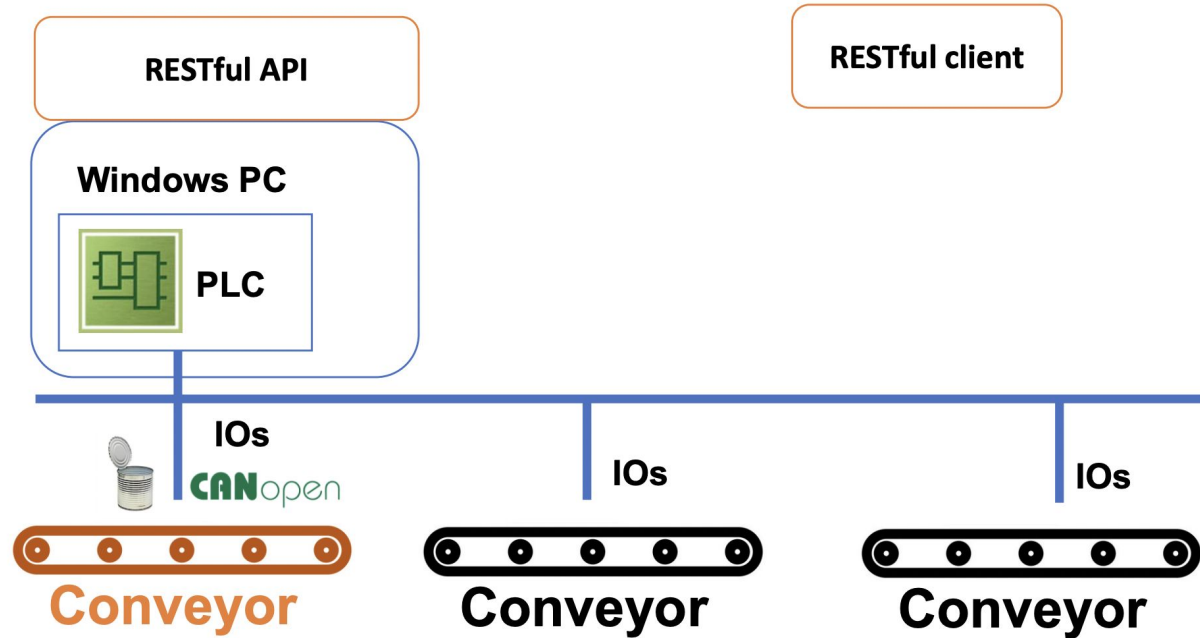


Assignment 1

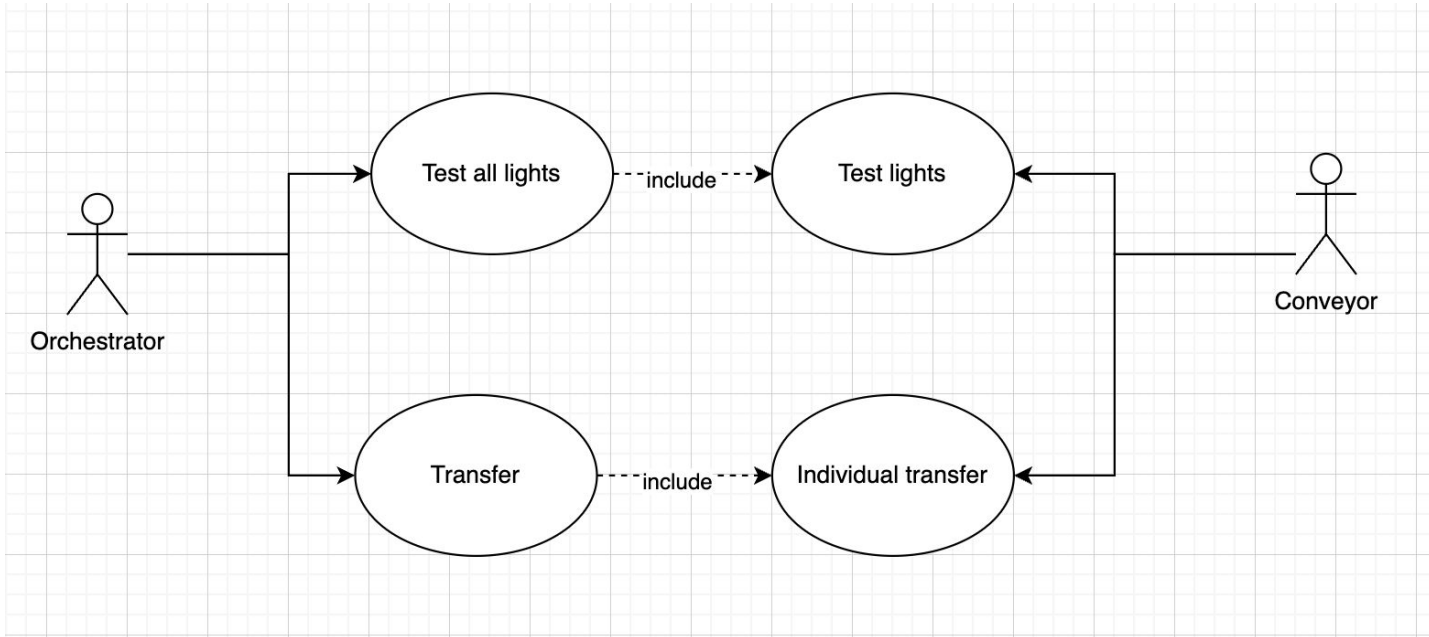
Conveyors system

Problem

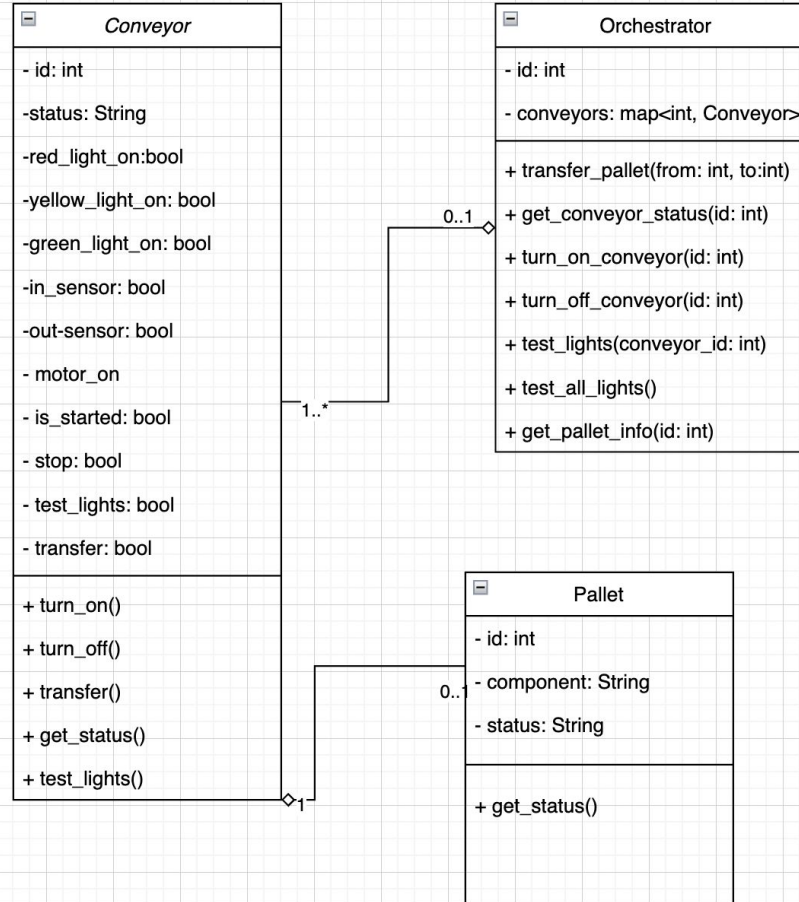
- Conveyor has motor, sensors and lights
- Pallet is transferred between conveyors



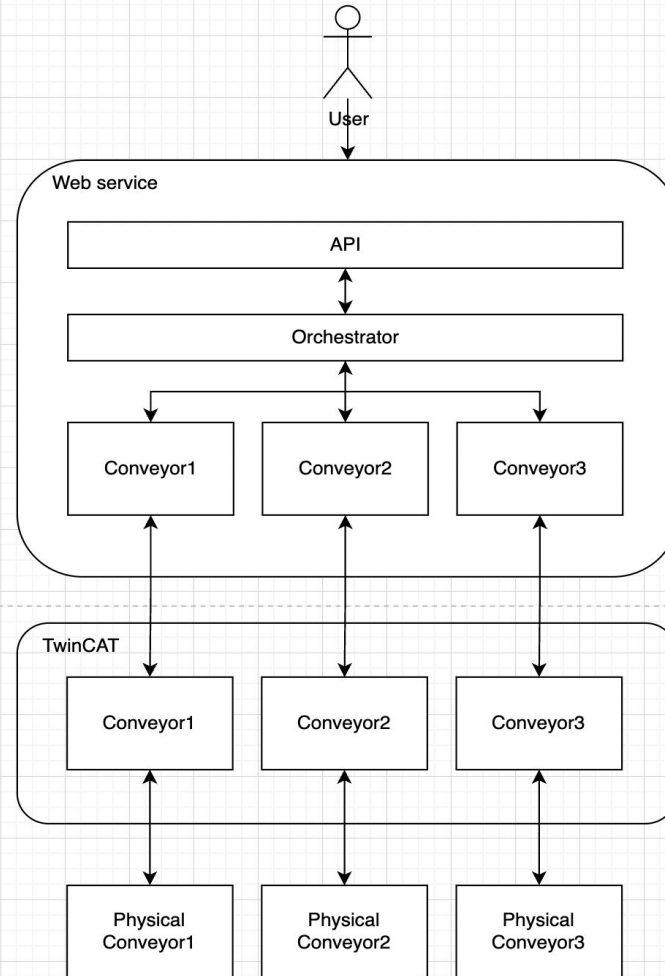
Use cases



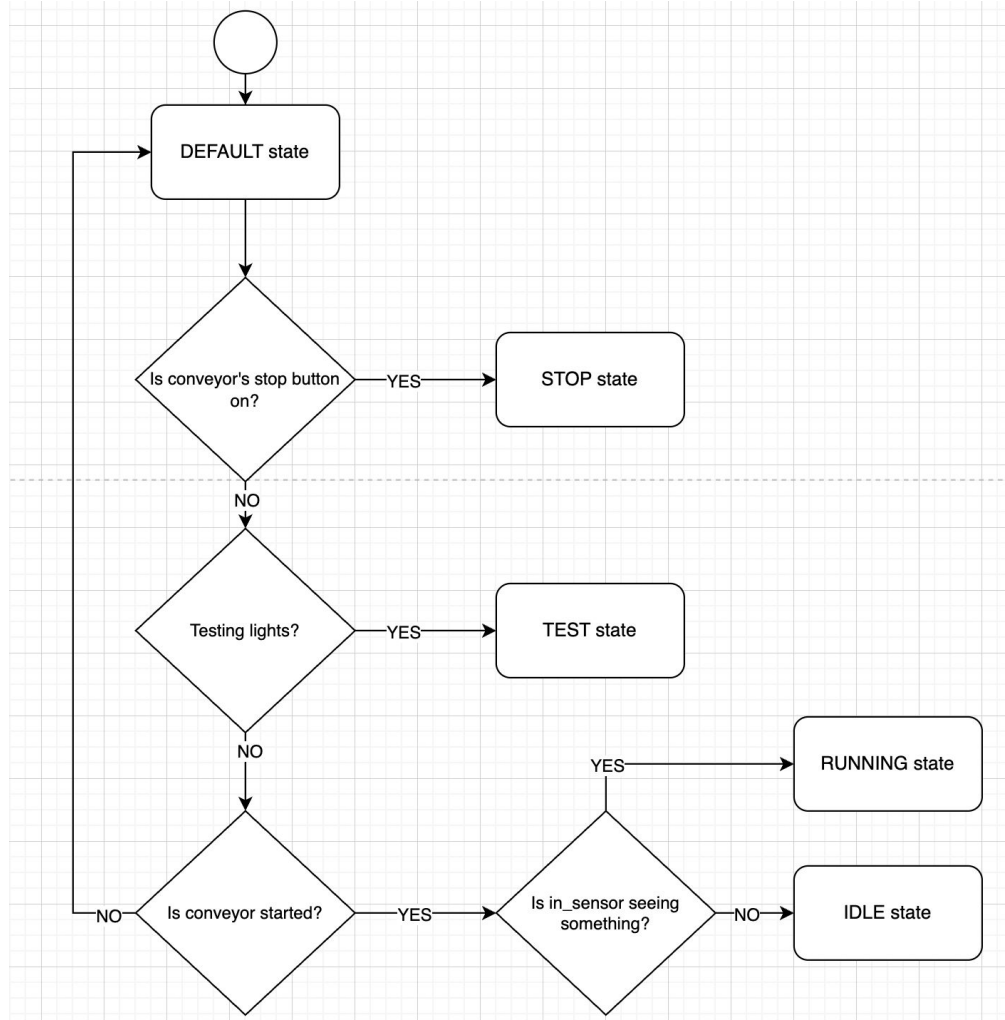
Class diagram



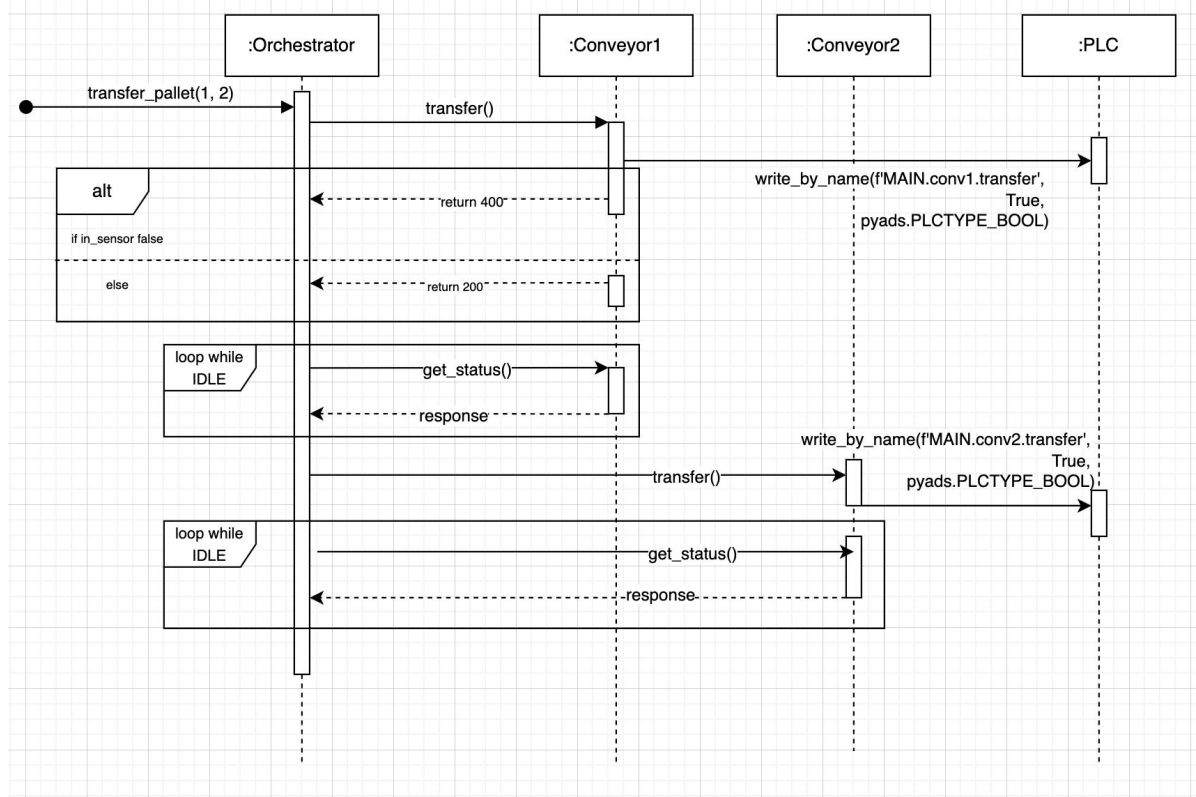
System architecture



Conveyor state machine



Sequence diagram



REST API - Conveyors

GET:

- `/conveyors/{id}`
 - Get the status of a conveyor with given id

POST

- `/conveyors/{id}/start`
 - Turn on a conveyor with given id
- `/conveyors/{id}/stop`
 - Turn off a conveyor with given id
- `/conveyors/{id}/testLights`
 - Executes test of lights on conveyor with given id
- `/conveyors/{id}/transfer`
 - Executes transfer mechanism on conveyor with given id

REST API - orchestrators

POST

- /orchestrators/{id}/testAllLights
 - Executes test of lights on all conveyors through orchestrator
- /orchestrators/{id}/collectiveTransfer
 - Executes transfer mechanism from conveyor <a> to conveyor given in body
 - Example request body:

```
{  
  "from": 1,  
  "to": 2  
}
```