Package 'ggcustomalluvial'

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Title What the Package Does (One Line, Title Case)

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Description What the package does (one paragraph).

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Encoding UTF-8

Roxygen list(markdown = TRUE)

RoxygenNote 7.3.2

Imports tidyverse, testthat, bezier

Contents

`create_strata_data` *Create Strata Data*

Description

This function generates a simple data frame for strata, useful for testing or quick visualization.

Usage

```
create_strata_data(n_axes, grouping_levels)
```

Arguments

grouping_levels	A vector of values for the grouping variable.
n_strata	The number of strata to create.
group_var	The variable to use for grouping the strata.

Value

A data frame with strata positions and grouping variable.

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generate_alluvium_polygons

Generate Polygon Data for Curved Alluvium Ribbons (Cubic Bézier Curves)

Description

Generate Polygon Data for Curved Alluvium Ribbons (Cubic Bézier Curves)

Usage

```
generate_alluvium_polygons(
  flow_data,
  strata_positions,
  curve_range = 0.1,
  n = 50
)
```

Arguments

flow_data	Data frame with columns: OmicLayer_from, stratum_from, OmicLayer_to, stratum_to, size, Drug
strata_positions	Data frame with strata layout info: Layer, group, xmin, xmax, ymin, ymax
curve_range	Numeric scalar controlling vertical curve offset (default 0.1)
n	Number of interpolation points per edge (default 50)

Value

Data frame suitable for geom_polygon(), with columns x, y, group, fill

layout_strata_positions

Layout Strata Positions with User-Defined Order

Description

This function computes the positions for strata based on a user-provided order.

Usage

```
layout_strata_positions(data, strata_order)
```

Arguments

data	A data frame containing the strata data with 'Layer' and 'group' columns.
strata_order	A named list where names are omics layers and values are character vectors specifying the desired order of strata within each layer.

Value

A data frame with the computed strata positions (xmin, xmax, ymin, ymax, Layer_Pos).

normalize_alluvium_sizes

Normalize a Vector to Proportions

Description

This function normalizes a numeric vector so that its values sum to 1. It is designed to be used inside dplyr::mutate() or similar workflows.

Usage

```
normalize_alluvium_sizes(x)
```

Arguments

x	A numeric vector to normalize.

Value

A numeric vector where all non-NA values sum to 1.

Examples

```
library(dplyr)
df <- tibble(group = c("A", "B", "C"), size = c(3, 6, 1))
```

plot_alluvial_from_data *Plot Alluvial Diagram from Data with User-Defined Strata Order*

Description

This function takes flow data and orders for omics layers and strata to generate an alluvial plot.

Usage

```
plot_alluvial_from_data(
  input_data,
  omics_order,
  strata_order = NULL,
  title = NULL
)
```

Arguments

input_data	A data frame containing flow information.
omics_order	A character vector specifying the order of omics layers.
strata_order	A named list where names are omics layers and values are character vectors specifying the desired order of strata within each layer.

Value

A ggplot object representing the alluvial plot.

plot_flow_paths *Plot Flow Paths*

Description

This function plots the flow paths with the given data, mapping the flow size to the width of the paths.

Usage

```
plot_flow_paths(
  data,
  x_col = "start_x",
  y_col = "flow_y_center",
  width_col = "flow_width"
)
```

Arguments

`data`	A data frame with flow path and visualization data.
`x_col`	The column containing x-axis positions (start and end).
`y_col`	The column containing y-axis positions (start and end).
`width_col`	The column representing flow width (normalized size).

Value

A ggplot object with the flow visualization.

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