EB GUIDE tutorial

Making a rectangle move across the screen

1. Tutorial: Making a rectangle move across the screen

The following instructions guide you through the process of animating a rectangle so that it continually moves across the screen when the simulation starts.

Approximate duration: Five minutes.

Adding widgets

In the following steps, you add three widgets to the view and organize the hierarchy of the widgets.

Prerequisite:

- The **Main** state machine contains an initial state and a view state.
- The initial state has a transition to the view state

Step 1
In the content area, double-click the view state.

The view is displayed in the content area.

Step 2
Drag a rectangle from the **Toolbox** into the view.

Step 3
Drag an animation from the **Toolbox** into the rectangle.

Step 4
In the navigation area, click the animation, and press the **F2** key. Rename the animation to `MyAnimation`.

Step 5
Drag a linear interpolation integer widget from the **Toolbox** into the rectangle.

Step 6
In the navigation area, move the linear interpolation integer widget in the hierarchy so that it becomes a child widget of the animation.

Now, if you start the simulation, a rectangle is displayed in a view. The rectangle does not move yet.

Adding a user-defined property of type conditional script

As a next step, you add a user-defined property to the rectangle. With the conditional script property, rendering the rectangle during simulation starts the animation.

Prerequisite:

- You completed the previous instruction.

Step 1
Select the rectangle.

Step 2
In the **Properties** panel, go to the **User-defined properties** category, and click ⊞.

A menu expands.

Step 3
In the menu, click **Conditional script**.

A user-defined property of type **Conditional script** is added to the rectangle.

Step 4
Rename the property to `startAnimation`.

Step 5
Next to the `startAnimation` property, click **Edit...**.

A script editor opens in the content area.

Step 6
Enter the following EB GUIDE Script:

```
function(v:arg0::bool)
    {
 f:animation_play(v:this->MyAnimation)
    }
```

Making the animation visible

The following instructions guide you through the process of making the animation visible.

Prerequisite:

- You completed the previous instruction.

Step 1
Select the linear interpolation integer widget.

Step 2
In the **Properties** panel, go to the `target` property, and click the ■ button next to the property.

A menu expands.

Step 3
In the menu, click **Add link to widget property**.

A dialog opens.

Step 4
In the dialog, go to the rectangle, and select its `x` property.

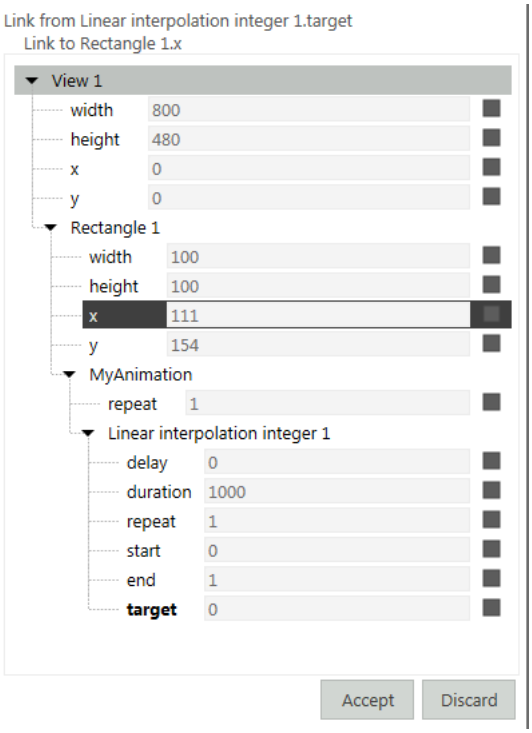

Figure 1. Linking between widget properties

Step 5
Click **Accept**.

The dialog closes. The button is displayed next to the `target` property.

Step 6
Link the `end` property to the view's `width` property.

With these settings, when the animation starts, the `x` property of the rectangle changes from zero to the width of the view. Thus the rectangle moves from the left boundary to the right boundary of the view.

Step 7
To make the animation run in infinite repetitions, enter `0` in the `repeat` property.

Step 8
Save the project.

Step 9
To start the simulation, click in the command area.

Result:

The rectangle continually moves from the left side of the view to the right side of the view.