %>%
      chart(caes(x = !!as.symbol(input$var), y = Freq), type = "column")
  })

  output$mychart2 <- renderChart({
    req(input$var != "Survived")
    Titanic %>%
      as.data.frame() %>%
      aggregate(as.formula(paste("Freq ~ Survived", input$var, sep = "+")), data = ., FUN = sum) %>%
      chart(caes(x = !!as.symbol(input$var), y = Freq, fill = Survived), type = "column")
  })
}

if (interactive())
  shinyApp(ui, server)

```

---

chart\_labs

*Chart labs*


---

## Description

Chart labs

## Usage

```
chart_labs(.chart, title = NULL, x = NULL, y = NULL)
```

## Arguments

<code>.chart</code>	A chart htmlwidget.
<code>title</code>	Text for main title.
<code>x</code>	Text for x-axis title.
<code>y</code>	Text for y-axis title.

## Value

A chart htmlwidget.

## Examples

```

chart(mtcars, caes(x = mpg, y = wt), type = "scatter") %>%
  chart_labs(
    title = "Main title",
    x = "X axis",
    y = "Y axis"
  )

```

---

chart_options	<i>Chart options</i>
---------------	----------------------

---

**Description**

Chart options

**Usage**

```
chart_options(.chart, ...)
```

**Arguments**

.chart	A chart htmlwidget.
...	Named list of options, options depends on chart's type, see common options <a href="#">here</a> .

**Value**

A chart htmlwidget.

**Examples**

```
chart(mtcars, caes(x = mpg, y = wt), type = "scatter") %>%
  chart_options(
    chart = list(title = "A scatter chart")
  )
```

---

countries	<i>Information on population, region, area size, infant mortality and more.</i>
-----------	---

---

**Description**

Data about countries of the world.

**Usage**

```
countries
```

**Format**

A data.frame with 227 rows and 20 variables:

Country a character vector

Region a character vector

Population a numeric vector

'Area (sq. mi.)' a numeric vector

'Pop. Density (per sq. mi.)' a numeric vector

'Coastline (coast/area ratio)' a numeric vector

'Net migration' a numeric vector

'Infant mortality (per 1000 births)' a numeric vector

'GDP (\$ per capita)' a numeric vector

'Literacy (%)' a numeric vector

'Phones (per 1000)' a numeric vector

'Arable (%)' a numeric vector

'Crops (%)' a numeric vector

'Other (%)' a numeric vector

Climate a numeric vector

Birthrate a numeric vector

Deathrate a numeric vector

Agriculture a numeric vector

Industry a numeric vector

Service a numeric vector

**Source**

fernandol on Kaggle (<https://www.kaggle.com/datasets/fernandol/countries-of-the-world/>)

**Description**

Create interactive tables : sortable, filterable, editable with the JavaScript library [tui-grid](#).

**Usage**

```

datagrid(
  data = list(),
  ...,
  sortable = TRUE,
  pagination = NULL,
  filters = FALSE,
  colnames = NULL,
  colwidths = "fit",
  align = "auto",
  theme = c("clean", "striped", "default"),
  draggable = FALSE,
  data_as_input = FALSE,
  contextmenu = FALSE,
  datepicker_locale = NULL,
  guess_colwidths_opts = guess_colwidths_options(),
  width = NULL,
  height = NULL,
  elementId = NULL
)

```

**Arguments**

<code>data</code>	A <code>data.frame</code> or something convertible in <code>data.frame</code> .
<code>...</code>	Arguments passed to the Grid <a href="#">JavaScript method</a> .
<code>sortable</code>	Logical, allow to sort columns.
<code>pagination</code>	Number of rows per page to display, default to <code>NULL</code> (no pagination).
<code>filters</code>	Logical, allow to filter columns.
<code>colnames</code>	Alternative colnames to be displayed in the header.
<code>colwidths</code>	Width for the columns, can be "auto" (width is determined by column's content) or a single or numeric vector to set the width in pixel. Use <code>NULL</code> to disable and use default behavior.
<code>align</code>	Alignment for columns content: "auto" (numeric and date on right, other on left), "right", "center" or "left". Use <code>NULL</code> to ignore.
<code>theme</code>	Predefined theme to be used.
<code>draggable</code>	Whether to enable to drag the row for changing the order of rows.
<code>data_as_input</code>	Should the data be available in an input <code>input\$&lt;ID&gt;_data</code> server-side?
<code>contextmenu</code>	Display or not a context menu when using right click in the grid. Can also be a list of custom options, see <a href="#">tui-grid documentation</a> for examples.
<code>datepicker_locale</code>	Custom locale texts for datepicker editor, see example in <a href="#">grid_editor_date()</a> .
<code>guess_colwidths_opts</code>	Options when <code>colwidths = "guess"</code> , see <a href="#">guess_colwidths_options()</a> .
<code>width, height</code>	Width and height of the table in a CSS unit or a numeric.
<code>elementId</code>	Use an explicit element ID for the widget.

**Value**

A datagrid htmlwidget.

**See Also**

[datagridOutput\(\)](#) / [renderDatagrid\(\)](#) for usage in Shiny applications.

**Examples**

```
library(toastui)

# default usage
datagrid(rolling_stones_50)

# Column's width alternatives (default is "fit")
datagrid(rolling_stones_50, colwidths = "guess")
datagrid(rolling_stones_50, colwidths = "auto")
datagrid(rolling_stones_50, colwidths = NULL)

# disable sorting
datagrid(rolling_stones_50, sortable = FALSE)

# enable default filtering
datagrid(rolling_stones_50, filters = TRUE)

# enable pagination (10 rows per page)
datagrid(rolling_stones_50, pagination = 10)

# Themes
datagrid(rolling_stones_50, theme = "striped")
datagrid(rolling_stones_50, theme = "default")

# Empty table
datagrid(list())

# Empty columns
datagrid(data.frame(
  variable_1 = character(0),
  variable_2 = character(0)
))

# Specify colnames
datagrid(
  data = data.frame(
    variable_1 = sample(1:50, 12),
    variable_2 = month.name
  ),
  colnames = c("Number", "Month of the year")
)
```

---

datagrid-shiny      *Shiny bindings for `datagrid()`*

---

### Description

Output and render functions for using `datagrid()` within Shiny applications and interactive Rmd documents.

### Usage

```
datagridOutput(outputId, width = "100%", height = "400px")
renderDatagrid(expr, env = parent.frame(), quoted = FALSE)
renderDatagrid2(expr, env = parent.frame(), quoted = FALSE)
datagridOutput2(outputId, width = "100%", height = "auto")
```

### Arguments

<code>outputId</code>	Output variable to read from.
<code>width, height</code>	Must be a valid CSS unit (like 100%, 400px, auto) or a number, which will be coerced to a string and have px appended.
<code>expr</code>	An expression that generates a calendar
<code>env</code>	The environment in which to evaluate <code>expr</code> .
<code>quoted</code>	Is <code>expr</code> a quoted expression (with <code>quote()</code> )? This is useful if you want to save an expression in a variable.

### Value

Output element that can be included in UI. Render function to create output in server.

### Special inputs

The following input values will be accessible in the server:

- **`input$outputId_data`** : contain the data displayed in grid, only available when `datagrid(data_as_input = TRUE)` or when using `grid_editor()`
- **`input$outputId_data_filtered`** : contain the filtered data displayed in grid, only available when `datagrid(data_as_input = TRUE)` or when using `grid_editor()`
- **`input$outputId_validation`** : contain results of validation rules applied to data, only available when using validation argument in `grid_editor()`

These other inputs can be defined using other functions:

- *row selection*: giving row selected with checkboxes or radio buttons in `inputId` defined in `grid_selection_row()`

- *cell selection*: giving cell selected with mouse in inputId defined in `grid_selection_cell()`
- *cell clicked*: giving row index and column name of cell clicked in inputId defined in `grid_click()`

### Examples

```

library(shiny)
library(toastui)

ui <- fluidPage(
  tags$h2("datagrid shiny example"),
  tabsetPanel(
    tabPanel(
      title = "Fixed height",
      datagridOutput("default"),
      tags$b("CHECK HEIGHT")
    ),
    tabPanel(
      title = "Full height",
      datagridOutput("fullheight", height = "auto"),
      tags$b("CHECK HEIGHT")
    ),
    tabPanel(
      title = "Pagination",
      datagridOutput("pagination", height = "auto"),
      tags$b("CHECK HEIGHT")
    )
  )
)

server <- function(input, output, session) {

  output$default <- renderDatagrid({
    datagrid(rolling_stones_500)
  })

  output$fullheight <- renderDatagrid({
    datagrid(rolling_stones_500, bodyHeight = "auto")
  })

  output$pagination <- renderDatagrid({
    datagrid(rolling_stones_500, pagination = 15)
  })

}

if (interactive())
  shinyApp(ui, server)

```

## Description

Properties to customize grid theme, see full list here : <https://nhn.github.io/tui.grid/latest/Grid/>.

## Usage

```
set_grid_theme(  
  selection.background = NULL,  
  selection.border = NULL,  
  scrollbar.border = NULL,  
  scrollbar.background = NULL,  
  scrollbar.emptySpace = NULL,  
  scrollbar.thumb = NULL,  
  scrollbar.active = NULL,  
  outline.border = NULL,  
  outline.showVerticalBorder = NULL,  
  frozenBorder.border = NULL,  
  area.header.border = NULL,  
  area.header.background = NULL,  
  area.body.background = NULL,  
  area.summary.border = NULL,  
  area.summary.background = NULL,  
  row.even.background = NULL,  
  row.even.text = NULL,  
  row.odd.background = NULL,  
  row.odd.text = NULL,  
  row.dummy.background = NULL,  
  row.hover.background = NULL,  
  cell.normal.background = NULL,  
  cell.normal.border = NULL,  
  cell.normal.text = NULL,  
  cell.normal.showVerticalBorder = NULL,  
  cell.normal.showHorizontalBorder = NULL,  
  cell.header.background = NULL,  
  cell.header.border = NULL,  
  cell.header.text = NULL,  
  cell.header.showVerticalBorder = NULL,  
  cell.header.showHorizontalBorder = NULL,  
  cell.rowHeader.background = NULL,  
  cell.rowHeader.border = NULL,  
  cell.rowHeader.text = NULL,  
  cell.rowHeader.showVerticalBorder = NULL,  
  cell.rowHeader.showHorizontalBorder = NULL,  
  cell.summary.background = NULL,  
  cell.summary.border = NULL,  
  cell.summary.text = NULL,  
  cell.summary.showVerticalBorder = NULL,  
  cell.summary.showHorizontalBorder = NULL,  
)
```

```

    cell.selectedHeader.background = NULL,
    cell.selectedRowHeader.background = NULL,
    cell.focused.border = NULL,
    cell.focused.background = NULL,
    cell.focusedInactive.border = NULL,
    cell.required.background = NULL,
    cell.required.text = NULL,
    cell.editable.background = NULL,
    cell.editable.text = NULL,
    cell.disabled.background = NULL,
    cell.disabled.text = NULL,
    cell.invalid.background = NULL,
    cell.invalid.text = NULL
)

reset_grid_theme()

```

### Arguments

`selection.background`  
Background color of a selection layer.

`selection.border`  
Border color of a selection layer.

`scrollbar.border`  
Border color of scrollbars.

`scrollbar.background`  
Background color of scrollbars.

`scrollbar.emptySpace`  
Color of extra spaces except scrollbar.

`scrollbar.thumb`  
Color of thumbs in scrollbars.

`scrollbar.active`  
Color of arrows(for IE) or thumb:hover(for other browsers) in scrollbars.

`outline.border` Color of the table outline.

`outline.showVerticalBorder`  
Whether vertical outlines of the table are visible.

`frozenBorder.border`  
Border color of a frozen border.

`area.header.border`  
Border color of the header area in the table.

`area.header.background`  
Background color of the header area in the table.

`area.body.background`  
Background color of the body area in the table.

`area.summary.border`  
Border color of the summary area in the table.

<code>area.summary.background</code>	Background color of the summary area in the table.
<code>row.even.background</code>	background color of even row.
<code>row.even.text</code>	text color of even row.
<code>row.odd.background</code>	background color of cells in odd row.
<code>row.odd.text</code>	text color of odd row.
<code>row.dummy.background</code>	background color of dummy row.
<code>row.hover.background</code>	background color of hovered row.
<code>cell.normal.background</code>	Background color of normal cells.
<code>cell.normal.border</code>	Border color of normal cells.
<code>cell.normal.text</code>	Text color of normal cells.
<code>cell.normal.showVerticalBorder</code>	Whether vertical borders of normal cells are visible.
<code>cell.normal.showHorizontalBorder</code>	Whether horizontal borders of normal cells are visible.
<code>cell.header.background</code>	Background color of header cells.
<code>cell.header.border</code>	border color of header cells.
<code>cell.header.text</code>	text color of header cells.
<code>cell.header.showVerticalBorder</code>	Whether vertical borders of header cells are visible.
<code>cell.header.showHorizontalBorder</code>	Whether horizontal borders of header cells are visible.
<code>cell.rowHeader.background</code>	Background color of row's header cells.
<code>cell.rowHeader.border</code>	border color of row's header cells.
<code>cell.rowHeader.text</code>	text color of row's header cells.
<code>cell.rowHeader.showVerticalBorder</code>	Whether vertical borders of row's header cells are visible.
<code>cell.rowHeader.showHorizontalBorder</code>	Whether horizontal borders of row's header cells are visible.
<code>cell.summary.background</code>	Background color of cells in the summary area.
<code>cell.summary.border</code>	border color of cells in the summary area.

`cell.summary.text`  
text color of cells in the summary area.

`cell.summary.showVerticalBorder`  
Whether vertical borders of cells in the summary area are visible.

`cell.summary.showHorizontalBorder`  
Whether horizontal borders of cells in the summary area are visible.

`cell.selectedHeader.background`  
background color of selected header cells.

`cell.selectedRowHeader.background`  
background color of selected row's head cells.

`cell.focused.border`  
border color of a focused cell.

`cell.focused.background`  
background color of a focused cell.

`cell.focusedInactive.border`  
border color of a inactive focus cell.

`cell.required.background`  
background color of required cells.

`cell.required.text`  
text color of required cells.

`cell.editable.background`  
background color of the editable cells.

`cell.editable.text`  
text color of the selected editable cells.

`cell.disabled.background`  
background color of disabled cells.

`cell.disabled.text`  
text color of disabled cells.

`cell.invalid.background`  
background color of invalid cells.

`cell.invalid.text`  
text color of invalid cells.

**Value**

No return value.

**Examples**

```
library(toastui)

# Default is "clean" theme
datagrid(rolling_stones_50)

# others builtins themes
datagrid(rolling_stones_50, theme = "striped")
datagrid(rolling_stones_50, theme = "default")
```

```
# Set global theme options
set_grid_theme(
  row.even.background = "#ddeb7",
  cell.normal.border = "#9bc2e6",
  cell.normal.showVerticalBorder = TRUE,
  cell.normal.showHorizontalBorder = TRUE,
  cell.header.background = "#5b9bd5",
  cell.header.text = "#FFF",
  cell.selectedHeader.background = "#013ADF",
  cell.focused.border = "#013ADF"
)

datagrid(rolling_stones_50)

# Remove theme
reset_grid_theme()
```

---

datagrid\_proxy

*Proxy for datagrid htmlwidget*

---

## Description

Proxy for datagrid htmlwidget

## Usage

```
datagrid_proxy(shinyId, session = shiny::getDefaultReactiveDomain())
```

## Arguments

shinyId	single-element character vector indicating the output ID of the chart to modify (if invoked from a Shiny module, the namespace will be added automatically).
session	the Shiny session object to which the chart belongs; usually the default value will suffice.

## Value

A datagrid\_proxy object.

## See Also

Other datagrid proxy methods: [grid\\_proxy\\_add\\_row\(\)](#), [grid\\_proxy\\_delete\\_row\(\)](#)

**Examples**

```
## Not run:

# Consider having created a datagrid widget with
datagridOutput("my_grid") # UI
output$my_grid <- renderDatagrid({}) # Server

# Then you can call proxy methods in observer:

# set datagrid proxy then call a cal_proxy_* function
datagrid_proxy("my_grid") %>%
  datagrid_proxy_addrow(mydata)

# or directly
datagrid_proxy_addrow("my_grid", mydata)

## End(Not run)
```

---

 editor

*Create an interactive editor*


---

**Description**

Create an interactive editor

**Usage**

```
editor(
  ...,
  getMarkdownOnChange = TRUE,
  getHTMLOnChange = TRUE,
  width = NULL,
  height = NULL,
  elementId = NULL
)
```

**Arguments**

... Options for the editor, see examples or [online reference](#).

getMarkdownOnChange, getHTMLOnChange Get editor's content in Shiny application through an input value: `input$<outputId>_(markdown|html)`.

height, width Height and width for the chart.

elementId An optional id.

**Value**

An editor `htmlwidget`.

## Examples

```
# Default is markdown editor with tab to switch to preview
editor()
# equivalent to
editor(previewStyle = "tab")
# Show preview side by side
editor(previewStyle = "vertical")

# Default edit type is markdown
editor(initialEditType = "markdown")
# Change to wysiwyg and remove switch mode option
editor(initialEditType = "wysiwyg", hideModeSwitch = TRUE)

# i18n : change language
editor(language = "fr")
editor(language = "ar")
# see https://github.com/nhn/tui.editor/blob/master/docs/en/i18n.md for other supported languages
```

---

editor-proxy-show-hide

*Show/hide an editor*

---

## Description

Show/hide an editor

## Usage

```
editor_proxy_show(proxy)
```

```
editor_proxy_hide(proxy)
```

## Arguments

proxy            A `editor_proxy()` htmlwidget object.

## Value

A `editor_proxy` object.

## See Also

Other editor proxy methods: `editor_proxy()`, `editor_proxy_change_preview()`, `editor_proxy_insert()`

**Examples**

```

library(shiny)
library(toastui)

ui <- fluidPage(
  tags$h2("Use editor's proxy"),
  fluidRow(
    column(
      width = 4,
      radioButtons(
        inputId = "changePreviewStyle",
        label = "change preview style",
        choices = c("tab", "vertical")
      ),
      checkboxInput(
        inputId = "showhide",
        label = "Show/hide editor",
        value = TRUE
      ),
      textInput(
        inputId = "text",
        label = "Text to insert:",
        width = "100%"
      ),
      actionButton("insert", "Insert text")
    ),
    column(
      width = 8,
      editorOutput("my_editor")
    )
  )
)

server <- function(input, output, session) {

  output$my_editor <- renderEditor({
    editor()
  })

  observeEvent(input$changePreviewStyle, {
    editor_proxy_change_preview("my_editor", input$changePreviewStyle)
  }, ignoreInit = TRUE)

  observeEvent(input$showhide, {
    if (input$showhide) {
      editor_proxy_show("my_editor")
    } else {
      editor_proxy_hide("my_editor")
    }
  }, ignoreInit = TRUE)

  observeEvent(input$insert, {

```

```

    editor_proxy_insert("my_editor", text = input$text)
  })
}

if (interactive())
  shinyApp(ui, server)

```

---

 editor-shiny

*Shiny bindings for editor()*


---

## Description

Output and render functions for using `editor()` within Shiny applications and interactive Rmd documents.

## Usage

```

editorOutput(outputId, width = "100%", height = "600px")

renderEditor(expr, env = parent.frame(), quoted = FALSE)

```

## Arguments

<code>outputId</code>	Output variable to read from.
<code>width, height</code>	Must be a valid CSS unit (like 100%, 400px, auto) or a number, which will be coerced to a string and have px appended.
<code>expr</code>	An expression that generates a calendar
<code>env</code>	The environment in which to evaluate <code>expr</code> .
<code>quoted</code>	Is <code>expr</code> a quoted expression (with <code>quote()</code> )? This is useful if you want to save an expression in a variable.

## Value

Output element that can be included in UI. Render function to create output in server.

## Examples

```

library(shiny)
library(toastui)

ui <- fluidPage(
  tags$h2("editor shiny example"),
  tabsetPanel(
    tabPanel(
      title = "Default",
      editorOutput("default"),
      tags$b("CHECK HEIGHT")
    )
  )
)

```

```

    ),
    tabPanel(
      title = "WYSIWYG",
      editorOutput("wysiwyg"),
      tags$b("CHECK HEIGHT")
    ),
    tabPanel(
      title = "Vertical",
      editorOutput("vertical"),
      tags$b("CHECK HEIGHT")
    )
  )
)
)

server <- function(input, output, session) {

  output$default <- renderEditor({
    editor(minHeight = "400px")
  })

  output$wysiwyg <- renderEditor({
    editor(initialEditType = "wysiwyg", hideModeSwitch = TRUE)
  })

  output$vertical <- renderEditor({
    editor(previewStyle = "vertical")
  })

}

if (interactive())
  shinyApp(ui, server)

```

---

 editor\_proxy

*Proxy for editor htmlwidget*


---

## Description

Proxy for editor htmlwidget

## Usage

```
editor_proxy(shinyId, session = shiny::getDefaultReactiveDomain())
```

## Arguments

shinyId	single-element character vector indicating the output ID of the chart to modify (if invoked from a Shiny module, the namespace will be added automatically).
session	the Shiny session object to which the chart belongs; usually the default value will suffice.

**Value**

A editor\_proxy object.

**See Also**

Other editor proxy methods: [editor\\_proxy\\_show\\_hide](#), [editor\\_proxy\\_change\\_preview\(\)](#), [editor\\_proxy\\_insert\(\)](#)

**Examples**

```
## Not run:

# Consider having created a editor widget with
editorOutput("my_editor") # UI
output$my_editor <- renderEditor({}) # Server

# Then you can call proxy methods in observer:

# set editor proxy then call a cal_proxy_* function
editor_proxy("my_editor") %>%
  cal_proxy_today()

# or directly
cal_proxy_today("my_editor")

## End(Not run)
```

---

editor\_proxy\_change\_preview  
*Change editor's preview style*

---

**Description**

Change editor's preview style

**Usage**

```
editor_proxy_change_preview(proxy, style = c("tab", "vertical"))
```

**Arguments**

proxy	A <a href="#">editor_proxy()</a> or outputId of the editor
style	Style for the editor : 'tab' or 'vertical'.

**Value**

A editor\_proxy object.

**See Also**

Other editor proxy methods: [editor-proxy-show-hide](#), [editor\\_proxy\(\)](#), [editor\\_proxy\\_insert\(\)](#)

**Examples**

```
library(shiny)
library(toastui)

ui <- fluidPage(
  tags$h2("Use editor's proxy"),
  fluidRow(
    column(
      width = 4,
      radioButtons(
        inputId = "changePreviewStyle",
        label = "change preview style",
        choices = c("tab", "vertical")
      ),
      checkboxInput(
        inputId = "showhide",
        label = "Show/hide editor",
        value = TRUE
      ),
      textInput(
        inputId = "text",
        label = "Text to insert:",
        width = "100%"
      ),
      actionButton("insert", "Insert text")
    ),
    column(
      width = 8,
      editorOutput("my_editor")
    )
  )
)

server <- function(input, output, session) {

  output$my_editor <- renderEditor({
    editor()
  })

  observeEvent(input$changePreviewStyle, {
    editor_proxy_change_preview("my_editor", input$changePreviewStyle)
  }, ignoreInit = TRUE)

  observeEvent(input$showhide, {
    if (input$showhide) {
      editor_proxy_show("my_editor")
    } else {
      editor_proxy_hide("my_editor")
    }
  })
}
```

```

    }
  }, ignoreInit = TRUE)

  observeEvent(input$insert, {
    editor_proxy_insert("my_editor", text = input$text)
  })
}

if (interactive())
  shinyApp(ui, server)

```

---

editor\_proxy\_insert    *Insert text in an editor*

---

### Description

Insert text in an editor

### Usage

```
editor_proxy_insert(proxy, text)
```

### Arguments

proxy	A <a href="#">editor_proxy()</a> or outputId of the editor
text	Text to insert.

### Value

A editor\_proxy object.

### See Also

Other editor proxy methods: [editor\\_proxy\\_show\\_hide](#), [editor\\_proxy\(\)](#), [editor\\_proxy\\_change\\_preview\(\)](#)

### Examples

```

library(shiny)
library(toastui)

ui <- fluidPage(
  tags$h2("Use editor's proxy"),
  fluidRow(
    column(
      width = 4,
      radioButtons(
        inputId = "changePreviewStyle",
        label = "change preview style",

```

```

      choices = c("tab", "vertical")
    ),
    checkboxInput(
      inputId = "showhide",
      label = "Show/hide editor",
      value = TRUE
    ),
    textInput(
      inputId = "text",
      label = "Text to insert:",
      width = "100%"
    ),
    actionButton("insert", "Insert text")
  ),
  column(
    width = 8,
    editorOutput("my_editor")
  )
)
)
)

server <- function(input, output, session) {

  output$my_editor <- renderEditor({
    editor()
  })

  observeEvent(input$changePreviewStyle, {
    editor_proxy_change_preview("my_editor", input$changePreviewStyle)
  }, ignoreInit = TRUE)

  observeEvent(input$showhide, {
    if (input$showhide) {
      editor_proxy_show("my_editor")
    } else {
      editor_proxy_hide("my_editor")
    }
  }, ignoreInit = TRUE)

  observeEvent(input$insert, {
    editor_proxy_insert("my_editor", text = input$text)
  })

}

if (interactive())
  shinyApp(ui, server)

```

**Description**

Customize cell(s) appearance with CSS according to an expression in the data used in the grid.

**Usage**

```
grid_style_cell(
  grid,
  expr,
  column,
  background = NULL,
  color = NULL,
  fontWeight = NULL,
  ...,
  class = NULL,
  cssProperties = NULL
)
```

```
grid_style_cells(
  grid,
  fun,
  columns,
  background = NULL,
  color = NULL,
  ...,
  class = NULL,
  cssProperties = NULL
)
```

**Arguments**

grid	A grid created with <code>datagrid()</code> .
expr	An expression giving position of row. Must return a logical vector.
column	Name of column (variable name) where to apply style.
background	Background color.
color	Text color.
fontWeight	Font weight, you can use "bold" for example.
...	Other CSS properties.
class	CSS class to apply to the row.
cssProperties	Alternative to specify CSS properties with a named list.
fun	Function to apply to columns to identify rows to style.
columns	Columns names to use with fun.

**Value**

A `datagrid` htmlwidget.

**Examples**

```

library(toastui)

datagrid(mtcars) %>%
  grid_style_cell(
    mpg > 19,
    column = "mpg",
    background = "#F781BE",
    fontWeight = "bold"
  )

datagrid(mtcars) %>%
  grid_style_cell(
    vs == 0,
    column = "vs",
    background = "#E41A1C80",
    color = "#FFF"
  ) %>%
  grid_style_cell(
    vs == 1,
    column = "vs",
    background = "#377EB880"
  )

# Use rlang to use character
library(rlang)
my_var <- "disp"
datagrid(mtcars) %>%
  grid_style_cell(
    !!sym(my_var) > 180,
    column = "disp",
    background = "#F781BE"
  )

# Style multiple columns

cor_longley <- as.data.frame(cor(longley))
cor_longley$Var <- row.names(cor_longley)
vars <- c("GNP.deflator", "GNP",
          "Unemployed", "Armed.Forces",
          "Population", "Year", "Employed")
datagrid(cor_longley[, c("Var", vars)]) %>%
  grid_style_cells(
    fun = ~ . > 0.9,
    columns = vars,
    background = "#053061",
    color = "#FFF"
  )

```

```

) %>%
grid_style_cells(
  fun = ~ . > 0 & . <= 0.9,
  columns = vars,
  background = "#539dc8",
  color = "#FFF"
) %>%
grid_style_cells(
  fun = ~ . < 0,
  columns = vars,
  background = "#b51f2e",
  color = "#FFF"
)

```

---

grid-editor

*Grid editor for columns*


---

## Description

Allow to edit content of columns with different inputs, then retrieve value server-side in shiny application with `input$<outputId>_data`.

## Usage

```

grid_editor(
  grid,
  column,
  type = c("text", "number", "checkbox", "select", "radio", "password"),
  choices = NULL,
  validation = validateOpts(),
  useListItemText = FALSE
)

grid_editor_opts(
  grid,
  editingEvent = c("dblclick", "click"),
  actionButtonId = NULL,
  session = shiny::getDefaultReactiveDomain()
)

```

## Arguments

grid	A table created with <code>datagrid()</code> .
column	Column for which to activate the editable content.
type	Type of editor: "text", "number", "checkbox", "select", "radio" or "password".
choices	Vector of choices, required for "checkbox", "select" and "radio" type.
validation	Rules to validate content edited, see <code>validateOpts()</code> .

useListItemText	If choices contains special characters (spaces, punctuation, ...) set this option to TRUE, you'll have to encode data in column to numeric as character (e.g. "1", "2", ...).
editingEvent	If set to "click", editable cell in the view-mode will be changed to edit-mode by a single click.
actionButtonId	Use an actionButton inputId to send edited data to the server only when this button is clicked. This allows not to send all the changes made by the user to the server.
session	Shiny session.

**Value**

A datagrid htmlwidget.

**See Also**

[grid\\_editor\\_date](#) for a date picker.

**Examples**

```
library(toastui)
library(shiny)

ui <- fluidPage(
  tags$h2("Edit grid demo"),
  fluidRow(
    column(
      width = 6,
      tags$p(
        "Each time you modify the grid, data is send to server"
      ),
      datagridOutput("grid1"),
      verbatimTextOutput("edited1")
    ),
    column(
      width = 6,
      tags$p(
        "Modify the grid, then click button to send data to server"
      ),
      datagridOutput("grid2"),
      actionButton(
        inputId = "update2",
        label = "Update edited data",
        class = "btn-block"
      ),
      verbatimTextOutput("edited2")
    )
  )
)
```

```
server <- function(input, output, session) {

  # Use same grid twice
  editdata <- data.frame(
    character = month.name,
    select = month.name,
    checkbox = month.abb,
    radio = month.name
  )
  editgrid <- datagrid(editdata) %>%
    grid_editor(
      column = "character",
      type = "text"
    ) %>%
    grid_editor(
      column = "select",
      type = "select",
      choices = month.name
    ) %>%
    grid_editor(
      column = "checkbox",
      type = "checkbox",
      choices = month.abb
    ) %>%
    grid_editor(
      column = "radio",
      type = "radio",
      choices = month.name
    )

  output$grid1 <- renderDatagrid({
    editgrid
  })

  output$edited1 <- renderPrint({
    input$grid1_data
  })

  output$grid2 <- renderDatagrid({
    editgrid %>%
      grid_editor_opts(
        actionButtonId = "update2"
      )
  })

  output$edited2 <- renderPrint({
    input$grid2_data
  })

}

if (interactive())
  shinyApp(ui, server)
```

---

grid-header	<i>Header options</i>
-------------	-----------------------

---

### Description

Properties to modify grid's header, like creating grouped header.

### Usage

```
grid_header(
  grid,
  complexColumns = NULL,
  columns = NULL,
  align = NULL,
  valign = NULL,
  height = NULL
)

grid_complex_header(grid, ..., height = 80)
```

### Arguments

grid	A table created with <code>datagrid()</code> .
complexColumns	list. This options creates new parent headers of the multiple columns which includes the headers of specified columns, and sets up the hierarchy.
columns	list. Options for column's header.
align	Horizontal alignment of the header content. Available values are 'left', 'center', 'right'.
valign	Vertical alignment of the row header content. Available values are 'top', 'middle', 'bottom'.
height	Numeric. The height of the header area.
...	Named arguments to merge columns under a common header, e.g. <code>newcol = c("col1", "col2")</code> .

### Value

A `datagrid` `htmlwidget`.

### Examples

```
library(toastui)

datagrid(rolling_stones_50) %>%
  grid_header(
    align = "left",
    height = "150px"
```

```

)

# Create columns groups
datagrid(iris) %>%
  grid_complex_header(
    "Sepal" = c("Sepal.Length", "Sepal.Width"),
    "Petal" = c("Petal.Length", "Petal.Width")
  )

# or use the full form to use more options
datagrid(iris) %>%
  grid_columns(
    columns = c("Petal.Length", "Petal.Width"),
    header = c("Length", "Width")
  ) %>%
  grid_header(
    complexColumns = list(
      list(
        header = "Sepal",
        name = "Sepal",
        hideChildHeaders = TRUE,
        resizable = TRUE,
        childNames = c("Sepal.Length", "Sepal.Width")
      ),
      list(
        header = "Petal",
        name = "Petal",
        childNames = c("Petal.Length", "Petal.Width")
      )
    ),
    height = 80,
    valign = "middle"
  )

# Custom HTML in header
# (not that sorting is incompatible with)
library(htmltools)
datagrid(mtcars) %>%
  grid_columns(
    columns = "mpg",
    minWidth = 120,
    header = tags$div(
      tags$b("Miles/(US) gallon"),
      tags$br(),
      tags$i("numeric")
    )
  ) %>%
  grid_header(
    columns = list(
      list(

```

```

      name = "mpg",
      align = "left",
      renderer = JS("DatagridColumnHeaderHTML")
    )
  )
)

```

---

grid_click	<i>Click event (in shiny)</i>
------------	-------------------------------

---

### Description

Click event (in shiny)

### Usage

```
grid_click(grid, inputId)
```

### Arguments

grid	A table created with <code>datagrid()</code> .
inputId	The input slot that will be used to access the value.

### Value

A datagrid htmlwidget.

### Examples

```

if (interactive()) {
  library(shiny)
  library(toastui)

  ui <- fluidPage(
    tags$h2("datagrid click"),
    datagridOutput("grid"),
    verbatimTextOutput("res")
  )

  server <- function(input, output, session) {

    df <- data.frame(
      index = 1:12,
      month = month.name,
      letters = letters[1:12]
    )

    output$grid <- renderDatagrid({

```

```

    datagrid(df) %>%
      grid_click(
        inputId = "click"
      )
  })

  output$res <- renderPrint({
    input$click
  })
}

shinyApp(ui, server)
}

```

---

 grid\_colorbar

*Style cells with a color bar*


---

## Description

Style cells with a color bar

## Usage

```

grid_colorbar(
  grid,
  column,
  bar_bg = "#5E81AC",
  color = "#ECEFF4",
  background = "#ECEFF4",
  from = NULL,
  prefix = NULL,
  suffix = NULL,
  label_outside = FALSE,
  label_width = "20px",
  border_radius = "0px",
  height = "16px",
  align = c("left", "center", "right")
)

```

## Arguments

grid	A grid created with <code>datagrid()</code> .
column	The name of the column where to create a color bar.
bar_bg	Background color of the color bar.
color	Color of the text.
background	Background of the cell.
from	Range of values of the variable to represent as a color bar.

prefix, suffix	String to put in front of or after the value.
label_outside	Show label outside of the color bar.
label_width	Width of label in case it's displayed outside the color bar.
border_radius	Border radius of color bar.
height	Height in pixel of color bar.
align	Alignment of label if it is displayed inside the color bar.

**Value**

A datagrid htmlwidget.

**Examples**

```
library(toastui)

dat <- rolling_stones_50[, "Artist", drop = FALSE]
dat$percentage <- sample(1:100, size = 50, replace = TRUE)
dat$numeric <- sample(1:1500, size = 50, replace = TRUE)

datagrid(dat) %>%
  grid_colorbar(
    column = "percentage"
  )

datagrid(dat) %>%
  grid_colorbar(
    column = "percentage",
    label_outside = TRUE
  )

# More options
datagrid(dat) %>%
  grid_colorbar(
    column = "percentage",
    from = c(0, 100),
    suffix = "%"
  ) %>%
  grid_colorbar(
    column = "numeric",
    bar_bg = "#BF616A",
    from = c(0, 1500),
    prefix = "$",
    height = "20px"
  )

data.frame(
  rn = rownames(mtcars),
  mpg = mtcars$mpg,
  check.names = FALSE
) %>%
```

```

datagrid(colnames = c("Automobile", "Miles/(US) gallon")) %>%
grid_colorbar(
  column = "mpg",
  bar_bg = ifelse(mtcars$mpg > mean(mtcars$mpg), "#5cb85c", "#BF616A"),
  label_outside = TRUE,
  label_width = "25px"
)

```

---

grid\_columns

*Set columns options*


---

### Description

Set options for one or several specific column.

### Usage

```

grid_columns(
  grid,
  columns,
  header = NULL,
  ellipsis = NULL,
  align = NULL,
  valign = NULL,
  className = NULL,
  width = NULL,
  minWidth = NULL,
  hidden = NULL,
  resizable = NULL,
  defaultValue = NULL,
  formatter = NULL,
  escapeHTML = NULL,
  ignored = NULL,
  sortable = NULL,
  sortingType = NULL,
  onBeforeChange = NULL,
  onAfterChange = NULL,
  whiteSpace = NULL,
  ...
)

```

### Arguments

grid	A grid created with <a href="#">datagrid()</a> .
columns	Name(s) of column in the data used in <a href="#">datagrid()</a> .
header	The header of the column to be shown on the header.

ellipsis	If set to true, ellipsis will be used for overflowing content.
align	Horizontal alignment of the column content. Available values are 'left', 'center', 'right'.
valign	Vertical alignment of the column content. Available values are 'top', 'middle', 'bottom'.
className	The name of the class to be used for all cells of the column.
width	The width of the column. The unit is pixel. If this value isn't set, the column's width is automatically resized.
minWidth	The minimum width of the column. The unit is pixel.
hidden	If set to true, the column will not be shown.
resizable	If set to false, the width of the column will not be changed.
defaultValue	The default value to be shown when the column doesn't have a value.
formatter	The function that formats the value of the cell. The return value of the function will be shown as the value of the cell. If set to 'listItemText', the value will be shown the text.
escapeHTML	If set to true, the value of the cell will be encoded as HTML entities.
ignored	If set to true, the value of the column will be ignored when setting up the list of modified rows.
sortable	If set to true, sort button will be shown on the right side of the column header, which executes the sort action when clicked.
sortingType	If set to 'desc', will execute descending sort initially when sort button is clicked. Default to 'asc'.
onBeforeChange	The function that will be called before changing the value of the cell. If stop() method in event object is called, the changing will be canceled.
onAfterChange	The function that will be called after changing the value of the cell.
whiteSpace	If set to 'normal', the text line is broken by fitting to the column's width. If set to 'pre', spaces are preserved and the text is broken by new line characters. If set to 'pre-wrap', spaces are preserved, the text line is broken by fitting to the column's width and new line characters. If set to 'pre-line', spaces are merged, the text line is broken by fitting to the column's width and new line characters.
...	Additional parameters.

**Value**

A datagrid htmlwidget.

**Note**

Documentation come from <https://nhn.github.io/tui.grid/latest/Grid/>.

**Examples**

```

library(toastui)

# New header label
datagrid(mtcars[, 1:5]) %>%
  grid_columns(columns = "mpg", header = "Miles/(US) gallon")

# Align content to right & resize
datagrid(mtcars[, 1:5]) %>%
  grid_columns(
    columns = "mpg",
    align = "left",
    resizable = TRUE
  ) %>%
  grid_columns(
    columns = "cyl",
    align = "left",
    resizable = TRUE
  )

# Hide a column
datagrid(mtcars[, 1:5]) %>%
  grid_columns(
    columns = "mpg",
    hidden = TRUE
  )

# Set options for 2 columns
datagrid(mtcars[, 1:5]) %>%
  grid_columns(
    columns = c("mpg", "cyl"),
    header = c("Miles/(US) gallon", "Number of cylinders")
  )

```

---

grid\_columns\_opts      *Set global columns options*

---

**Description**

Set options for all columns.

**Usage**

```

grid_columns_opts(
  grid,
  minWidth = NULL,

```

```

    resizable = NULL,
    frozenCount = NULL,
    frozenBorderWidth = NULL
)

```

### Arguments

grid	A table created with <code>datagrid()</code> .
minWidth	Minimum width of each columns.
resizable	If set to true, resize-handles of each columns will be shown.
frozenCount	The number of frozen columns.
frozenBorderWidth	The value of frozen border width. When the frozen columns are created by "frozenCount" option, the frozen border width set.

### Value

A `datagrid` `htmlwidget`.

### Examples

```

library(toastui)

# Set minimal width for columns
datagrid(countries) %>%
  grid_columns_opts(
    minWidth = 140
  )

# Freeze two first columns
datagrid(countries) %>%
  grid_columns_opts(
    minWidth = 140,
    frozenCount = 2,
    frozenBorderWidth = 5
  )

```

---

grid_col_button	<i>Display buttons in grid's column</i>
-----------------	---

---

### Description

Display buttons in grid's column

**Usage**

```
grid_col_button(
  grid,
  column,
  inputId,
  label = NULL,
  icon = NULL,
  status = "default",
  btn_width = "100%",
  ...
)
```

**Arguments**

grid	A table created with <a href="#">datagrid()</a> .
column	The name of the column where to create buttons.
inputId	The input slot that will be used to access the value.
label	Label to display on button, if NULL use column's content.
icon	Icon to display in button.
status	Bootstrap status (color) of the button: default, primary, success, info, warning, danger, ... A class prefixed by btn- will be added to the button.
btn_width	Button's width.
...	Further arguments passed to <a href="#">grid_columns()</a> .

**Value**

A datagrid htmlwidget.

**Examples**

```
library(toastui)
library(shiny)

ui <- fluidPage(
  tags$h2("Buttons in grid"),
  datagridOutput("grid"),
  verbatimTextOutput("clicks")
)

server <- function(input, output, session) {

  dat <- data.frame(
    variable = paste(1:26, LETTERS, sep = " - "),
    button1 = 1:26,
    button2 = letters,
    button3 = LETTERS
  )
}
```

```

output$grid <- renderDatagrid({
  datagrid(dat) %>%
    grid_col_button(
      column = "button1",
      inputId = "button1"
    ) %>%
    grid_col_button(
      column = "button2",
      inputId = "button2",
      align = "center",
      btn_width = "50%",
      status = "primary"
    ) %>%
    grid_col_button(
      column = "button3",
      inputId = "button3",
      label = "Remove",
      icon = icon("trash"),
      status = "danger"
    )
})

output$clicks <- renderPrint({
  cat(
    "Button 1: ", input$button1,
    "\nButton 2: ", input$button2,
    "\nButton 3: ", input$button3,
    "\n"
  )
})

}

if (interactive())
  shinyApp(ui, server)

```

---

grid\_col\_checkbox      *Display checkboxes in grid's column*

---

### Description

Display checkboxes in grid's column

### Usage

```

grid_col_checkbox(
  grid,
  column,
  class = "form-check d-flex justify-content-center my-1",
  ...
)

```

**Arguments**

grid	A table created with <code>datagrid()</code> .
column	The name of the column where to create buttons.
class	CSS classes to add to checkbox container.
...	Further arguments passed to <code>grid_columns()</code> .

**Value**

A `datagrid` `htmlwidget`.

**Examples**

```

library(toastui)
library(shiny)
library(bslib)

ui <- fluidPage(
  theme = bslib::bs_theme(version = 5L),
  tags$h2("Checkbox column grid demo"),
  fluidRow(
    column(
      width = 8,
      datagridOutput("grid"),
      verbatimTextOutput("edited")
    )
  )
)

server <- function(input, output, session) {

  output$grid <- renderDatagrid({
    data.frame(
      month = month.name,
      checkboxes = sample(c(TRUE, FALSE), 12, replace = TRUE),
      switches = sample(c(TRUE, FALSE), 12, replace = TRUE)
    ) %>%
    datagrid(data_as_input = TRUE) %>%
    grid_col_checkbox(column = "checkboxes") %>%
    grid_col_checkbox(
      column = "switches",
      # /\ will only works with bslib::bs_theme(version = 5L)
      class = "form-check form-switch d-flex justify-content-center my-1"
    )
  })

  output$edited <- renderPrint({
    input$grid_data # outputId + "_data"
  })
}

```

```
if (interactive())
  shinyApp(ui, server)
```

---

grid\_editor\_date      *Grid editor for date/time columns*

---

### Description

Allow to edit content of columns with a calendar and time picker, then retrieve value server-side in shiny application with `input$<outputId>_data`.

### Usage

```
grid_editor_date(
  grid,
  column,
  format = "yyyy-MM-dd",
  type = c("date", "month", "year"),
  timepicker = c("none", "tab", "normal"),
  weekStartDay = NULL,
  language = NULL
)
```

### Arguments

grid	A table created with <a href="#">datagrid()</a> .
column	Column for which to activate the date picker.
format	Date format, default is "yyyy-MM-dd".
type	Type of selection: date, month or year.
timepicker	Add a timepicker.
weekStartDay	Start of the week : 'Sun' (default), 'Mon', ..., 'Sat'
language	Either "en" or "ko" the builtin language, or "custom" to use texts defined in <code>datagrid(datepicker_locale = list(...))</code> , see example.

### Value

A `datagrid` `htmlwidget`.

### See Also

[grid\\_editor](#) for normal inputs.

**Examples**

```

library(toastui)

dat <- data.frame(
  date = Sys.Date() + 1:10,
  date_locale = format(Sys.Date() + 1:10, format = "%d/%m/%Y"),
  month = format(Sys.Date() + 1:10, format = "%Y-%m"),
  year = format(Sys.Date() + 1:10, format = "%Y"),
  time1 = Sys.time() + 1:10,
  time2 = Sys.time() + 1:10
)

datagrid(
  data = dat,
  datepicker_locale = list(
    titles = list(
      DD = c(
        "Dimanche", "Lundi", "Mardi",
        "Mercredi", "Jeudi", "Vendredi", "Samedi"
      ),
      D = c("Dim", "Lun", "Mar", "Mer", "Jeu", "Ven", "Sam"),
      MMMM = c(
        "Janvier", "F\u00e9vrier", "Mars",
        "Avril", "Mai", "Juin", "Juillet",
        "Ao\u00fbt", "Septembre", "Octobre",
        "Novembre", "D\u00e9cembre"
      ),
      MMM = c(
        "Jan", "F\u00e9v", "Mar", "Avr",
        "Mai", "Juin", "Juil", "Aou",
        "Sept", "Oct", "Nov", "D\u00e9c"
      )
    ),
    titleFormat = "MMMM yyyy",
    todayFormat = "DD dd MMMM yyyy",
    date = "Date",
    time = "Heure"
  )
)%>%
grid_editor_date(
  column = "date"
)%>%
grid_editor_date(
  column = "date_locale",
  format = "dd/MM/yyyy",
  language = "custom",
  weekStartDay = "Mon"
)%>%
grid_editor_date(
  column = "month",
  type = "month",

```

```

        format = "yyyy-MM"
    ) %>%
    grid_editor_date(
      column = "year",
      type = "year",
      format = "yyyy"
    ) %>%
    grid_editor_date(
      column = "time1",
      timepicker = "tab",
      format = "yyyy-MM-dd HH:mm"
    ) %>%
    grid_editor_date(
      column = "time2",
      timepicker = "normal",
      format = "yyyy-MM-dd HH:mm"
    )

```

---

 grid\_filters

*Set filters options*


---

## Description

Set filters options

## Usage

```

grid_filters(
  grid,
  columns,
  showApplyBtn = NULL,
  showClearBtn = NULL,
  operator = NULL,
  format = "yyyy-MM-dd",
  type = "auto"
)

```

## Arguments

grid	A table created with <a href="#">datagrid()</a> .
columns	Name(s) of column in the data used in <a href="#">datagrid()</a> .
showApplyBtn	Apply filters only when button is pressed.
showClearBtn	Reset the filter that has already been applied.
operator	Multi-option filter, the operator used against multiple rules : "OR" or "AND".
format	Date format.
type	Type of filter : "auto", "text", "number", "date" or "select".

**Value**

A datagrid htmlwidget.

**Examples**

```
library(toastui)

data <- data.frame(
  number = 1:12,
  month.abb = month.abb,
  month.name = month.name,
  date = Sys.Date() + 0:11,
  stringsAsFactors = FALSE
)

datagrid(data) %>%
  grid_filters(
    columns = "month.abb",
    showApplyBtn = TRUE,
    showClearBtn = TRUE,
    type = "text"
  ) %>%
  grid_filters(
    columns = "month.name",
    type = "select"
  ) %>%
  grid_filters(columns = "date") %>%
  grid_filters(columns = "number")

# Filter all variables
datagrid(rolling_stones_500) %>%
  grid_filters(columns = names(rolling_stones_500))
# or
datagrid(rolling_stones_500, filters = TRUE)
```

---

grid\_format

*Format column content*

---

**Description**

Format column content

**Usage**

```
grid_format(grid, column, formatter)
```

**Arguments**

grid	A table created with <code>datagrid()</code> .
column	Name of the column to format.
formatter	Either an R function or a JavaScript function wrapped in <code>JS()</code> .

**Value**

A datagrid htmlwidget.

**Examples**

```
library(toastui)
library(scales)

# Create some data
data <- data.frame(
  col_num = rnorm(12),
  col_currency = sample(1:1e6, 12, TRUE),
  col_percentage = sample(1:100, 12, TRUE) / 100,
  col_date = sample(Sys.Date() + 0:364, 12),
  col_time = Sys.time() + sample.int(86400 * 365, 12),
  col_logical = sample(c(TRUE, FALSE), 12, TRUE),
  stringsAsFactors = FALSE
)

# Use R functions
datagrid(data, colwidths = "fit") %>%
  grid_format(
    "col_percentage", label_percent(accuracy = 1)
  ) %>%
  grid_format(
    "col_currency", label_dollar(prefix = "$", big.mark = ",")
  ) %>%
  grid_format(
    "col_num", label_number(accuracy = 0.01)
  ) %>%
  grid_format(
    "col_date", label_date(format = "%d/%m/%Y")
  ) %>%
  grid_format(
    "col_time", label_date(format = "%d/%m/%Y %H:%M")
  ) %>%
  grid_format(
    "col_logical", function(value) {
      lapply(
        X = value,
        FUN = function(x) {
          if (x)
            shiny::icon("check")
          else

```

```

      shiny::icon("times")
    }
  )
}
)

# Use a JavaScript function
datagrid(data) %>%
  grid_format(
    column = "col_percentage",
    formatter = JS("function(obj) {return (obj.value*100).toFixed(0) + '%';}")
  )

```

---

grid\_proxy\_add\_row     *Add rows to an existent datagrid*

---

## Description

Add rows to an existent datagrid

## Usage

```
grid_proxy_add_row(proxy, data)
```

## Arguments

proxy            A [datagrid\\_proxy\(\)](#) or outputId of the grid.  
 data            data.frame to append in the grid.

## Value

A datagrid\_proxy object.

## See Also

Other datagrid proxy methods: [datagrid\\_proxy\(\)](#), [grid\\_proxy\\_delete\\_row\(\)](#)

## Examples

```

library(shiny)
library(toastui)

ui <- fluidPage(
  tags$h2("Append row to grid"),
  datagridOutput("grid"),

```

```

    actionButton(
      inputId = "add",
      label = "Add row",
      class = "btn-block"
    )
  )
)

server <- function(input, output, session) {

  dat <- data.frame(
    character = month.name,
    select = month.name,
    checkbox = month.abb,
    radio = month.name,
    password = month.name
  )

  output$grid <- renderDatagrid({
    datagrid(rolling_stones_50[1, ])
  })

  value <- reactiveVal(1)
  observeEvent(input$add, {
    row <- value() + 1
    grid_proxy_add_row(
      proxy = "grid",
      data = rolling_stones_50[row, ]
    )
    value(row)
  })
}

if (interactive())
  shinyApp(ui, server)

```

---

grid\_proxy\_delete\_row *Delete row in an existent grid*

---

### Description

Delete row in an existent grid

### Usage

```
grid_proxy_delete_row(proxy, rowKey)
```

### Arguments

proxy	A <a href="#">datagrid_proxy()</a> or outputId of the grid.
rowKey	Row key of the row to delete, you can find the rowKey value in input\$<outputId>_data.

**Value**

A datagrid\_proxy object.

**See Also**

Other datagrid proxy methods: [datagrid\\_proxy\(\)](#), [grid\\_proxy\\_add\\_row\(\)](#)

**Examples**

```
library(toastui)
library(shiny)

ui <- fluidPage(
  tags$h2("Delete row in grid via proxy"),
  fluidRow(
    column(
      width = 6,
      datagridOutput("grid"),
      verbatimTextOutput("clicks")
    ),
    column(
      width = 6,
      verbatimTextOutput("output_data")
    )
  )
)

server <- function(input, output, session) {

  dat <- data.frame(
    index = 1:26,
    letter = sample(letters),
    remove = 1:26
  )

  output$grid <- renderDatagrid({
    datagrid(dat, data_as_input = TRUE) %>%
      grid_columns("remove", width = 120) %>%
      grid_col_button(
        column = "remove",
        inputId = "remove_row",
        label = "Remove",
        icon = icon("trash"),
        status = "danger",
        btn_width = "115px",
        align = "left"
      )
  })

  output$clicks <- renderPrint({
    cat(
      "Removed: ", input$remove_row,
```

```

      "\n"
    )
  })

  observeEvent(input$remove_row, {
    data <- input$grid_data
    rowKey <- data$rowKey[data$remove == input$remove_row]
    grid_proxy_delete_row("grid", rowKey)
  })

  output$output_data <- renderPrint({
    input$grid_data
  })
}

if (interactive())
  shinyApp(ui, server)

```

---

grid_row_merge	<i>Merge rows</i>
----------------	-------------------

---

### Description

Merge rows

### Usage

```
grid_row_merge(grid, columns)
```

### Arguments

grid	A grid created with <code>datagrid()</code> .
columns	column(s) in which merge consecutive rows.

### Value

A `datagrid` `htmlwidget`.

### Examples

```

library(toastui)

datagrid(mtcars[order(mtcars$cyl), 1:5]) %>%
  grid_row_merge(columns = "cyl")

datagrid(mtcars[, 1:8]) %>%
  grid_row_merge(columns = "cyl") %>%
  grid_row_merge(columns = "vs")

```

---

grid\_selection\_cell    *Cell selection (in shiny)*

---

### Description

Cell selection (in shiny)

### Usage

```
grid_selection_cell(grid, inputId, selectionUnit = c("cell", "row"))
```

### Arguments

`grid`                    A table created with `datagrid()`.  
`inputId`                The input slot that will be used to access the value.  
`selectionUnit`        The unit of selection on grid.

### Value

A datagrid htmlwidget.

### Examples

```
if (interactive()) {  
  library(shiny)  
  library(toastui)  
  
  ui <- fluidPage(  
    tags$h2("datagrid cell selection"),  
    datagridOutput("grid_1"),  
    verbatimTextOutput("result_1"),  
    datagridOutput("grid_2"),  
    verbatimTextOutput("result_2")  
  )  
  
  server <- function(input, output, session) {  
  
    df <- data.frame(  
      index = 1:12,  
      month = month.name,  
      letters = letters[1:12]  
    )  
  
    output$grid_1 <- renderDatagrid({  
      datagrid(df) %>%
```

```

        grid_selection_cell(
          inputId = "cells"
        )
      })
    output$result_1 <- renderPrint({
      input$cells
    })

    output$grid_2 <- renderDatagrid({
      datagrid(df) %>%
        grid_selection_cell(
          inputId = "rows",
          selectionUnit = "row"
        )
      })
    output$result_2 <- renderPrint({
      input$rows
    })
  }

  shinyApp(ui, server)
}

```

---

grid\_selection\_row      *Row selection (in shiny)*

---

### Description

Row selection (in shiny)

### Usage

```

grid_selection_row(
  grid,
  inputId,
  type = c("checkbox", "radio"),
  return = c("data", "index"),
  width = NULL
)

```

### Arguments

grid	A table created with <code>datagrid()</code> .
inputId	The input slot that will be used to access the value.
type	Type of selection: "checkbox" (multiple rows) or "radio" (unique row).
return	Value that will be accessible via input : a data.frame with selected row(s) or just the index of selected row(s).
width	Width of the column.

**Value**

A datagrid htmlwidget.

**Examples**

```
library(shiny)
library(toastui)

ui <- fluidPage(
  tags$h2("datagrid row selection"),
  fluidRow(
    column(
      width = 6,
      datagridOutput("grid_checkbox"),
      verbatimTextOutput("res_checkbox")
    ),
    column(
      width = 6,
      datagridOutput("grid_radio"),
      verbatimTextOutput("res_radio")
    )
  )
)

server <- function(input, output, session) {

  df <- data.frame(
    index = 1:12,
    month = month.name,
    letters = letters[1:12]
  )

  output$grid_checkbox <- renderDatagrid({
    datagrid(df) %>%
      grid_selection_row(
        inputId = "sel_check",
        type = "checkbox"
      )
  })

  output$res_checkbox <- renderPrint({
    input$sel_check
  })

  output$grid_radio <- renderDatagrid({
    datagrid(df) %>%
      grid_selection_row(
        inputId = "sel_radio",
        type = "radio"
      )
  })
}
```

```

    output$res_radio <- renderPrint({
      input$sel_radio
    })
  }

  if (interactive())
    shinyApp(ui, server)

```

---

grid\_sparkline

*Render HTMLwidgets in Grid*


---

### Description

Create small charts in a column.

### Usage

```
grid_sparkline(grid, column, renderer, height = "40px", styles = NULL)
```

### Arguments

grid	A grid created with <code>datagrid()</code> .
column	Column data are stored and where to render widgets.
renderer	A function that will create an HTMLwidget.
height	Height of the row (applies to all table).
styles	A list of CSS parameters to apply to the cells where widgets are rendered.

### Value

A datagrid htmlwidget.

### Examples

```

library(toastui)
library(apexcharter)

# Create some fake data
spark <- data.frame(
  month = month.name,
  stringsAsFactors = FALSE
)
# Create a list-columns with data.frames
# from which to create charts
spark$data <- lapply(
  X = seq_len(12),
  FUN = function(x) {
    data.frame(x = 1:10, y = sample(1:30, 10, TRUE))
  }
)

```

```

    }
  )

  # Create the grid
  datagrid(spark) %>%
    grid_columns(
      columns = "month", width = 150
    ) %>%
    grid_sparkline(
      column = "data",
      renderer = function(data) { # this function will render a chart
        apex(data, aes(x, y), type = "area") %>%
          ax_chart(sparkline = list(enabled = TRUE))
      }
    )

  # You can also use package highcharter for example
  # by using the following renderer:
  # renderer = function(data) {
  #   hchart(data, type = "area", hcaes(x, y)) %>%
  #     hc_add_theme(hc_theme_sparkline())
  # }

```

---

grid\_style\_column      *Set column style*

---

## Description

Apply styles to a column according to CSS properties declared by expression based on data passed to grid..

## Usage

```

grid_style_column(
  grid,
  column,
  background = NULL,
  color = NULL,
  fontWeight = NULL,
  ...
)

```

## Arguments

grid	A grid created with <code>datagrid()</code> .
column	Name of column (variable name) where to apply style.
background	Background color.
color	Text color.

fontWeight      Font weight, you can use "bold" for example.  
 ...              Other CSS properties.

### Value

A datagrid htmlwidget.

### Examples

```
library(toastui)
library(scales)

datagrid(mtcars) %>%
  grid_style_column(
    column = "mpg",
    background = col_numeric("Blues", domain = NULL)(mpg),
    fontWeight = "bold",
    color = ifelse(mpg > 25, "white", "black")
  )

datagrid(mtcars) %>%
  grid_style_column(
    column = "mpg",
    background = col_numeric("Blues", domain = NULL)(mpg),
    fontWeight = "bold",
    color = ifelse(mpg > 25, "white", "black")
  ) %>%
  grid_style_column(
    column = "cyl",
    background = col_bin("Blues", domain = NULL)(cyl),
    fontStyle = "italic"
  )
```

---

grid_style_row	<i>Set grid row style</i>
----------------	---------------------------

---

### Description

Apply styles to an entire row identified by an expression.

### Usage

```
grid_style_row(
  grid,
  expr,
  background = NULL,
  color = NULL,
  fontWeight = NULL,
  ...,
```

```

    class = NULL,
    cssProperties = NULL
  )

```

### Arguments

grid	A grid created with <code>datagrid()</code> .
expr	An expression giving position of row. Must return a logical vector.
background	Background color.
color	Text color.
fontWeight	Font weight, you can use "bold" for example.
...	Other CSS properties.
class	CSS class to apply to the row.
cssProperties	Alternative to specify CSS properties with a named list.

### Value

A `datagrid` htmlwidget.

### Examples

```

library(toastui)

datagrid(mtcars) %>%
  grid_style_row(
    mpg > 19,
    background = "#F781BE"
  )

datagrid(mtcars) %>%
  grid_style_row(
    vs == 0,
    background = "#E41A1C80",
    color = "#FFF"
  ) %>%
  grid_style_row(
    vs == 1,
    background = "#377EB880"
  )

# Use rlang to use character
library(rlang)
my_var <- "disp"
datagrid(mtcars) %>%
  grid_style_row(
    !!sym(my_var) > 180,
    background = "#F781BE"
  )

```

---

`grid_summary`*Add summary area to grid*

---

**Description**

Add summary area to grid

**Usage**

```
grid_summary(  
  grid,  
  columns,  
  stat = c("sum", "min", "max", "avg"),  
  digits = 0,  
  label = NULL,  
  sep = "<br>",  
  position = c("bottom", "top"),  
  height = 40,  
  js_function = NULL  
)
```

**Arguments**

<code>grid</code>	A table created with <code>datagrid()</code> .
<code>columns</code>	Name of column (variable name) for which to add a summary.
<code>stat</code>	Statistic to display: "sum", "min", "max" or "avg". Can be several values.
<code>digits</code>	Number of digits to display.
<code>label</code>	Label to display next to statistic.
<code>sep</code>	Separator between several statistics.
<code>position</code>	The position of the summary area: "bottom" or "top".
<code>height</code>	The height of the summary area.
<code>js_function</code>	JavaScript function to compute the statistic you want. Function should have one argument, it will be the values of the column. If used, <code>stat</code> , <code>digits</code> , <code>label</code> and <code>sep</code> will be ignored.

**Value**

A `datagrid` `htmlwidget`.

## Examples

```
library(toastui)

# Add a line with sum of column
datagrid(ps3_games[, c(1, 5, 6, 7, 8)], colwidths = "guess") %>%
  grid_summary(
    column = "NA_Sales",
    stat = "sum"
  )

# Do that for several columns
datagrid(ps3_games[, c(1, 5, 6, 7, 8)], colwidths = "guess") %>%
  grid_summary(
    column = c("NA_Sales", "EU_Sales", "JP_Sales", "Other_Sales"),
    stat = "sum",
    label = "Total: "
  )
```

---

guess\_colwidths\_options

*Options for guessing columns widths*

---

## Description

Options for guessing columns widths

## Usage

```
guess_colwidths_options(min_width = 70, max_width = 400, mul = 1, add = 0)
```

## Arguments

min_width	Minimal width.
max_width	Maximal width.
mul	Multiplicative constant.
add	Additive constant

## Value

a list of options to use in `datagrid()`.

## Examples

```
datagrid(rolling_stones_50, colwidths = "guess")
datagrid(
  rolling_stones_50,
  colwidths = "guess",
  guess_colwidths_opts= guess_colwidths_options(mul = 2)
)
```

---

met_paris	<i>Meteorological for Le Bourget Station</i>
-----------	--

---

**Description**

This dataset contains temperature and relative humidity for year 2020.

**Usage**

```
met_paris
```

**Format**

A data.frame with 12 rows and 3 variables:

**month** Month of the year

**temp** List column containing data.frame with 2 column "date and"temp"

**rh** List column containing data.frame with 2 column "date and"rh"

**Source**

Data collected with package stationaRy from NOAA

---

navigation_options	<i>Options for buttons displayed above calendar</i>
--------------------	---

---

**Description**

Options for buttons displayed above calendar

**Usage**

```
navigation_options(  
  today_label = "Today",  
  prev_label = ph("caret-left"),  
  next_label = ph("caret-right"),  
  class = "btn-bordered btn-sm btn-primary",  
  bg = NULL,  
  color = NULL,  
  fmt_date = "YYYY-MM-DD",  
  sep_date = " ~ "  
)
```

**Arguments**

today_label	Text to display on today button.
prev_label	Text to display on prev button.
next_label	Text to display on next button.
class	Class to add to buttons.
bg, color	Background and text colors.
fmt_date	Format for the date displayed next to the buttons, use dayjs library (see <a href="https://day.js.org/docs/en/display/format">https://day.js.org/docs/en/display/format</a> )
sep_date	Separator to use between start date and end date.

**Value**

a list.

**Note**

Buttons are generated with the following CSS library : <http://btn.surge.sh/>, where you can find available options for class argument.

**Examples**

```
# Use another button style
calendar(
  navigation = TRUE,
  navOpts = navigation_options(
    class = "btn-stretch btn-sm btn-warning"
  )
)

# Custom colors (background and text)
calendar(
  navigation = TRUE,
  navOpts = navigation_options(bg = "#FE2E2E", color = "#FFF")
)

# both
calendar(
  navigation = TRUE,
  navOpts = navigation_options(
    bg = "#04B431", color = "#FFF",
    class = "btn-float btn-md"
  )
)

# Change date format and separator
calendar(
  navigation = TRUE,
  navOpts = navigation_options(
    fmt_date = "DD/MM/YYYY",
```

```
        sep_date = " - "  
    )  
)
```

---

ps3\_games

*Top 20 PS3 games*

---

### Description

This dataset contains 20 PS3 video games with sales.

### Usage

ps3\_games

### Format

A data.frame with 20 rows and 8 variables:

**Name** Name of the game

**Year** Year of the game's release

**Genre** Genre of the game

**Publisher** Publisher of the game

**NA\_Sales** Sales in North America (in millions)

**EU\_Sales** Sales in Europe (in millions)

**JP\_Sales** Sales in Japan (in millions)

**Other\_Sales** Sales in the rest of the world (in millions)

### Source

GregorySmith on Kaggle (<https://www.kaggle.com/datasets/gregorut/videogamesales/>)

---

rolling\_stones\_50

*Rolling Stone's 50 Greatest Albums of All Time*

---

### Description

Data about Rolling Stone magazine's (2012) top 50 albums of all time list.

### Usage

rolling\_stones\_50

**Format**

A data.frame with 50 rows and 6 variables:

**Number** Position on the list

**Year** Year of release

**Album** Album name

**Artist** Artist name

**Genre** Genre name

**Subgenre** Subgenre name

**Source**

Gibs on Kaggle (<https://www.kaggle.com/datasets/notgibs/500-greatest-albums-of-all-time-rolling-stone/>)

---

rolling\_stones\_500      *Rolling Stone's 500 Greatest Albums of All Time*

---

**Description**

Data about Rolling Stone magazine's (2012) top 500 albums of all time list.

**Usage**

rolling\_stones\_500

**Format**

A data.frame with 500 rows and 6 variables:

**Number** Position on the list

**Year** Year of release

**Album** Album name

**Artist** Artist name

**Genre** Genre name

**Subgenre** Subgenre name

**Source**

Gibs on Kaggle (<https://www.kaggle.com/datasets/notgibs/500-greatest-albums-of-all-time-rolling-stone/>)

---

schedules\_properties *Schedules properties*

---

### Description

This dataset contains properties that can be use to create schedules in `calendar()`.

### Usage

```
schedules_properties
```

### Format

A data.frame with 26 rows and 3 variables:

**Name** Name of property

**Type** Type

**Description** Description

### Source

Toast UI documentation (<https://nhn.github.io/tui.calendar/latest/EventObject/>)

---

set\_grid\_lang *Set grid language options*

---

### Description

Set grid language options

### Usage

```
set_grid_lang(  
  display.noData = "No data",  
  display.loadingData = "Loading data...",  
  display.resizeHandleGuide = "You can change the width... [truncated]",  
  filter.contains = "Contains",  
  filter.eq = "Equals",  
  filter.ne = "Not equals",  
  filter.start = "Starts with",  
  filter.end = "Ends with",  
  filter.after = "After",  
  filter.afterEq = "After or Equal",  
  filter.before = "Before",  
  filter.beforeEq = "Before or Equal",
```

```

    filter.apply = "Apply",
    filter.clear = "Clear",
    filter.selectAll = "Select All"
)

```

### Arguments

display.noData, display.loadingData, display.resizeHandleGuide

Display language options.

filter.contains, filter.eq, filter.ne, filter.start, filter.end,  
 filter.after, filter.afterEq, filter.before, filter.beforeEq,  
 filter.apply, filter.clear, filter.selectAll

Filter language options.

### Value

No return value.

### Examples

```

library(toastui)

# Change text displayed when no data in grid
set_grid_lang(display.noData = "Pas de donn\u00e9es")
datagrid(data.frame())

# change text for filters
set_grid_lang(
  # Text
  filter.contains = "Contient",
  filter.eq = "Egal \u00e0",
  filter.ne = "Diff\u00e9rent de",
  filter.start = "Commence par",
  filter.end = "Fini par",
  # Date
  filter.after = "Apr\u00e8s",
  filter.afterEq = "Apr\u00e8s ou \u00e9gal \u00e0",
  filter.before = "Avant",
  filter.beforeEq = "Avant ou \u00e9gal \u00e0",
  # Buttons
  filter.apply = "Appliquer",
  filter.clear = "Supprimer",
  # Select
  filter.selectAll = "Tout s\u00e9lectionner"
)

datagrid(rolling_stones_50) %>%
  grid_filters(
    columns = "Artist",
    type = "text",
    showApplyBtn = TRUE,
    showClearBtn = TRUE
  )

```

```

) %>%
  grid_filters(
    columns = "Genre",
    type = "select"
  ) %>%
  grid_filters(
    columns = "Year",
    type = "date"
  )

```

---

toastui	<i>HTMLwidget interface to the <a href="https://ui.toast.com/TOASTUI">Rhrefhttps://ui.toast.com/TOASTUI</a> javascript libraries.</i>
---------	---

---

## Description

Create interactive tables, calendars and charts with one package.

## Tables

Interactive and editable tables with [tui-grid](#), see [datagrid\(\)](#).

## Calendars

Interactive and editable calendars with [tui-calendar](#), see [calendar](#).

## Charts

Interactive charts with [tui-chart](#), see [chart](#).

## Author(s)

Victor Perrier (@dreamRs\_fr)

## See Also

Useful links:

- <https://dreamrs.github.io/toastui/>
- Report bugs at <https://github.com/dreamRs/toastui/issues>

---

toastui-exports	<i>toastui exported operators and S3 methods</i>
-----------------	--

---

## Description

The following functions are imported and then re-exported from the toastui package to avoid listing the magrittr as Depends of toastui

---

validateOpts	<i>Validation options</i>
--------------	---------------------------

---

### Description

Validate columns' content with rules, useful when content is editable.

### Usage

```
validateOpts(
  required = NULL,
  type = NULL,
  min = NULL,
  max = NULL,
  regExp = NULL,
  unique = NULL,
  jsfun = NULL
)
```

### Arguments

required	If set to TRUE, the data of the column will be checked to be not empty.
type	Type of data, can be "string" or "number".
min	For numeric values, the minimum acceptable value.
max	For numeric values, the maximum acceptable value.
regExp	A regular expression to validate content.
unique	If set to TRUE, check the uniqueness on the data of the column.
jsfun	A JS function to validate content.

### Value

A datagrid htmlwidget.  
a list of options to use in [grid\\_editor\(\)](#).

### Examples

```
library(shiny)

ui <- fluidPage(
  tags$h2("Validation rules"),
  datagridOutput("grid"),
  verbatimTextOutput("validation")
)

server <- function(input, output, session) {
```

```
output$grid <- renderDatagrid({
  validate <- data.frame(
    col_text = c("a", "b", "a", NA, "c"),
    col_number = sample(1:10, 5),
    col_mail = c("victor@mail.com", "victor", NA, "victor@mail", "victor.fr")
  )

  datagrid(validate) %>%
    grid_editor(
      "col_text", type = "text",
      validation = validateOpts(required = TRUE, unique = TRUE)
    ) %>%
    grid_editor(
      "col_number", type = "number",
      validation = validateOpts(min = 0, max = 5)
    ) %>%
    grid_editor(
      "col_mail", type = "text",
      validation = validateOpts(
        regExp = "^[a-zA-Z0-9_\\-\\.]+@[a-zA-Z0-9_\\-\\.]+\\.([a-zA-Z]{2,5})$"
      )
    )
  })

output$validation <- renderPrint({
  input$grid_validation
})

}

if (interactive())
  shinyApp(ui, server)
```

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