



# PXL – IT

## 42TIN280 Software Analysis - System & System Context – Context Diagram

**Week 03 – semester 01**

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## Exercise – Order system (02)

- An offer by a representative is entered in the information system; therefore the client data and an order line are filled in on the screen for each article. Articles can be selected from a drop-down list. All kinds of variations with reductions, delivery and payment conditions are possible. The chief of the representative can approve an offer.
- Once an offer is approved it can be saved and sent to the customer by the Secretary. The status of the offer changes from new to sent.
- Once the offer has been accepted by the client it becomes a new delivery. This update is done by the secretary.

## Exercise – Order system (02)

- When an offer is rejected by the client, the secretary can delete the offer, but the client data remains in the system. This client data can be updated by anyone within the company.
- In case of a new delivery, the secretary makes an appointment with the client for delivering. The status of the delivery changes from new to 'appointment made'. In the mean time the delivery of the articles is prepared by the worker. When the delivery is 'ready for shipment', the worker indicates this in the system. When the delivery is done, the worker changes the status from 'appointment made' to 'delivered'.
- Draw the context diagram

## Exercise – Hospital (01)

- When a patient enters the hospital, his entrance needs to be registered. When the patient does not yet have an appointment with the doctor for whom he is coming, the receptionist makes the appointment, confirms the appointment and hands over a print out to the patient.
- If the patient already had an appointment, the receptionist searches the personal data of the patient using his/her SIS card. When the personal data is correct, the appointment is registered and as such confirmed. When the data is not correct any more, the receptionist, corrects the data and when all mandatory data is filled in correctly, the appointment is registered and as such confirmed.

## Exercise – Hospital (02)

- Has the patient no SIS card on him / her, the receptionist, needs to use the manual process to register all mandatory data in the system (in stead of using the automatic process). If all mandatory data is filled in, the appointment is registered and as such confirmed. When still some mandatory data is missing, the system refreshes the data entrance screen and indicates on top of it that some mandatory data is missing.

# Exercise – Blood Bank Testing Unit (01)

- The Blood Bank Testing Unit. This is one unit within the College Street Red Cross Blood Donor Centre.
- On the day following a blood donation, the Blood Bank unit tests all blood for blood type and potential viral agents.
- They send the results of these tests to the Processing Office (another unit of the Centre).
- For each tested blood unit, they fill out a form which lists the blood unit number, the blood type, the date and the results of the test.
- If the tests indicate that the blood may be contaminated with a viral agent, the blood unit is destroyed.
- This is indicated on the test form.

## Exercise – Blood Bank Testing Unit (02)

- Blood units have a limited shelf life. The Blood Bank receives a list every day of those units which have exceeded their shelf life.
- These are discarded and the list sent back to the Processing Office with a signed indication of the disposal of the units.
- The Blood Bank also distributes blood to various hospitals requesting blood.
- Requests usually come in for specific blood types.
- The Blood Bank prepares refrigerated containers of these units and distributes them to the hospital vans when they arrive to pick up their supply.
- The Blood Bank receives a listing for each hospital and the specific units of blood to supply to the hospital from the Processing Office.

## Exercise – Blood Bank Testing Unit (03)

- The order is printed in triplicate.
- When the order is filled, the lab technician signs the order and returns a copy to the Processing Office.
- A copy of it travels with the blood to the requesting hospital. The final copy is kept in the Blood Bank records but discarded after one year.
- Draw the context diagram



# Questions & answers

