Overview

The Slider class enables you to create sliders, which are objects that indicate a quantity and its relationship to the range of possible values for that quantity. A slider enables you to easily select a value that falls within a specified range. Values in the range are defined by a minimum and a maximum value, as well as by an increment that determines the interval between successive values.

For example, a slider with a minimum of 0, a maximum of 10, and an increment of 2, may return values of 0, 2, 4, 6, 8, and 10. The maximum value is represented visually on the slider when the thumb is at the far right for a horizontal slider and at the bottom for a vertical slider. The minimum value is represented visually on the slider when the thumb is at the far left for a horizontal slider and at the top for a vertical slider.

A slider looks and functions much like the sliding volume control on a radio. You can use a slider to adjust the range of an object it is associated with, such as a critical success factor, or to change numeric data over a known range of data values. For example, assume you have an equation with three variables, and you want to test the outcome of the equation based on a variety of values for each variable. In this case, you could create a slider for each variable in the equation. You could set, and reset, the value of each variable through the sliders and analyze the effects on the outcome of the equation.

Use a slider in your applications when you need to see the current value of an element relative to the range of possible values for that element.

Methods

Methods specific to the Slider class are described here. Inherited methods are described in the Object class and the Widget class.
Dictionary

_getInc

Returns the number by which the values in the slider's range are incremented

Syntax

CALL NOTIFY (slider-name, '_getInc', increment);

<table>
<thead>
<tr>
<th>Where ...</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>increment</td>
<td>N</td>
<td>returns the size of the slider's intervals</td>
</tr>
</tbody>
</table>

Example

The following example uses a slider to obtain data points between -2.20 and +2.20 in increments of 0.10. Pressing the Zoom button halves the current increment value, and the UnZoom button doubles the increment value.

INIT:

call notify('slider1', '_set_min_', -2.20);
call notify('slider1', '_set_max_', 2.20);
call notify('slider1', '_set_inc_', 0.10);
slider1 = 0;
return;

ZOOM:

/* halve the current increment */
call notify('slider1', '_get_inc_', inc);
call notify('slider1', '_set_inc_', inc/2);
return;

UNZOOM:

/* double the current increment */
call notify('slider1', '_get_inc_', inc);
call notify('slider1', '_set_inc_', inc*2);
return;

MAIN:

/* The numeric text entry field named SVALUE */
/* shows the numeric value of the slider. */
svalue = slider1;
return;
getMax

_Returns the maximum value in a slider’s range_

**Syntax**

CALL NOTIFY (slider-name, ‘_getMax’, max-val);

<table>
<thead>
<tr>
<th>Where ...</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>max-val</td>
<td>N</td>
<td>returns the maximum value in the slider’s range</td>
</tr>
</tbody>
</table>

**Example**

The following example, which combines a critical success factor and a slider to produce a dynamically changeable CSF display, restricts the maximum value of the CSF to the maximum value in the slider’s range:

```
INIT:
    call notify('slider1','_get_max_',csf);
    slider1=csf;
    return;

SLIDER1:
    csf=slider1;
    return;
```

getMin

_Returns the minimum value in a slider’s range_

**Syntax**

CALL NOTIFY (slider-name, ‘_getMin’, min-val);

<table>
<thead>
<tr>
<th>Where ...</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>min-val</td>
<td>N</td>
<td>returns the minimum value in the slider’s range</td>
</tr>
</tbody>
</table>

**Example**

The following example, which combines a critical success factor and a slider to produce a dynamically changeable CSF display, restricts the minimum value of the CSF to the minimum value in the slider’s range:

```
INIT:
    call notify('slider1','_get_min_',csf);
    slider1=csf;
    return;

SLIDER1:
    csf=slider1;
    return;
```
INIT:
    call notify('slider1','_get_min_',csf);
    slider1=csf;
    return;

SLIDER1:
    csf=slider1;
    return;

---

_getValue

Returns the value (thumb position) of a slider

Inherited from Widget

Syntax

CALL NOTIFY (slider-name, '_getValue', slider-value);

<table>
<thead>
<tr>
<th>Where</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>slider-value</td>
<td>N</td>
<td>returns the thumb position of the slider</td>
</tr>
</tbody>
</table>

_setInc

Assigns the number by which the values in the slider’s range are incremented

Syntax

CALL NOTIFY (slider-name, '_setInc', increment);

<table>
<thead>
<tr>
<th>Where</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>increment</td>
<td>N</td>
<td>specifies the size of the slider’s intervals</td>
</tr>
</tbody>
</table>

Details

Only data points that are multiples of the increment away from the minimum value will be returned by the slider.

Example

The following example uses a slider to obtain data points within the range of -2.20 to +2.20 in increments of 0.10:
Slider Class

_setMin

Assigns the minimum value in a slider’s range

_syntax
CALL NOTIFY (slider-name, '_setMin', min-val);

<table>
<thead>
<tr>
<th>Where ...</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>min-val</td>
<td>N</td>
<td>specifies the minimum value in the slider’s range</td>
</tr>
</tbody>
</table>

_example
The following example, which combines a critical success factor and a slider to produce a dynamically changeable CSF display, restricts the range of the CSF by decreasing the maximum value of the slider’s range to 60:

INIT:
  csf = 30;
  call notify('slider1', '_set_max_', 60);
  slider1 = 30;
return;

SLIDER1:
  csf = slider1;
return;

_setMax

Assigns the maximum value in a slider’s range

Syntax
CALL NOTIFY (slider-name, '_setMax', max-val);

<table>
<thead>
<tr>
<th>Where ...</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>max-val</td>
<td>N</td>
<td>specifies the maximum value in the slider’s range</td>
</tr>
</tbody>
</table>

Example
The following example, which combines a critical success factor and a slider to produce a dynamically changeable CSF display, restricts the range of the CSF by decreasing the maximum value of the slider’s range to 60:

INIT:
  csf = 30;
  call notify('slider1', '_set_max_', 2.20);
  call notify('slider1', '_set_inc_', 0.10);
  slider1 = 0;
  svalue=slider1;
return;

MAIN:
/* The numeric text entry field named SVALUE */
/* shows the numeric value of the slider. */
svalue=slider1;
return;
**Syntax**

`CALL NOTIFY (slider-name, '_setMin', min-val);`

<table>
<thead>
<tr>
<th>Where ...</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>min-val</td>
<td>N</td>
<td>specifies the minimum value in the slider’s range</td>
</tr>
</tbody>
</table>

**Example**

The following example, which combines a critical success factor and a slider to produce a dynamically changeable CSF display, restricts the range of the CSF by increasing the minimum value in the slider’s range to 30:

```
INIT:
    csf = 30;
    call notify('slider1', '_set_min_', 30);
    slider1 = 30;
    return;

SLIDER1:
    csf = slider1;
    return;
```

**_setValue**

Assigns a value (thumb position) to a slider

Inherited from Widget

**Syntax**

`CALL NOTIFY (slider-name, '_setValue', slider-value);`

<table>
<thead>
<tr>
<th>Where ...</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>slider-value</td>
<td>N</td>
<td>specifies the value (thumb position) to assign to the slider</td>
</tr>
</tbody>
</table>

**Details**

The _setValue method assigns only values that fall on or between the slider’s minimum and maximum values. If a value is greater than the slider’s maximum value, the _setValue method assigns the maximum value. However, if the value is set directly (via the SCL variable), the value is not adjusted to the slider’s range until the FRAME entry is refreshed.

For an example using the _setValue method, see the Scroll Bar class.