Group 7

:Simulation | :MailGenerator | :MailPool | :Robot

generateAllMail()

loop

addToMailPool()

loop
addToPool(mailItem)

loadItemsToRobot()

loop
ref loadItem

loop
operate → **ref** robot operation

Clock.Tick()

printResults()

printStatistics()

Robot Operation

:MailPool | :Robot

addToTube(mailItem, true)

[number in tube < 3]
addToTube(mailItem, true)

[number in tube < 3]
addToTube(mailItem, true)

loadItem

:Robot	:MailPool	:Building	:FoodTube

alt

[RobotStatus = Returning]

:Robot → :MailPool : addToPool(mailItem)

[RobotStatus = Waiting]

:Robot → :Building : reserveFloor(floor)

:Robot → :Robot : changeState(RobotState.Heating)

[RobotStatus = Heating]

:Robot → :Robot : increment heat counter

:Robot → :Robot : [heat counter > 5] changeState(RobotState.Delivering)

[RobotStatus = Delivery]

:Robot → :Robot : deliver(mailItem)

:Robot → :Building : freeFloor(floor)

:Robot → :Robot : updateStatistics()

:Robot → :FoodTube : removeItem()

:Robot → :Robot : [empty] changeState(RobotState.Returning)