

DD1368 Database Technology
Homework 1



Doren Calliku
Group Number: 8

1. What do you think are the **main** objects that need to be represented in the database?

These are the objects included in the big picture in order to create a manageable data formation.

Ward
Outpatient Clinic

Medical Doctor
Personnel Officer
Change Nurse

Staff Member
Consultant
Patient
Next-of-Kin
Local Doctor
Supplier

Resource
Beds
Medication
Supply

Requisition Form
Appointment
Waiting List
Employment Contract

The most important ones can be argued to be:

Ward,
Outpatient Clinic,
Change Nurse,
Patient,
Medication,
Staff Member

2. What relationships do you think exist between these main objects?

The **Ward** or the **Outpatient Clinic** is being managed from the **Change Nurse**, it has **Patients** in it, uses **Medications** (when they finish Supplies are needed), and has **Staff Members** registered to it.

Change Nurse deals with the well-going of the **Ward**, assignment of **Staff Members** and management of **Medication**.

Patients can go to the **Outpatient Clinic** or the **Wards**, according to their condition, assigned from the appointment; they use **Medications**, they are controlled from **Staff Members**.

Staff Members are assigned to a **Ward** from the **Change Nurse**; they use **Medications** for the **Patients**.

Medications are used from **Patients**, given from **Staff Members**.

3. For each of the objects, what details do you think need to be stored in the database?

Ward = (ward_budget, ward_no, ward_name , ward_location , ward_beds, ward_extNumber)

Outpatient Clinic = (outClinic_beds, outClinic_extNumber)

Medical Doctor

Personnel Officer

Change Nurse

Staff Member= (staff_number, staff_name , staff_address, staff_telephone , staff_birth, staff_gender, staff_insurance, staff_position, staff_salary, staff_salaryScale, staff_qualification = (qualification_type, qualification_institutionName), staff_experience = (experience_organization, experience_position, experience_startDate, experience_finishDate), staff_wardAllocation, staff_shift)

Patient = (patient_name, patient_address, patient_telephone, patient_birth, patient_gender, patient_maritalStatus, patient_dateRegistered, patient_next-of-kin)

Outpatient = (outpatient_number, outpatient_name, outpatient_address, outpatient_telephone number, outpatient_birth, outpatient_gender, outpatient_appointment = (appointment_date, appointment_time))

Inpatient = (inpatient_name, inpatient_address, inpatient_telephone, inpatient_birth, inpatient_gender, inpatient_maritalStatus, inpatient_dateRegistered, inpatient_next-of-kin, inpatient_dateWaitingList, inpatient_wardRequired, inpatient_expected, inpatient_wardDate, inpatient_wardLeaveExpect, inpatient_wardLeave)

Next-of-Kin = (next_name, next_relationship, next_address, next_telephone)

Local Doctor = (localDoc_name, localDoc_clinicNo, localDoc_address, localDoc_telephone)

Supplier = (supplier_name, supplier_number, supplier_address, supplier_email, supplier_telephone, supplier_faxNumber)

Resource = (resource_staff, resource_beds, resource_supplies)

Bed = (bed_number)

Medication Prescription = (prescription_name, prescription_number, prescription_drugNo, prescription_name, prescription_units/day, prescription_administration, prescription_start , prescription_finish)

Supply = (supply_itemNo, supply_iname, supply_description, supply_quantity, supply_reorderLevel, supply_cost)

Drug = (drug_drugNumber , drug_name, drug_description, drug_dosage, drug_administration, drug_stock, drug_reorderLevel, drug_cost)

Requisition Form = requisition_number, requisition_staff, requisition_wardNo, requisition_wardName, requisition_drugNumber, requisition_drugName, requisition_drugDescription, requisition_drugDosage, requisition_drugAdministration, requisition_cost/unit, requisition_quantityRequired, requisition_dateOrdered, requisition_dateReceived, requisition_receivedBy)

Appointment = (appointment_name, appointment_consultant, appointment_date, appointment_examinationRoom, appointment_result)

Waiting List = (waitingList_patientNo)

Employment Contract = (contract_hours/week, contract_permanentOrTemporary, contract_salaryType)