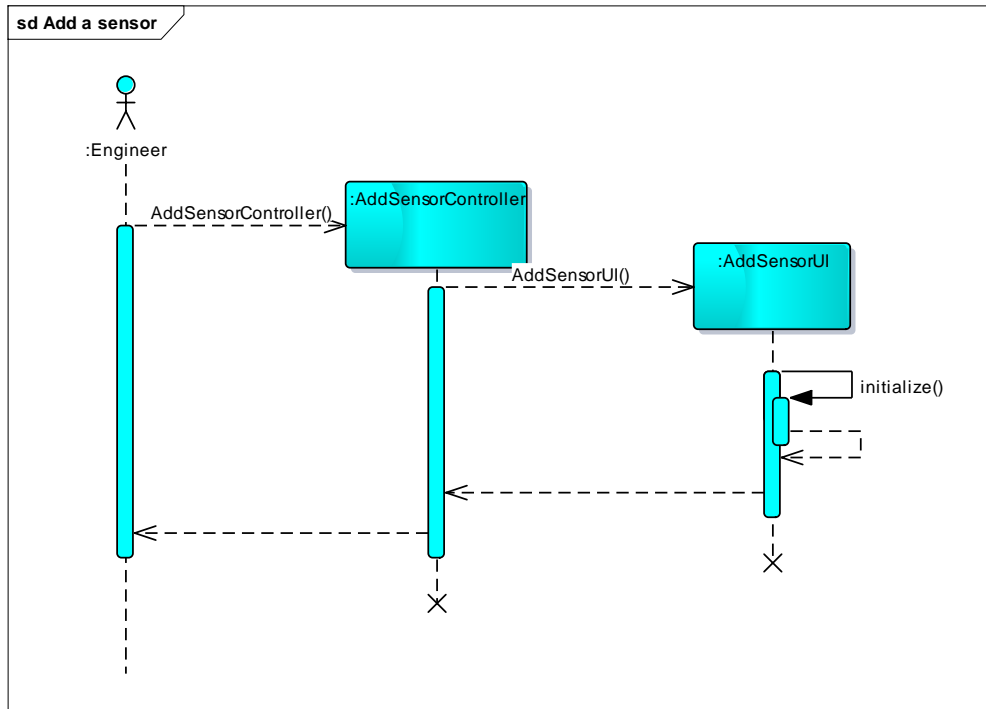


Learning UML

O'Reilly

Exercises – Interaction Occurrences

If you have followed along, your *Add a sensor* sequence diagram should look similar to this one.



If you haven't got it, then you can add it.

Swap the position of the *:AddSensorController* and *:AddSensorUI* lifelines.

Now we are going to add a new sequence diagram for the interaction between the actor and the GUI and reference it from here.

Create a new package in the Interaction View called *Add Sensor User Interaction* with no diagram, then create an Interaction in that package with the same name.

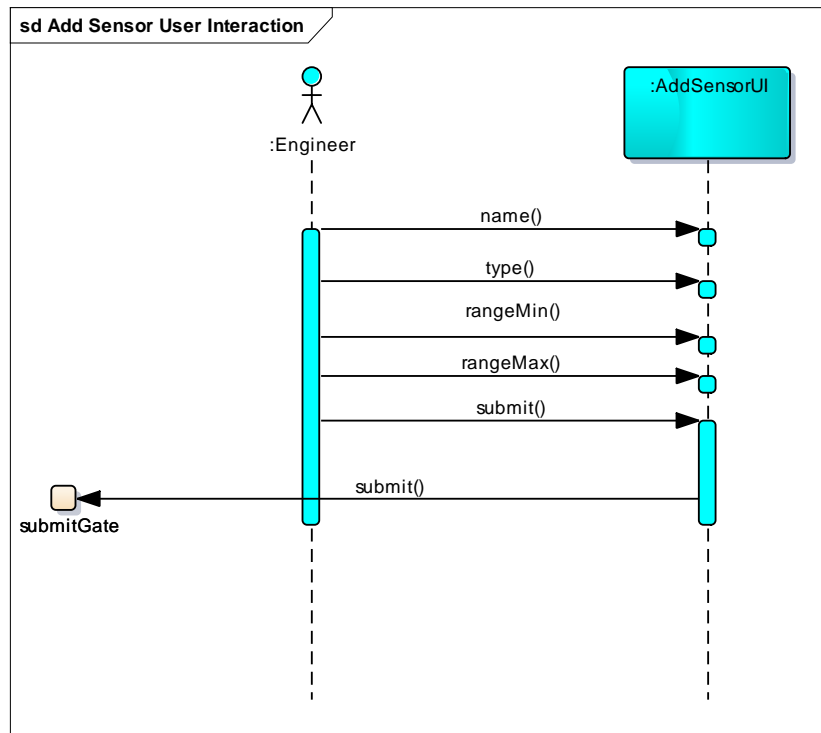
Add the lifelines for *:Engineer* and *:AddSensorUI* to that diagram. (You can either copy them from *Add a sensor* or drag them from the project browser. If you copy them, you don't need to copy the existing connectors.)

Add some messages from the actor to the *:AddSensorUI* for the values that are being entered: *name*, *type*, *rangeMin* and *rangeMax*. Then a message for *submit*.

Add a gate to the diagram and call it *submitGate*.

Draw a message from the *:AddSensorUI* to the gate and call it *submit*.

The diagram should look like this:



Now go to the *Add a sensor* sequence diagram and drag this diagram in from the project browser. Ensure that it is added as an interaction occurrence.

Position it over the lifelines for the actor and *:AddSensorUI*.

Draw a message from the interaction occurrence to the *:AddSensorController* lifeline called *submit*. Add a message back to the *:AddSensorUI* lifeline called *getValues*.

Your diagram should look like this.

