Explanation of the sequence diagram for the elevator system

In the sequence diagram below, the elevator gets an order from a user to the 4th floor. It then finds out that it is not the closest (using getDesignatedElevatorId), and therefore gives the order to another elevator. However, the other elevator does not return a message saying that it has accepted the order. Therefore the timer times out, and the elevator again has to find the closest elevator. At the same time, the third elevator’s motor has stopped, so the elevator ends up taking the order itself instead. This sequence diagram is based on code from an elevatorproject done in another subject, and the code can be found here: <https://github.com/TTK4145-Students-2021/project-gruppe64>.

Diagram, schematic

Description automatically generated

It is also important to note that there is a lot happening in the background as well, and some processes (for instance polling on the buttons) happen all the time, but are only shown in the sequence diagram when it actually happens that a user presses a button.