

Assignment 2

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1.WARD:

Wards in the Well Meadows Hospital.

Ward (WardNumber, WardName, Location, TotalNoOfBeds, TelephoneExtension)

- Primary Key: WardNumber
- Alternate Key: TelephoneExtension

Table Name	COLUMN	NULL/NOT NULL	KEY
Ward	WardNumber	NOT NULL	PRIMARY KEY
Ward	WardName	NOT NULL	NONE
Ward	Location	NOT NULL	NONE
Ward	TotalNoOfBeds	NOT NULL	NONE
Ward	TelephoneExtension	NOT NULL	ALTERNATE KEY

2.Staff:

Information regarding the staff working at the hospital including their qualification, work experience and contract type. Staff records includes basic identification information, Staff Qualifications contains Qualification type, date and their Institution name. Work experience contains their previous work position, start and end date and their work organization. Contract includes staff contract type, pay and hours worked per week.

Staff (StaffNumber, StaffFirstName, StaffLastName, Address, Sex, TelephoneNo, BirthDate, NIN, Positon, CurrentSalary, SalaryScale, ContractHoursPerWeek, ContractType, ContractPayType, QualifiactionType, QualificationDate, QualificationInstitutionName, WorkExperiencePosition, WorkStartDate, WorkEndDate, WorkOrganization)

- Primary Key: StaffNumber
- Alternate Key: NIN

Table	COLUMN	NOT NULL/NULL	KEY
Staff	StaffNumber	NOT NULL	PRIMARY KEY
Staff	StaffFirstName	NOT NULL	NONE
Staff	StaffLastName	NOT NULL	NONE
Staff	Address	NOT NULL	NONE
Staff	Sex	NOT NULL	NONE
Staff	TelephoneNo	NOT NULL	NONE
Staff	BirthDate	NOT NULL	NONE
Staff	NIN	NOTNULL	ALTERNATE KEY

Staff	Position	NOT NULL	NONE
Staff	CurrentSalary	NOT NULL	NONE
Staff	SalaryScale	NOT NULL	NONE
Staff	ContractType	NOT NULL	NONE
Staff	ContractPayType	NOT NULL	NONE
Staff	ContractHoursPerWeek	NOT NULL	NONE
Staff	QualificationDate	NOT NULL	NONE
Staff	QualificationType	NOT NULL	NONE
Staff	QualificationInstitutionName	NOT NULL	NONE
Staff	WorkExperiencePosition	NOT NULL	NONE
Staff	WorkEndDate	NOT NULL	NONE
Staff	WorkStartDate	NOT NULL	NONE
Staff	WorkExperienceOrganization	NOT NULL	NONE

3. WardStaffAllocation.

The Charge Nurse allocates shifts for hospital personnel.

StaffAllocation (StaffNumber, WardNumber, Shift, WardName, Location, Charge Nurse, TelephoneExtension)

- Foreign Key: StaffNumber, WardNumber.
- Alternate Key: TelephoneExtension.

Table	COLUMN	NULL/NOT NULL	KEY
StaffAllocation	StaffNumber	NOT NULL	FOREIGN KEY
StaffAllocation	WardNumber	NOT NULL	FOREIGN KEY
StaffAllocation	Shift	NOT NULL	NONE
StaffAllocation	WardName	NOT NULL	NONE
StaffAllocation	Location	NOT NULL	NONE
StaffAllocation	Charge Nurse	NOT NULL	NONE
StaffAllocation	TelephoneExtension	NOT NULL	ALTERNATE KEY

4. Patient:

Patients admitted to the Well Meadows Hospital and their personal information, including their next of kin's details.

Patient (PatientNumber, PatientFirstName, PatientLastName, Address, PhoneNumber, BirthDate, Sex, MaritalStatus, RegistrationDate, KinName, KinRelationToPatient, KinAddress, KinPhoneNumber)

- Primary Key: PatientNumber

Table	COLUMN	NULL/NOT NULL	KEY
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Patient	PatientNumber	NOT NULL	PRIMARY KEY
Patient	PatientFirstName	NOT NULL	NONE
Patient	PatientLastName	NOT NULL	NONE
Patient	Address	NOT NULL	NONE
Patient	PhoneNumber	NOT NULL	NONE
Patient	BirthDate	NOT NULL	NONE
Patient	Sex	NOT NULL	NONE
Patient	MaritalStatus	NOT NULL	NONE
Patient	RegistrationDate	NOT NULL	NONE
Patient	KinName	NOT NULL	NONE
Patient	KinRelationToPatient	NOT NULL	NONE
Patient	KinAddress	NOT NULL	NONE
Patient	KinPhoneNumber	NOT NULL	NONE

5. Local Doctors:

Information regarding the local doctors referring patients to the Well Meadow Hospital.

Local Doctors (LocalDoctorFullName, ClinicNumber, ClinicAddress, ClinicPhoneNumber)

- Primary Key: ClinicNumber

Table	COLUMN	NULL/NOT NULL	KEY
Local Doctors	ClinicNumber	NOT NULL	PRIMARY KEY
Local Doctors	LocalDoctorFullName	NOT NULL	NONE
Local Doctors	ClinicAddress	NOT NULL	NONE
Local Doctors	ClinicPhoneNumber	NOT NULL	NONE

6. Patient Appointment:

Information regarding the patients' appointments set up by the local doctors that refer them.

Patient Appointment (AppointmentNumber, PatientNumber, StaffNumber, AppointmentDate, AppointmentTime, ExaminationRoom)

- Primary Key: AppointmentNumber
- Foreign Key: StaffNumber, PatientNumber

Table	COLUMN	NULL/NOT NULL	KEY
Patient Appointment	AppointmentNumber	NOT NULL	PRIMARY KEY
Patient Appointment	PatientNumber	NOT NULL	FOREIGN KEY
Patient Appointment	StaffNumber	NOT NULL	FOREIGN KEY
Patient Appointment	AppointmentDate	NOT NULL	NONE
Patient Appointment	AppointmentTime	NOT NULL	NONE

Patient Appointment	ExaminationRoom	NOT NULL	NONE
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7.Outpatient:

Information regarding patients visiting the Outpatient clinic.

Outpatient (PatientNumber, AppointmentDate, AppointmentTime

- Foreign Key: PatientNumber

Table	COLUMN	NULL/NOT NULL	KEY
Outpatient	PatientNumber	NOT NULL	FOREIGN KEY
Outpatient	AppointmentDate	NOT NULL	NONE
Outpatient	AppointmentTime	NOT NULL	NONE

8.Inpatients:

Information regarding patients referred to the inpatient clinic.

Inpatient (PatientNumber, WaitingListDate, WardRequired, ExpectedDurationOfStay, WardPlacementDate, WardExpectedLeaveDate, WardActualLeaveDay)

- Primary Key: BedNumber
- Foreign Key: PatientNumber

Table	COLUMN	NULL/NOT NULL	KEY
Inpatient	BedNumber	NOT NULL	PRIMARY KEY
Inpatient	PatientNumber	NOT NULL	FOREIGN KEY
Inpatient	WaitinglistDate	NOT NULL	NONE
Inpatient	WardRequired	NOT NULL	NONE
Inpatient	ExpectedDurationOfStay	NOT NULL	NONE
Inpatient	WardPlacementDate	NOT NULL	NONE
Inpatient	WardExpectedLeaveDate	NOT NULL	NONE
Inpatient	WardActualLeaveDay	NOT NULL	NONE

9. Patient Medication:

Prescription medication prescribed to the patient.

Patient Medication (PatientNumber, DrugNumber, UnitsPerday, AdministrationMethod, StartDate, EndDate)

- Foreign Key: PatientNumber, DrugNumber

Table	COLUMN	NULL/NOT NULL	KEY
Patient Medication	PatientNumber	NOT NULL	FOREIGN KEY
Patient Medication	DrugNumber	NOT NULL	FOREIGN KEY
Patient Medication	UnitsPerDay	NOT NULL	NONE
Patient Medication	AdministrationMethod	NOT NULL	NONE
Patient Medication	StartDate	NOT NULL	NONE
Patient Medication	EndDate	NOT NULL	NONE

10. Surgical and Non-Surgical Supplies:

Information regarding Surgical and Non-Surgical supply stock maintained by the Wells Meadow Hospital.

Surgical and Non-Surgical Supplies (ItemNumber, ItemName, ItemDescription, StockQuantity, ReorderLevel, CostPerUnit)

- Primary Key: ItemNumber

Table	COLUMN	NULL/NOT NULL	KEY
Surgical and Non-Surgical Supplies	ItemNumber	NOT NULL	PRIMARY KEY
Surgical and Non-Surgical Supplies	ItemName	NOT NULL	NONE
Surgical and Non-Surgical Supplies	ItemDescription	NOT NULL	NONE
Surgical and Non-Surgical Supplies	StockQuantity	NOT NULL	NONE
Surgical and Non-Surgical Supplies	ReorderLevel	NOT NULL	NONE
Surgical and Non-Surgical Supplies	CostPerUnit	NOT NULL	NONE

11. Pharmaceutical Supplies:

Information regarding Pharmaceutical Supply stock maintained by Wells Meadow Hospital.

Pharmaceutical Supplies (DrugName, DrugNumber, DrugType, DrugDescription, DrugDosage, AdministrationMethod, PharmStockQuantity, PharmReorderLevel, PharmCostPerUnit)

- Primary Key: DrugNumber

Table	COLUMN	NULL/NOT NULL	KEY
Pharmaceutical Supplies	DrugNumber	NOT NULL	PRIMARY KEY
Pharmaceutical Supplies	DrugName	NOT NULL	NONE
Pharmaceutical Supplies	DrugDescription	NOT NULL	NONE
Pharmaceutical Supplies:	DrugDosage	NOT NULL	NONE
Pharmaceutical Supplies	AdministrationMethod	NOT NULL	NONE
Pharmaceutical Supplies	StockQuantity	NOT NULL	NONE
Pharmaceutical Supplies	ReorderLevel	NOT NULL	NONE
Pharmaceutical Supplies	CostPerUnit	NOT NULL	NONE
Pharmaceutical Supplies	DrugType	NOT NULL	NONE

12. Ward Requisites:

Information regarding ordering of the hospital supplies using the ward requisition form.

Ward Requisite (RequisitionNumber, RequisitionName, WardNumber, WardName, RequisitionedBy, RequisitionDate, DrugName, DrugDescription, DrugDosage, AdminsitrationMethod, CostperUnit, QuantityRequired, OrderDate, Drug/ItemNumber)

- Primary Key: RequisitionNumber
- Foreign Key: WardNumber, Drug/ItemNumber

Table	COLUMN	NULL/NOT NULL	KEY
Ward Requisites	RequisitionNumber	NOT NULL	PRIMARY KEY
Ward Requisites	RequisitionName	NOT NULL	NONE
Ward Requisites	WardName	NOT NULL	NONE
Ward Requisites	RequisitionedBy	NOT NULL	NONE
Ward Requisites	RequisitionDate	NOT NULL	NONE
Ward Requisites	DrugName	NOT NULL	NONE
Ward Requisites	DrugDescription	NOT NULL	NONE
Ward Requisites	DrugDosage	NOT NULL	NONE
Ward Requisite	AdminsitrationMethod	NOT NULL	NONE
Ward Requisite	CostperUnit	NOT NULL	NONE
Ward Requisite	QuantityRequired	NOT NULL	NONE
Ward Requisite	OrderDate	NOT NULL	NONE
Ward Requisite	WardNumber	NOT NULL	FOREIGN KEY
Ward Requisite	Drug/ItemNumber	NOT NULL	FOREIGN KEY

13.Suppliers:

Information of the suppliers that supply goods to Wells Meadow Hospital.

Suppliers (SupplierName, SupplierNumber, SupplierAddress, SupplierPhoneNumber, Supplier FaxNumber)

- Primary Key: SupplierNumber

Table	COLUMN	NULL/NOT NULL	KEY
Suppliers	SupplierNumber	NOT NULL	PRIMARY KEY
Suppliers	SupplierName	NOT NULL	NONE
Suppliers	SupplierAddress	NOT NULL	NONE
Suppliers	SupplierPhoneNumber	NOT NULL	NONE
Suppliers	SupplierFaxNumber	NOT NULL	NONE

RELATIONSHIPS:

PARENT ENTITY	CHILD ENTITY	CARDINALITY
StaffMembers	WardStaffAllocation	1:N
StaffMembers	Patient Appointment	1:N
Wards	StaffAllocation	1:N
Wards	Ward Requisites	1:N
Patient	Patient Medication	1:N
Patient	Local Doctors	N:1
Patient	Inpatient	N:1
Patient	Outpatient	N:1
PharmaceuticalSupplies	Ward Requisites	1:N
PharmaceuticalSupplies	Medication	N:M
PharmaceuticalSupplies	Suppliers	N:1
Surgical and Non-Surgical Supplies	Ward Requisites	1:N
Surgical and Non-Surgical Supplies	Suppliers	N:1

- Each Staff Member has multiple Staff Allocations.
- Each StaffAllocation belongs to one Staff Member.
- Each StaffMembers holds multiple PatientAppointments.
- Each PatientAppointment belongs to one StaffMembers.
- Each Ward has multiple Staff Allocations.
- Each member in the StaffAllocation belongs to one Ward.
- Each Ward has multiple Ward Requisites.
- Each Ward Requisite belongs to one Ward.
- Each Patient has multiple Patient Medication.
- Each Patient Medication prescription belongs to one Patients.
- Each Patient has one Local Doctor referring them to the Well Meadow Hospital.
- Each Local Doctor refers many patients to the Well Meadow Hospital.
- A single Patient attends the InPatient clinic.
- The Inpatient Clinic has multiple Patients.
- A single Patient attends the OutPatient clinic.
- The Outpatient Clinic has multiple Patients.
- Multiple PharmaceuticalSupplies are listed in the Ward Requisites.
- Each Ward Requisite is written for individual PharmaceuticalSupplies.

- Multiple Surgical and Non-Surgical Supplies are listed in the Ward Requisites.
- Each Ward Requisite is written for individual Surgical and Non-Surgical Supplies.
- Pharmaceutical Supplies includes many Patient Medication.
- Patient Medication may include multiple PharmaceuticalSupplies.
- Each PharmaceuticalSupplies is supplied by one supplier.
- Each Supplier supplies multiple PharmaceuticalSupplies.
- Each Surgical and Non-Surgical Supplies is supplied by one supplier.
- Each Supplier supplies multiple Surgical and Non-Surgical Supplies.