

The plot/vglt Reference Manual

Plotting with vega lite, version 1.0

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1 Systems

The main system appears first, followed by any subsystem dependency.

1.1 plot/vglt

Plotting with vega lite

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Version 1.0

Dependencies

- plot (system).
- yason (system).
- let-plus (system).
- dfio/json (system).

Source [plot.asd], page 3.

Child Components

- [pkgdcl.lisp], page 3 (file).
- [data.lisp], page 3 (file).
- [spec.lisp], page 3 (file).
- [plots.lisp], page 4 (file).

2 Files

Files are sorted by type and then listed depth-first from the systems components trees.

2.1 Lisp

2.1.1 plot/vglt/plot.asd

Source [plot.asd], page 3.

Parent Component

[plot/vglt], page 1 (system).

ASDF Systems

- [plot/vglt], page 1.
- plot.

2.1.2 plot/vglt/pkgdcl.lisp

Source [plot.asd], page 3.

Parent Component

[plot/vglt], page 1 (system).

Packages [vglt], page 5.

2.1.3 plot/vglt/data.lisp

Dependency

[pkgdcl.lisp], page 3 (file).

Source [plot.asd], page 3.

Parent Component

[plot/vglt], page 1 (system).

Internals [sequence-to-alist], page 8 (function).

2.1.4 plot/vglt/spec.lisp

Dependency

[data.lisp], page 3 (file).

Source [plot.asd], page 3.

Parent Component

[plot/vglt], page 1 (system).

Public Interface

- [add], page 7 (function).
- [bar-chart], page 7 (function).
- [box-plot], page 7 (function).
- [histogram], page 7 (function).
- [pie-chart], page 7 (function).
- [scatter-plot], page 8 (function).
- [spec], page 8 (function).

2.1.5 plot/vglt/plots.lisp

Dependency

[spec.lisp], page 3 (file).

Source [plot.asd], page 3.

Parent Component

[plot/vglt], page 1 (system).

Public Interface

- [plot], page 7 (function).
- [save-plot], page 7 (function).

3 Packages

Packages are listed by definition order.

3.1 vgl_t

Source [pkgdcl.lisp], page 3.

Use List

- common-lisp.
- dfio.
- let-plus.
- select.

Public Interface

- [add], page 7 (function).
- [bar-chart], page 7 (function).
- [box-plot], page 7 (function).
- [histogram], page 7 (function).
- [pie-chart], page 7 (function).
- [plot], page 7 (function).
- [save-plot], page 7 (function).
- [scatter-plot], page 8 (function).
- [spec], page 8 (function).

Internals [sequence-to-alist], page 8 (function).

4 Definitions

Definitions are sorted by export status, category, package, and then by lexicographic order.

4.1 Public Interface

4.1.1 Ordinary functions

- add** (*spec key value*) [Function]
 Adds the given KEY / VALUE pair to the Vega-Lite specification
Package [vglt], page 5.
Source [spec.lisp], page 3.
- bar-chart** (*data x y &key title description*) [Function]
 Return a Vega-Lite JSON specification for a bar chart
Package [vglt], page 5.
Source [spec.lisp], page 3.
- box-plot** (*data x y &key title description*) [Function]
 Return a Vega-Lite JSON specification for a box plot using min-max extent
Package [vglt], page 5.
Source [spec.lisp], page 3.
- histogram** (*data column &key title description*) [Function]
 Return a Vega-Lite JSON specification for a histogram plot
Package [vglt], page 5.
Source [spec.lisp], page 3.
- pie-chart** (*data category count &key title description*) [Function]
 Return a Vega-Lite JSON specification for a pie chart
Package [vglt], page 5.
Source [spec.lisp], page 3.
- plot** (*spec*) [Function]
 Render a Vega-Lite specification, SPEC, after saving it to a file
Package [vglt], page 5.
Source [plots.lisp], page 4.
- save-plot** (*spec &key embed-spec filespec*) [Function]
 Saves SPEC as JavaScript and HTML suitable for viewing with a browser into file specified by FILESPEC
 SPEC is a SYMBOL whose value is the lisp specification for the plot. If FILESPEC is not given, SYMBOL-NAME is used for the HTML filename and it is written to the PLOT:CACHE; directory. EMBED-SPEC indicates whether or not to embed the specification into the JavaScript, currently this option is not honored; it will be used when the websockets REPL is implemented. Returns the pathname to the file.
Package [vglt], page 5.
Source [plots.lisp], page 4.

scatter-plot (*data x y &key title description*) [Function]

Return a Vega-Lite JSON specification for a scatter plot

Package [vglt], page 5.

Source [spec.lisp], page 3.

spec (**&optional** *schema*) [Function]

Returns an empty Vega-Lite spec with the given schema version

Package [vglt], page 5.

Source [spec.lisp], page 3.

4.2 Internals

4.2.1 Ordinary functions

sequence-to-alist (*seq &optional x*) [Function]

Map X to each value in SEQ as an ALIST

By default, Vega-Lite will accept a JSON array as data and map it. The spec then refers to it as 'data', instead of X, Y, etc. If for some reason you don't want to use that, this function will do the same mapping using a key of your choice.

Input:

`seq = #(1 2 3 4)`

`x = 'X'`

Output: `((X 1) (X 2) (X 3) (X 4))`

Remember that Vega-Lite is case sensitive

Package [vglt], page 5.

Source [data.lisp], page 3.

Appendix A Indexes

A.1 Concepts

(Index is nonexistent)

A.2 Functions

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