

EB GUIDE tutorial

Making a rectangle move across the screen

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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 content area displays the **Main** state machine.
- 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 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.

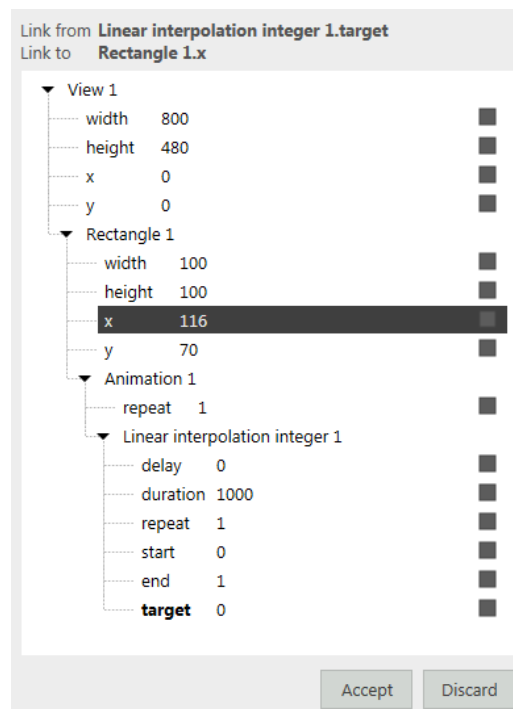


Figure 1. Linking between widget properties

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.