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:

✦ Blue star

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`