

# Package ‘sunburstShinyWidget’

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**Type** Package

**Title** Sunburst 'HTML' Widget Based on 'd3.js'

**Version** 0.5.0

**Description** Provides a sunburst plot based on the 'd3.js' library as an HTML 'shiny' widget.

**License** MIT + file LICENSE

**Encoding** UTF-8

**Depends** shiny

**Imports** htmlwidgets, tidyr, bslib, glue, DT, tibble, dplyr, purrr, scales, waiter

**Suggests** jsonlite, testthat (>= 3.0.0), covr, mockery, knitr, rmarkdown

**VignetteBuilder** knitr

**Config/testthat/edition** 3

**RoxygenNote** 7.3.3

**NeedsCompilation** no

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**Repository** CRAN

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`add_remain_and_diff_cols`*Add Remain and Diff Columns to a Data Frame*

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**Description**

Add Remain and Diff Columns to a Data Frame

**Usage**

```
add_remain_and_diff_cols(btns_df, totalPathways)
```

**Arguments**

`btns_df` A data frame with a Remain column of numeric counts.  
`totalPathways` A numeric value for the total number of pathways.

**Value**

A data frame with formatted Remain and Diff columns.

---

`callJS`*callJS*

---

**Description**

See: <https://deanattali.com/blog/htmlwidgets-tips/>

**Usage**

```
callJS()
```

**Value**

`id`

---

customActionButton      *Create a Colored Action Button*

---

**Description**

Create a Colored Action Button

**Usage**

```
customActionButton(inputId, label, color, font_size = "10px")
```

**Arguments**

inputId	The input slot for the button.
label	The button label.
color	A CSS color string for the button background.
font_size	A CSS font size string.

**Value**

A shiny::actionButton with custom styling.

---

getPathwayGroupDatatable  
*Get Pathway Group Data Table*

---

**Description**

Sends a custom message to the sunburst widget to retrieve pathway group data.

**Usage**

```
getPathwayGroupDatatable(id, pathwayAnalysisDTO, pathLength)
```

**Arguments**

id	The namespaced widget output ID.
pathwayAnalysisDTO	A list containing the pathway analysis data.
pathLength	An integer specifying the pathway length.

**Value**

The widget element ID (invisibly).

---

`match_color`*Match Event Names to Colors*

---

**Description**

Match Event Names to Colors

**Usage**

```
match_color(x, eventCodes)
```

**Arguments**

`x` A character string of comma-separated event names.  
`eventCodes` A data frame with name and color columns.

**Value**

A character string of HTML action buttons.

---

`run_app`*Run the Sunburst Demo App*

---

**Description**

Launches an example Shiny application that demonstrates the sunburst widget.

**Usage**

```
run_app(...)
```

**Arguments**

`...` Additional arguments passed to [runApp](#).

**Value**

This function does not return; it runs the Shiny app.

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sunburstShinyWidget    *Create a Sunburst Shiny Widget*

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### Description

Creates an interactive sunburst plot as an HTML widget.

### Usage

```
sunburstShinyWidget(  
  data,  
  design,  
  width = NULL,  
  height = NULL,  
  elementId = NULL  
)
```

### Arguments

data	A list containing the chart data.
design	A list containing the design configuration.
width	Widget width (a valid CSS unit or a number).
height	Widget height (a valid CSS unit or a number).
elementId	An optional element ID for the widget.

### Value

An htmlwidget object.

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sunburstShinyWidget-shiny  
*Shiny bindings for sunburstShinyWidget*

---

### Description

Output and render functions for using sunburstShinyWidget within Shiny applications and interactive Rmd documents.

### Usage

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

**Arguments**

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

**Value**

sunburstShinyWidgetOutput returns a shiny.tag.list object containing the HTML output container for the sunburst widget.

renderSunburstShinyWidget returns a shiny.render.function that evaluates the given expression to produce a sunburst widget for the corresponding output element.

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sunburstUI	<i>Sunburst Shiny Module UI</i>
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**Description**

Sunburst Shiny Module UI  
Sunburst Shiny Module Server

**Usage**

```
sunburstUI(id)

sunburstServer(
  id,
  chartData,
  design,
  btn_font_size = "14px",
  show_colors_in_table = FALSE,
  steps_table_export_name = reactive(NULL),
  n_steps = reactive(5L)
)
```

**Arguments**

id	A character string for the module namespace.
chartData	A list containing chart data including event codes and cohort pathways.
design	A list containing design configuration for the sunburst plot.
btn_font_size	A character string for action button font size.

<code>show_colors_in_table</code>	Logical; if TRUE, show colored buttons in the steps table.
<code>steps_table_export_name</code>	A reactive returning a custom export filename, or NULL for the default.
<code>n_steps</code>	A reactive returning the number of pathway steps to display.

**Value**

A `tagList` containing the sunburst UI elements.

A Shiny module server function.

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