

Practice Script 9

Summary:

- Error handling in concurrent programs

Exercise 9.1

Modify the warehouse problem by implementing a concurrent fault management adapted to the two communication models between threads applied.

Test the modification by purposely injecting errors into the program.

Exercise 9.2

Modify the warehouse problem so that clerks can only communicate with each other on certain points on the map (doors/counters).

The following figure shows a map that exemplifies this new situation (the communication zones are defined by the symbol +):

```
#####
#C          #                               #
#          +      C                       #
#          #                               #
#          #                               #
####+#####          #####+###           #
#          +      #                       #
#          #####+#####                   #
#          #                       #       #
#          #####          +              #
#          #      C          #           #
#          #          #####+#+#####+###  #
#          #          #               #   #
#          #          #               #   #
#      C          +      #      C       #
#          #          #               #   #
#          #          #               #   #
#          #          #               #   #
#####
```

Exercise 9.3

Modify the class `ActorQueue` (problem 8.3), to include error handling on an actor.

