

Learning UML

O'Reilly

Exercises – Parallel Flows in Activity Diagrams

If you have followed along, you should have a use case diagram *Configuration* containing a use case *Add a sensor*.

Now you are going to add an activity diagram to this use case.

Select the use case in the diagram and add an activity diagram and call it *Add a sensor*.

Create a new activity in the diagram called *Add a sensor*. Enlarge it so that you can put other activities into it.

Add an initial node and the following activities and connect them with control flows:

Display sensor entry screen

Enter sensor details and submit

Create new sensor

Add a fork node and a join node.

Add the two activities:

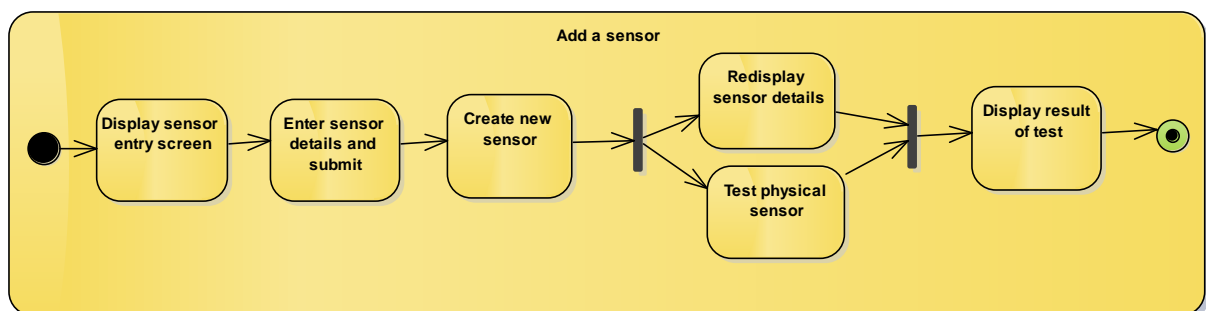
Redisplay sensor details

Test physical sensor

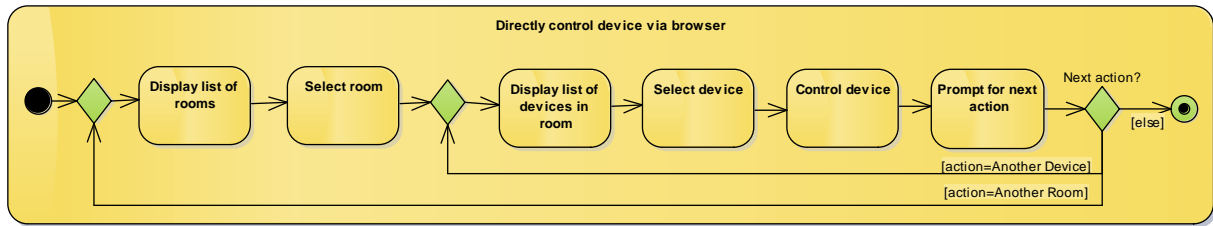
Connect the activities to the fork and join nodes in parallel.

Add an activity *Display result of test* and an activity final node. Join the nodes and activities together so you have a connected workflow.

Your diagram should look something like this.



You should also have an existing activity diagram called *Directly control device via browser* that looks like this.



Add a fork node after the activity *Control device* and reconnect the existing activities via the fork node.

Add a new activity *Send control message to device* above *Prompt for next action* and connect it from the fork node.

Add a flow final (not an activity final) after the new activity and connect the activity to it.

Your diagram should look something like this.

