Legend

Version 1.0.0, by Giorgio Bianchini

Description: Draws a Markdown legend.

Module type: Plotting

Module ID: `06888353-e930-4d08-ab24-5727bced8cd6`

This module renders a snippet of Markdown code and draws it on the plot. This can be used e.g. to display a description or legend of the plot.

Parameters

Markdown source

Control type: Markdown

Default value:

```
### **Legend**

* ![](circle://8,#CC79A7) Red circle
* ![](square://8,#0072B2) Blue square
* ![](star://8,#009E73) Green star
```

This parameter is used to specify the Markdown source code for the legend that is drawn on the plot. See Further information for instructions on how to include some common symbols in this; if you wish to include more complicated things, you can create them in a graphics software, include them as attachments, and use the `attachment://` syntax.

Background colour

Control type: Colour

Default value: #FFFFFF (opacity: 100%)

The background colour for the legend.

Font size

Control type: Number spin box

Default value: 14

Range: [0, +∞)

The base font size used to render the legend. Headers use a larger font.

Text colour

Control type: Colour

Default value: ■ #000000 (opacity: 100%)

The colour of the text in the legend.

Width

Control type: Number spin box

Default value: 200

Range: [0, +∞)

The width of the legend (the height is computed automatically).

Left margin

Control type: Number spin box

Default value: 5

Range: (-∞, +∞)

The left margin of the legend. Note that this can be < 0.

Top margin

Control type: Number spin box

Default value: 5

Range: (-∞, +∞)

The top margin of the legend. Note that this can be < 0.

Right margin

Control type: Number spin box

Default value: 5

Range: (-∞, +∞)

The right margin of the legend. Note that this can be < 0.

Bottom margin

Control type: Number spin box

Default value: -5

Range: (-∞, +∞)

The bottom margin of the legend. Note that this can be < 0, which is useful to counter excessive space after the last text line.

Border colour

Control type: Colour

Default value: ■ #000000 (opacity: 100%)

The colour of the border drawn around the legend.

Border thickness

Control type: Number spin box

Default value: 0

Range: [0, +∞)

The thickness of the border drawn around the legend.

Header line colour

Control type: Colour

Default value: ■ #B4B4B4 (opacity: 100%)

The colour of the line drawn below headers in the legend.

Header line thickness

Control type: Number spin box

Default value: 0

Range: [0, +∞)

The thickness of the line drawn below headers in the legend.

Anchor

Control type: Drop-down list

Default value: Bottom-center

Possible values:

- Node
- Top-left
- Top-center
- Top-right
- Middle-left
- Middle-center
- Middle-right
- Bottom-left
- Bottom-center
- Bottom-right

This parameter is used to select the anchor used to determine the position of the legend. If the selected value is `Node`, the specified node is used as an anchor. Otherwise, the selected point on the tree plot is used. Note that these positions refer to the *tree* plot and do not take into account the presence of labels and other elements.

Node

Control type: Node

If the Anchor was set to `Node`, this control is used to select the node that acts as an anchor.

Alignment

Control type: Drop-down list

Default value: Top-center

Possible values:

- Top-left
- Top-center
- Top-right
- Middle-left
- Middle-center
- Middle-right
- Bottom-left
- Bottom-center
- Bottom-right

This parameter controls to which point on the legend the selected Anchor corresponds.

Position

Control type: Point

Default value: (0, 10)

This parameter determines how much the legend is shifted with respect to the position determined by the Anchor and the Alignment.

Further information

In addition to the Markdown features supported by VectSharp.Markdown, this module supports some special image protocols to draw coloured symbols that may aid in creating a legend for the tree plot.

These are used by inserting in the markdown source an image whose address starts with `attachment://`, `circle://`, `ellipse://`, `square://`, `rect://`, `poly://` or `star://`. For example:

```
 ![](star://8,blue) Blue star
```

Renders to:

After the special protocol, you need to supply a series of parameters that will be used to determine the size and colour of the shape that is drawn:

- `attachment://<name>`

  This includes the image contained in the attachment with the specified name in the Markdown document. The correct format for the image is chosen automatically.

  Example:

    - `attachment://Legend`

- `circle://<diameter>,<colour>[,<stroke thickness>[,<stroke colour>]]`

  This draws a circle with the specified diameter and colour. The `stroke thickness` and `stroke colour` parameters can be omitted, in which case the circle will only be filled and not stroked.

  Examples:

    - `circle://8,cornflowerblue` 
    - `circle://6,#009e76,1,black` 
    - `circle://10,,1,orange` 

- `ellipse://<width>,<height>,<colour>[,<stroke thickness>[,<stroke colour>]]`

  This draws an ellipse with the specified width, height and colour. The `stroke thickness` and `stroke colour` parameters can be omitted, in which case the ellipse will only be filled and not stroked.

  Examples:

    - `ellipse://12,8,cornflowerblue` 
    - `ellipse://10,6,#009e76,1,black` 
    - `ellipse://8,10,,1,orange` 

- `square://<size>,<colour>[,<stroke thickness>[,<stroke colour>]]`

  This draws a square with the specified size and colour. The `stroke thickness` and `stroke colour` parameters can be omitted, in which case the square will only be filled and not stroked.

  Examples:

    - `square://8,cornflowerblue` 
    - `square://6,#009e76,1,black` 

    - `square://10,,1,orange` 

- `rect://<width>,<height>,<colour>[,<stroke thickness>[,<stroke colour>]]`

  This draws a rectangle with the specified width, height and colour. The `stroke thickness` and `stroke colour` parameters can be omitted, in which case the rectangle will only be filled and not stroked.

  Examples:

    - `rect://12,8,cornflowerblue` 
    - `rect://10,6,#009e76,1,black` 
    - `rect://8,10,,1,orange` 

- `poly://<width>[,<height>],<colour>[,<sides>[,<stroke thickness>[,<stroke colour>]]]`

  This draws a polygon with the specified width, height, colour and number of sides. The `stroke thickness` and `stroke colour` parameters can be omitted, in which case the polygon will only be filled and not stroked. If the `height` is omitted, it will be equal to the `width`. If the number of `sides` is omitted, it will be equal to `3`.

  Examples:

    - `poly://8,cornflowerblue` 
    - `poly://10,6,#009e76,5,1,black` 
    - `poly://8,10,,4,1,orange` 

- `star://<width>[,<height>],<colour>[,<tips>[,<stroke thickness>[,<stroke colour>]]]`

  This draws a star with the specified width, height, colour and number of tips. The `stroke thickness` and `stroke colour` parameters can be omitted, in which case the star will only be filled and not stroked. If the `height` is omitted, it will be equal to the `width`. If the number of `sides` is omitted, it will be equal to `5`.

  Examples:

- `star://8,cornflowerblue`
- `star://10,6,#009e76,3,1,black`
- `star://8,10,,4,1,orange`