

# Package ‘upsetjs’

October 12, 2022

**Type** Package

**Title** 'HTMLWidget' Wrapper of 'UpSet.js' for Exploring Large Set Intersections

**Description** 'UpSet.js' is a re-implementation of 'UpSetR' to create interactive set visualizations for more than three sets. This is a 'htmlwidget' wrapper around the 'JavaScript' library 'UpSet.js'.

**Version** 1.11.1

**Date** 2022-07-13

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**URL** [https://github.com/upsetjs/upsetjs\\_r/](https://github.com/upsetjs/upsetjs_r/)

**BugReports** [https://github.com/upsetjs/upsetjs\\_r/issues](https://github.com/upsetjs/upsetjs_r/issues)

**Depends** R (>= 3.2.0)

**License** AGPL-3 | file LICENSE

**Encoding** UTF-8

**Imports** htmlwidgets, magrittr

**Suggests** knitr, crosstalk, rmarkdown, formatR, tibble, testthat, styler, lintr, pkgdown

**LazyData** true

**RoxygenNote** 7.2.0

**VignetteBuilder** knitr

**Language** en-US

**KeepSource** true

**NeedsCompilation** no

**Repository** CRAN

**Date/Publication** 2022-07-13 06:00:08 UTC

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---

addCategoricalAttribute  
*adds a new query to the plot*

---

**Description**

adds a new query to the plot

**Usage**

```
addCategoricalAttribute(upsetjs, name, values, categories = NULL)
```

**Arguments**

upsetjs	an object of class upsetjs or upsetjs_proxy
name	name of the attribute
values	the values as a factor
categories	optional categories otherwise the levels are used

**Value**

the object given as first argument

**Examples**

```
upsetjs() %>%  
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%  
  addCategoricalAttribute("attr", as.factor(sample(c("male", "female"), 3, replace = TRUE)))
```

---

addNumericAttribute *adds a new numeric attribute to the plot*

---

**Description**

adds a new numeric attribute to the plot

**Usage**

```
addNumericAttribute(upsetjs, name, values, min_value = NULL, max_value = NULL)
```

**Arguments**

upsetjs	an object of class upsetjs or upsetjs_proxy
name	name of the attribute
values	the values as a numeric vector
min_value	optional min domain value
max_value	optional max domain value

**Value**

the object given as first argument

**Examples**

```
upsetjs() %>%
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%
  addNumericAttribute("attr", runif(3))
```

---

addQuery	<i>adds a new query to the plot</i>
----------	-------------------------------------

---

**Description**

adds a new query to the plot

**Usage**

```
addQuery(upsetjs, name, color, elems = NULL, set = NULL)
```

**Arguments**

upsetjs	an object of class upsetjs or upsetjs_proxy
name	name of the query
color	color of the query
elems	the list of elems to highlight
set	the set name, similar to the selection

**Value**

the object given as first argument

**Examples**

```
upsetjs() %>%
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%
  addQuery(name = "Q1", color = "red", set = "b")
```

---

asCombination                    *creates a new UpSet set combination structure*

---

**Description**

creates a new UpSet set combination structure

**Usage**

```
asCombination(  
  name,  
  elems = c(),  
  type = "intersection",  
  sets = strsplit(name, "&"),  
  cardinality = length(elems),  
  color = NULL  
)
```

**Arguments**

name	name of the set combination
elems	the elements of the set combination
type	the set combination type (intersection,distinctIntersection,union,combination)
sets	the sets this combination is part of
cardinality	the cardinality of the set, default to length(elems)
color	the color of the set

**Value**

the set object

**Examples**

```
asCombination("a", c(1, 2, 3))
```

---

asSet                            *creates a new UpSet set structure*

---

**Description**

creates a new UpSet set structure

**Usage**

```
asSet(name, elems = c(), cardinality = length(elems), color = NULL)
```

**Arguments**

name	name of the set
elems	the elements of the set
cardinality	the cardinality of the set, default to length(elems)
color	the color of the set

**Value**

the set object

**Examples**

```
asSet("a", c(1, 2, 3))
```

---

chartFontSizes	<i>specify chart font sizes</i>
----------------	---------------------------------

---

**Description**

specify chart font sizes

**Usage**

```
chartFontSizes(  
  upsetjs,  
  font.family = NULL,  
  chart.label = NULL,  
  set.label = NULL,  
  axis.tick = NULL,  
  bar.label = NULL,  
  legend = NULL,  
  title = NULL,  
  description = NULL,  
  export.label = NULL,  
  value.label = NULL  
)
```

**Arguments**

upsetjs	an object of class upsetjs or upsetjs_proxy
font.family	specify the font family to render
chart.label	font size of the chart label, default: 16px
set.label	font size of the set label, default: 10px
axis.tick	font size of the axis tick, default: 16px
bar.label	font size of the bar label, default: 10px

legend	font size of the legend label, default: 10px
title	font size of the chart title, default: 24px
description	font size of the chart description, default: 16px
export.label	font size of the export label, default: 10px
value.label	font size of the value label, (venn diagram only) default: 12px

**Value**

the object given as first argument

**Examples**

```
upsetjs() %>%
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%
  chartFontSizes(font.family = "serif")
```

---

chartKarnaughMapLabels

*specify chart labels*

---

**Description**

specify chart labels

**Usage**

```
chartKarnaughMapLabels(upsetjs, title = NULL, description = NULL)
```

**Arguments**

upsetjs	an object of class upsetjs_kamp or upsetjs_kmap_proxy
title	the chart title
description	the chart description

**Value**

the object given as first argument

**Examples**

```
upsetjsKarnaughMap() %>%
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%
  chartKarnaughMapLabels(title = "Test")
```

---

chartKarnaughMapLayout

*specify the chart karnaugh map layout*

---

### Description

specify the chart karnaugh map layout

### Usage

```
chartKarnaughMapLayout(
  upsetjs,
  padding = NULL,
  bar.padding = NULL,
  numerical.scale = NULL
)
```

### Arguments

upsetjs	an object of class upsetjs_kmap or upsetjs_kmap_proxy
padding	padding around the plot
bar.padding	padding ratio (default 0.1) for the bar charts
numerical.scale	numerical scale: linear (default) or log

### Value

the object given as first argument

### Examples

```
upsetjsKarnaughMap() %>%
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%
  chartKarnaughMapLayout(padding = 10)
```

---

chartLabels

*specify chart labels*

---

### Description

specify chart labels



**Usage**

```

chartLabels(
  upsetjs,
  title = NULL,
  description = NULL,
  combination.name = NULL,
  combination.name.axis.offset = NULL,
  set.name = NULL,
  set.name.axis.offset = NULL,
  bar.label.offset = NULL
)

```

**Arguments**

upsetjs	an object of class upsetjs or upsetjs_proxy
title	the chart title
description	the chart description
combination.name	the label for the combination chart
combination.name.axis.offset	the offset of the combination label from the axis in pixel
set.name	the label for the set chart
set.name.axis.offset	the offset of the set label from the axis in pixel
bar.label.offset	the offset of the bar label from the bar in pixel

**Value**

the object given as first argument

**Examples**

```

upsetjs() %>%
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%
  chartLabels(set.name = "Test")

```

---

chartLayout	<i>specify the chart layout</i>
-------------	---------------------------------

---

**Description**

specify the chart layout

**Usage**

```

chartLayout(
  upsetjs,
  height.ratios = NULL,
  width.ratios = NULL,
  padding = NULL,
  bar.padding = NULL,
  dot.padding = NULL,
  numerical.scale = NULL,
  band.scale = NULL,
  set.label.alignment = NULL,
  set.max.scale = NULL,
  combination.max.scale = NULL
)

```

**Arguments**

<code>upsetjs</code>	an object of class <code>upsetjs</code> or <code>upsetjs_proxy</code>
<code>height.ratios</code>	a vector of length 2 for the ratios between the combination and set plot, e.g. <code>c(0.6, 0.4)</code>
<code>width.ratios</code>	a vector of length 3 for the ratios between set, label, and combination plot, e.g. <code>c(0.3, 0.2, 0.5)</code>
<code>padding</code>	padding around the plot
<code>bar.padding</code>	padding ratio (default 0.1) for the bar charts
<code>dot.padding</code>	padding factor (default 0.7) for the dots
<code>numerical.scale</code>	numerical scale: linear (default) or log
<code>band.scale</code>	band scale: band (default)
<code>set.label.alignment</code>	set label alignment: left, center (default), right
<code>set.max.scale</code>	maximum value for the set scale
<code>combination.max.scale</code>	maximum value for the combination scale

**Value**

the object given as first argument

**Examples**

```

upsetjs() %>%
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%
  chartLayout(width.ratios = c(0.4, 0.2, 0.4))

```

---

chartProps	<i>generic set chart props</i>
------------	--------------------------------

---

**Description**

generic set chart props

**Usage**

```
chartProps(upsetjs, ...)
```

**Arguments**

upsetjs	an object of class upsetjs or upsetjs_proxy
...	all upsetjs properties in R name notation

**Value**

the object given as first argument

**Examples**

```
upsetjs() %>%
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%
  chartProps(theme = "dark")
```

---

chartStyleFlags	<i>specify chart flags</i>
-----------------	----------------------------

---

**Description**

specify chart flags

**Usage**

```
chartStyleFlags(upsetjs, id = NULL, export.buttons = NULL, class.name = NULL)
```

**Arguments**

upsetjs	an object of class upsetjs or upsetjs_proxy
id	the optional HTML ID
export.buttons	show export SVG and PNG buttons
class.name	extra CSS class name to the root element

**Value**

the object given as first argument

**Examples**

```
upsetjs() %>%
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%
  chartStyleFlags(id = "test")
```

---

chartTheme	<i>specify theming options</i>
------------	--------------------------------

---

**Description**

specify theming options

**Usage**

```
chartTheme(
  upsetjs,
  theme = NULL,
  selection.color = NULL,
  alternating.color = NULL,
  color = NULL,
  has.selection.color = NULL,
  text.color = NULL,
  hover.hint.color = NULL,
  not.member.color = NULL,
  value.text.color = NULL,
  stroke.color = NULL,
  has.selection.opacity = NULL,
  opacity = NULL,
  filled = NULL
)
```

**Arguments**

upsetjs	an object of class upsetjs or upsetjs_proxy
theme	theme to use 'dark' or 'light'
selection.color	selection color
alternating.color	alternating background color
color	main bar color
has.selection.color	main color used when a selection is present

text.color	main text color
hover.hint.color	color of the hover hint
not.member.color	color of the dot if not a member
value.text.color	value text color (venn diagram only)
stroke.color	circle stroke color (venn diagram and karnaugh map only)
has.selection.opacity	main opacity used when a selection is present
opacity	main bar opacity
filled	enforce filled circles (venn diagram only)

**Value**

the object given as first argument

**Examples**

```
upsetjs() %>%
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%
  chartTheme(theme = "dark")
```

---

chartVennLabels	<i>specify chart labels</i>
-----------------	-----------------------------

---

**Description**

specify chart labels

**Usage**

```
chartVennLabels(upsetjs, title = NULL, description = NULL)
```

**Arguments**

upsetjs	an object of class upsetjs_venn or upsetjs_venn_proxy
title	the chart title
description	the chart description

**Value**

the object given as first argument

**Examples**

```
upsetjsVennDiagram() %>%
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%
  chartVennLabels(title = "Test")
```

---

chartVennLayout	<i>specify the chart venn layout</i>
-----------------	--------------------------------------

---

**Description**

specify the chart venn layout

**Usage**

```
chartVennLayout(upsetjs, padding = NULL)
```

**Arguments**

upsetjs	an object of class <code>upsetjs_venn</code> or <code>upsetjs_venn_proxy</code>
padding	padding around the plot

**Value**

the object given as first argument

**Examples**

```
upsetjsVennDiagram() %>%
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%
  chartVennLayout(padding = 10)
```

---

clearAttributes	<i>clears the list of attributes for incremental updates</i>
-----------------	--

---

**Description**

clears the list of attributes for incremental updates

**Usage**

```
clearAttributes(upsetjs)
```

**Arguments**

upsetjs	an object of class <code>upsetjs</code> or <code>upsetjs_proxy</code>
---------	---

**Value**

the object given as first argument

**Examples**

```
upsetjs() %>%
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%
  clearAttributes()
```

---

clearQueries	<i>clears the list of queries for incremental updates</i>
--------------	---

---

**Description**

clears the list of queries for incremental updates

**Usage**

```
clearQueries(upsetjs)
```

**Arguments**

upsetjs            an object of class upsetjs or upsetjs\_proxy

**Value**

the object given as first argument

**Examples**

```
upsetjs() %>%
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%
  addQuery(name = "Q1", color = "red", set = "b") %>%
  clearQueries()
```

---

extractSetsFromDataFrame	<i>extract the sets from a data frame (rows = elems, columns = sets, cell = contained)</i>
--------------------------	--

---

**Description**

extract the sets from a data frame (rows = elems, columns = sets, cell = contained)

**Usage**

```
extractSetsFromDataFrame(
  df,
  attributes = NULL,
  order.by = "cardinality",
  limit = NULL,
  colors = NULL,
  store.elems = TRUE
)
```

**Arguments**

df	the data.frame like structure
attributes	the optional column list or data frame
order.by	order intersections by cardinality or degree
limit	limit the ordered sets to the given limit
colors	the optional list with set name to color
store.elems	store the elements in the sets (default TRUE)

---

fromDataFrame	<i>extract the sets from a data frame (rows = elems, columns = sets, cell = contained)</i>
---------------	--

---

**Description**

extract the sets from a data frame (rows = elems, columns = sets, cell = contained)

**Usage**

```
fromDataFrame(
  upsetjs,
  df,
  attributes = NULL,
  order.by = "cardinality",
  limit = NULL,
  shared = NULL,
  shared.mode = "click",
  colors = NULL,
  c_type = NULL,
  store.elems = TRUE
)
```



**Arguments**

upsetjs	an object of class upsetjs or upsetjs_proxy
df	the data.frame like structure
attributes	the optional column list or data frame
order.by	order intersections by cardinality or degree
limit	limit the ordered sets to the given limit
shared	a crosstalk shared data frame
shared.mode	whether on 'hover' or 'click' (default) is synced
colors	the optional list with set name to color
c_type	the combination type to use
store.elems	whether to store the set elements within the structures (set to false for big data frames)

**Value**

the object given as first argument

**Examples**

```
df <- as.data.frame(list(a = c(1, 1, 1), b = c(0, 1, 1)), row.names = c("a", "b", "c"))
upsetjs() %>% fromDataFrame(df)
```

---

fromExpression	<i>generates the sets from a lists object that contained the cardinalities of both sets and combinations (&amp;)</i>
----------------	--

---

**Description**

generates the sets from a lists object that contained the cardinalities of both sets and combinations (&)

**Usage**

```
fromExpression(
  upsetjs,
  value,
  symbol = "&",
  order.by = "cardinality",
  colors = NULL,
  type = "intersection"
)
```

**Arguments**

upsetjs	an object of class upsetjs or upsetjs_proxy
value	the expression list input
symbol	the symbol how to split list names to get the sets
order.by	order intersections by cardinality or name
colors	the optional list with set name to color
type	the type of intersections this data represents (intersection,union,distinctIntersection)

**Value**

the object given as first argument

**Examples**

```
upsetjs() %>% fromExpression(list(a = 3, b = 2, `a&b` = 2))
```

---

fromList	<i>generates the sets from a lists object</i>
----------	---

---

**Description**

generates the sets from a lists object

**Usage**

```
fromList(
  upsetjs,
  value,
  order.by = "cardinality",
  limit = NULL,
  shared = NULL,
  shared.mode = "click",
  colors = NULL,
  c_type = NULL
)
```

**Arguments**

upsetjs	an object of class upsetjs or upsetjs_proxy
value	the list input value
order.by	order intersections by cardinality or name
limit	limit the ordered sets to the given limit
shared	a crosstalk shared data frame
shared.mode	whether on 'hover' or 'click' (default) is synced
colors	the optional list with set name to color
c_type	the combination type to use or "none" for disabling initial generation

**Value**

the object given as first argument

**Examples**

```
upsetjs() %>% fromList(list(a = c(1, 2, 3), b = c(2, 3)))
```

---

```
generateDistinctIntersections
```

*configure the generation of the distinct intersections*

---

**Description**

configure the generation of the distinct intersections

**Usage**

```
generateDistinctIntersections(  
  upsetjs,  
  min = 0,  
  max = NULL,  
  empty = FALSE,  
  order.by = "cardinality",  
  limit = NULL,  
  colors = NULL  
)
```

**Arguments**

upsetjs	an object of class upsetjs or upsetjs_proxy
min	minimum number of sets in an intersection
max	maximum number of sets in an intersection
empty	whether to include empty intersections or not
order.by	order intersections by cardinality, degree, name or a combination of it
limit	limit the number of intersections to the top N
colors	the optional list with set name to color

**Value**

the object given as first argument

**Examples**

```
upsetjs() %>%  
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%  
  generateDistinctIntersections(min = 2)
```

---

generateIntersections *configure the generation of the intersections*

---

## Description

configure the generation of the intersections

## Usage

```
generateIntersections(  
  upsetjs,  
  min = 0,  
  max = NULL,  
  empty = FALSE,  
  order.by = "cardinality",  
  limit = NULL,  
  colors = NULL  
)
```

## Arguments

upsetjs	an object of class upsetjs or upsetjs_proxy
min	minimum number of sets in an intersection
max	maximum number of sets in an intersection
empty	whether to include empty intersections or not
order.by	order intersections by cardinality, degree, name or a combination of it
limit	limit the number of intersections to the top N
colors	the optional list with set name to color

## Value

the object given as first argument

## Examples

```
upsetjs() %>%  
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%  
  generateIntersections(min = 2)
```

---

generateUnions      *configure the generation of the unions*

---

## Description

configure the generation of the unions

## Usage

```
generateUnions(  
  upsetjs,  
  min = 0,  
  max = NULL,  
  empty = FALSE,  
  order.by = "cardinality",  
  limit = NULL,  
  colors = NULL  
)
```

## Arguments

upsetjs	an object of class upsetjs or upsetjs_proxy
min	minimum number of sets in an union
max	maximum number of sets in an union
empty	whether to include empty intersections or not
order.by	order intersections by cardinality, degree, name or a combination of it
limit	limit the number of intersections to the top N
colors	the optional list with set name to color

## Value

the object given as first argument

## Examples

```
upsetjs() %>%  
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%  
  generateUnions()
```

getCombinations      *extract the vector of combinations*

---

**Description**

extract the vector of combinations

**Usage**

```
getCombinations(upsetjs)
```

**Arguments**

upsetjs      an object of class upsetjs

**Value**

vector of sets

**Examples**

```
upsetjs() %>%  
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%  
  getCombinations()
```

---

getElements      *extract the vector of elements*

---

**Description**

extract the vector of elements

**Usage**

```
getElements(upsetjs)
```

**Arguments**

upsetjs      an object of class upsetjs or upsetjs\_proxy

**Value**

vector of elements

**Examples**

```
upsetjs() %>%  
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%  
  getElements()
```

---

getSets	<i>extract the vector of sets</i>
---------	-----------------------------------

---

**Description**

extract the vector of sets

**Usage**

```
getSets(upsetjs)
```

**Arguments**

upsetjs            an object of class upsetjs

**Value**

vector of sets

**Examples**

```
upsetjs() %>%
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%
  getSets()
```

---

got	<i>Games of Thrones Character dataset for UpSet.js</i>
-----	--

---

**Description**

A dataset containing set information about Game of Thrones characters

**Usage**

```
got
```

**Format**

A data frame with 22 rows and 6 variables/sets:

**Lannister** character part of the Lannister house

**Stark** character part of the Stark house

**female** character is female

**male** character is male

**royal** character is royal

**was.killed** character was killed

**Source**

<https://github.com/jeffreylancaster/game-of-thrones>

---

interactiveChart	<i>make it an interactive chart</i>
------------------	-------------------------------------

---

**Description**

make it an interactive chart

**Usage**

```
interactiveChart(upsetjs, value = TRUE, events_nonce = FALSE)
```

**Arguments**

upsetjs	an object of class upsetjs or upsetjs_proxy
value	whether to enable or disable or set the mode: hover, click, contextMenu
events_nonce	whether to enable send a unique once (event date) for each event to prevent deduplication

**Value**

the object given as first argument

**Examples**

```
upsetjs() %>%
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%
  interactiveChart()
```

---

queryLegend	<i>renders a legend for the queries</i>
-------------	---

---

**Description**

renders a legend for the queries

**Usage**

```
queryLegend(upsetjs, value = TRUE)
```

**Arguments**

upsetjs	an object of class upsetjs or upsetjs_proxy
value	whether to enable or disable



**Value**

the object given as first argument

**Examples**

```
upsetjs() %>%
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%
  addQuery(name = "Q1", color = "red", set = "b") %>%
  queryLegend(FALSE)
```

---

renderUpsetjs	<i>Shiny render bindings for upsetjs</i>
---------------	--

---

**Description**

Shiny render bindings for upsetjs

**Usage**

```
renderUpsetjs(expr, env = parent.frame(), quoted = FALSE)
```

**Arguments**

expr	An expression that generates an upset
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**

The output of shinyRenderWidget function

---

setAttributes	<i>set the attributes</i>
---------------	---------------------------

---

**Description**

set the attributes

**Usage**

```
setAttributes(upsetjs, attrs = list())
```

**Arguments**

upsetjs            an object of class upsetjs or upsetjs\_proxy  
 attrs             the attributes to set

**Value**

the object given as first argument

**Examples**

```
upsetjs() %>%
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%
  setAttributes(list(
    attr = runif(3),
    cat = as.factor(sample(c("male", "female"), 3, replace = TRUE))
  ))
```

---

setCombinations	<i>set the vector of combinations</i>
-----------------	---------------------------------------

---

**Description**

set the vector of combinations

**Usage**

```
setCombinations(upsetjs, value)
```

**Arguments**

upsetjs            an object of class upsetjs  
 value             the vector of combinations

**Value**

the object given as first argument

**Examples**

```
upsetjs() %>%
  setCombinations(list(asCombination("a", c(1, 2, 3)))) %>%
  getCombinations()
```

---

setElements	<i>set the vector of elements</i>
-------------	-----------------------------------

---

**Description**

set the vector of elements

**Usage**

```
setElements(upsetjs, value)
```

**Arguments**

upsetjs	an object of class upsetjs
value	the vector of elements

**Value**

the object given as first argument

**Examples**

```
upsetjs() %>%  
  setElements(c(1, 2, 3, 4, 5)) %>%  
  getElements()
```

---

setQueryes	<i>set the queries</i>
------------	------------------------

---

**Description**

set the queries

**Usage**

```
setQueryes(upsetjs, queries = list())
```

**Arguments**

upsetjs	an object of class upsetjs or upsetjs_proxy
queries	the queries to set

**Value**

the object given as first argument

**Examples**

```
upsetjs() %>%
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%
  setQueries(list(list(name = "Q1", color = "red", set = "b")))
```

---

setSelection	<i>sets the selection of the chart</i>
--------------	--

---

**Description**

sets the selection of the chart

**Usage**

```
setSelection(upsetjs, name = NULL)
```

**Arguments**

upsetjs	an object of class upsetjs or upsetjs_proxy
name	the name of the set to select or a list with name and type

**Value**

the object given as first argument

**Examples**

```
upsetjs() %>%
  fromList(list(a = c(1, 2, 3), b = c(2, 3))) %>%
  setSelection("b")
```

---

setSets	<i>set the vector of sets</i>
---------	-------------------------------

---

**Description**

set the vector of sets

**Usage**

```
setSets(upsetjs, value)
```

**Arguments**

upsetjs	an object of class upsetjs
value	the vector of sets

**Value**

the object given as first argument

**Examples**

```
upsetjs() %>%
  setCombinations(list(asSet("a", c(1, 2, 3)))) %>%
  getSets()
```

---

upsetjs	<i>Upset.js</i>
---------	-----------------

---

**Description**

upsetjs a htmlwidget wrapper around UpSet.js (<https://upset.js.org/>)

**Usage**

```
upsetjs(
  width = "100%",
  height = NULL,
  elementId = NULL,
  sizingPolicy = upsetjsSizingPolicy()
)
```

**Arguments**

width	width of the element
height	height of the element
elementId	unique element id
sizingPolicy	htmlwidgets sizing policy object. Defaults to <code>upsetjsSizingPolicy()</code>

**Value**

An object of class `upsetjs` and `htmlwidget`

**Examples**

```
upsetjs() %>% fromList(list(a = c(1, 2, 3), b = c(2, 3)))
```

---

upsetjsDash                    *create a new upsetjs dash adapter*

---

**Description**

create a new upsetjs dash adapter

**Usage**

```
upsetjsDash(children = NULL, id = NULL, width = NULL, height = NULL)
```

**Arguments**

children	dash children
id	dash id
width	upsetjs width
height	upsetjs height

**Value**

the set object

**Examples**

```
upsetjsDash("u") %>% fromList(list(a = c(1, 2, 3), b = c(2, 3)))
```

---

upsetjsEulerDiagram    *upsetjs - factory for UpSet.js Euler Diagram HTMLWidget*

---

**Description**

upsetjs - factory for UpSet.js Euler Diagram HTMLWidget

**Usage**

```
upsetjsEulerDiagram(
  width = "100%",
  height = NULL,
  elementId = NULL,
  sizingPolicy = upsetjsSizingPolicy()
)
```

**Arguments**

width	width of the element
height	height of the element
elementId	unique element id
sizingPolicy	htmlwidgets sizing policy object. Defaults to <code>upsetjsSizingPolicy()</code>

**Value**

An object of class `upsetjs_venn` and `htmlwidget`

**Examples**

```
upsetjs() %>% fromList(list(a = c(1, 2, 3), b = c(2, 3)))
```

---

`upsetjsEulerDiagramProxy`

*reactive helper to update an upsetjs euler diagram in place*

---

**Description**

reactive helper to update an upsetjs euler diagram in place

**Usage**

```
upsetjsEulerDiagramProxy(outputId, session)
```

**Arguments**

outputId	the id of the upsetjs widget
session	current shiny session

**Value**

an object of class `upsetjs_proxy`

**Examples**

```
## Not run:
upsetjsEulerDiagramProxy("upsetjs1", session) %>% setSelection("a")

## End(Not run)
```

---

upsetjsKarnaughMap     *upsetjs - factory for UpSet.js Karnaugh Map HTMLWidget*

---

### Description

upsetjs - factory for UpSet.js Karnaugh Map HTMLWidget

### Usage

```
upsetjsKarnaughMap(
  width = "100%",
  height = NULL,
  elementId = NULL,
  sizingPolicy = upsetjsSizingPolicy()
)
```

### Arguments

width	width of the element
height	height of the element
elementId	unique element id
sizingPolicy	htmlwidgets sizing policy object. Defaults to <a href="#">upsetjsSizingPolicy()</a>

### Value

An object of class upsetjs\_venn and htmlwidget

### Examples

```
upsetjsKarnaughMap() %>% fromList(list(a = c(1, 2, 3), b = c(2, 3)))
```

---

upsetjsKarnaughMapProxy     *reactive helper to update an upsetjs karnaugh map diagram in place*

---

### Description

reactive helper to update an upsetjs karnaugh map diagram in place

### Usage

```
upsetjsKarnaughMapProxy(outputId, session)
```



**Arguments**

outputId	the id of the upsetjs widget
session	current shiny session

**Value**

an object of class upsetjs\_proxy

**Examples**

```
## Not run:
upsetjsKarnaughMapProxy("upsetjs1", session) %>% setSelection("a")

## End(Not run)
```

---

upsetjsOutput	<i>Output and render functions for using UpSet.js within Shiny applications and interactive Rmd documents.</i>
---------------	--

---

**Description**

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

**Usage**

```
upsetjsOutput(outputId, width = "100%", height = "400px")
```

**Arguments**

outputId	output variable to read from
width	Must be a valid CSS unit (like '100%', '800px', 'auto') or a number, which will be coerced to a string and have 'px' appended.
height	see width

**Value**

An output or render function that enables the use of the widget within Shiny applications.

---

upsetjsProxy                    *reactive helper to update an upsetjs inplace*

---

**Description**

reactive helper to update an upsetjs inplace

**Usage**

```
upsetjsProxy(outputId, session)
```

**Arguments**

outputId	the id of the upsetjs widget
session	current shiny session

**Value**

an object of class upsetjs\_proxy

**Examples**

```
## Not run:
upsetjsProxy("upsetjs1", session) %>% setSelection("a")

## End(Not run)
```

---

upsetjsSizingPolicy    *upsetjs sizing policy*

---

**Description**

upsetjs sizing policy

**Usage**

```
upsetjsSizingPolicy(
  defaultWidth = "100%",
  defaultHeight = 400,
  padding = 0,
  browser.fill = TRUE,
  ...
)
```

**Arguments**

defaultWidth	defaults to "100%" of the available width
defaultHeight	defaults to 400px tall
padding	defaults to 0px
browser.fill	defaults to TRUE
...	all other arguments supplied to <code>htmlwidgets::sizingPolicy</code>

**Value**

An `htmlwidgets::sizingPolicy` object

**Examples**

```
upsetjs(sizingPolicy = upsetjsSizingPolicy(padding = 20)) %>%
  fromList(list(a = c(1, 2, 3), b = c(2, 3)))
```

---

`upsetjsVennDiagram`     *upsetjs - factory for UpSet.js Venn Diagram HTMLWidget*

---

**Description**

upsetjs - factory for UpSet.js Venn Diagram HTMLWidget

**Usage**

```
upsetjsVennDiagram(
  width = "100%",
  height = NULL,
  elementId = NULL,
  sizingPolicy = upsetjsSizingPolicy()
)
```

**Arguments**

width	width of the element
height	height of the element
elementId	unique element id
sizingPolicy	htmlwidgets sizing policy object. Defaults to <code>upsetjsSizingPolicy()</code>

**Value**

An object of class `upsetjs_venn` and `htmlwidget`

**Examples**

```
upsetjs() %>% fromList(list(a = c(1, 2, 3), b = c(2, 3)))
```

upsetjsVennDiagramProxy

*reactive helper to update an upsetjs venn diagram in place*

---

### **Description**

reactive helper to update an upsetjs venn diagram in place

### **Usage**

```
upsetjsVennDiagramProxy(outputId, session)
```

### **Arguments**

outputId	the id of the upsetjs widget
session	current shiny session

### **Value**

an object of class upsetjs\_proxy

### **Examples**

```
## Not run:  
upsetjsVennDiagramProxy("upsetjs1", session) %>% setSelection("a")  
  
## End(Not run)
```

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