**Data**

List<Kit> KitsOnConveyor

Int NumKitsToDeliver //Initially 0

FCS fcs

KitRobot kitrobot

GUIConveyor guiConveyor

Semaphore Animation**Messages**

//From KitRobot

NeedKit(){

NumKitsToDeliver++;

}

//From KitRobot

TakeKitAway(Kit k){

KitsOnConveyor.add(k)

}

//From GUI

bringEmptyKitDone(){

Animation.release();

}

//From GUI

giveKitToKitRobotDone(){

Animation.release();

}

//From GUI

receiveKitDone(){

Animation.release();

}**Scheduler**

If Ǝ k in KitsOnConveyor ϵ

k.KS = AwaitingPickup

call SendKit(k)

If Ǝ k in KitsOnConveyor ϵ

k.KS = Shipped

call DeliverKit(k)

//Default KS for Kit is

//MovingIn

If Ǝ k in KitsOnConveyor ϵ

k.KS = MovingIn

call PrepareKit()

**Actions**

PrepareKit(){

Kit k = new Kit();

KitsOnConveyor.add(k);

Animation.acquire();

GUIConveyor.bringEmptyKit(k);

}

SendKit(Kit k){

NumKitsToDeliver--;

kitrobot.HereIsKit(k);

Animation.acquire();

GUIConveyor.giveKitToKitRobot(k);

}

DeliverKit(Kit k){

Animation.acquire();

GUIConveyor.receiveKit(k);

}