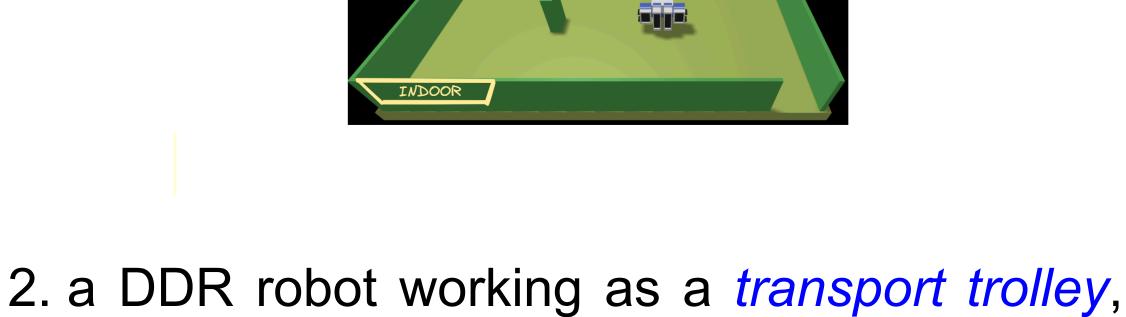
TemaFinale23

company intends to build ColdStorageService, composed of a set of elements:

- 1. a service area (rectangular, flat) that includes:
 - o an INDOOR port, to enter food (fruits, vegetables, etc.) o a ColdRoom container, devoted to store
 - food, upto MAXW kg. The ColdRoom is positioned within the

service area, as shown in the following picture:



that is intially situated in its HOME location.

The transport trolley has the form of a square of side length RD. The transport trolley is used to perform a deposit action that consists in the following

phases:

located on the INDOOR 2. go from the INDOOR to the PORT of the ColdRoom

1. pick up a food-load from a *Fridge truck*

- 3. deposit the food-load in the ColdRoom 3. a ServiceAcessGUI that allows an human
 - being to see the current current weigth of
- the material stored in the ColdRoom and to send to the ColdStorageService a request to store new FW kg of food. If the request is accepted, the services return a ticket that expires after a prefixed amount of time (TICKETTIME secs) and provides a field to enter the ticket number when a Fridge truck is at the INDOOR of the service. 4. a ServiceStatusGUI that allows a Servicemanager (an human being) to supervises the state of the service.
- Alarm requirements The system includes a a Sonar and a Led

The Sonar is used as an 'alarm device': when it

trolley is moving

is stopped.

TICKETTIME.

connected to a RaspnerryPi.

measures a distance less that a prefixed value **DLIMT**, the *transport trolley* must be stopped; it will be resumed when Sonar detects again a

distance higher than **DLIMT**. The Led is used as a warning devices, according to the following scheme: • the Led is off when the transport trolley is at HOME

Service users story

ServiceAcessGUI to send a request to store

its load of FW kg. If the request is accepted,

the driver drives its truck to the INDOOR of

the service, before the ticket exipration time

the

• the Led blinks while the transport

• the *Led* is **on** when *transport trolley*

summarized as follows: Fridge truck driver uses

The story of the ColdStorageService can be

- 2. When the truck is at the INDOOR of the service, the driver uses the ServiceAcessGUI to enter the ticket number and waits until the message charge taken (sent by the ColdStorageService) appears on the ServiceAcessGUI. At this point, the truck should leave the INDOOR. 3. When the service accepts a ticket, the
- up the food, sends the charge taken message and then goes to the *ColdRoom* to store the food. 4. When the deposit action is terminated, the transport trolley accepts another ticket (if any) or returns to HOME.

transport trolley reaches the INDOOR, picks

- 5. While the transport trolley is moving, the Alarm requirements should be satisfied. However, the *transport trolley* should not be stopped if some prefixed amount of time (MINT msecs) is not passed from the previous stop.
- 6. A Service-manager migtht use the ServiceStatusGUI to see: • the current state of the transport trolley

and it **position** in the room;

- the current weigth of the material stored in the ColdRoom; • the number of store-requests rejected since the start of the service.

team is composed of 3 person.

About requirements The development of the ServiceStatusGUI is

optional. However, it is (required) if the working

TemaFinale23 Alarm *requirements* Service users Previous topic DeliverableAppl1HTT This Page

Show Source

Quick search

iss23 1.0 documentation » TemaFinale23