

ENTITY DICTIONARY:

Entity: Appointment

Description: A scheduled time for a patient to have when attending a clinic

Attributes:

- Attended: Boolean, a value to see if the person is going to the appointment
- AppointmentID: Varchar(16) a unique identification number, Weak Key
- Date: date, A year, month, day, and time
- Reason: Varchar(100), brief description for the appointment

Entity: Business

Description: An organization that will interact with the medication.

Attributes:

- Address: Varchar(100), a street, Zip code, city, and state
- CompanyID: Varchar(16), a unique identification number, Primary Key
- Name: Varchar(50), a name of the Company
- Phone Number: varchar(10), a 10-digit long number

Entity: Clinic

Description: A medical facility that holds appointments with patients

Attributes:

- No attributes

Entity: Company Drug

Description: A drug that is a variation of a generic drug

Attributes:

- CompanyID: Varchar(16) a unique identification number, Weak Key
- DrugID: Varchar(16) a unique identification number, Weak Key
- Name: Varchar(40), a name to identify the drug

Entity: Doctor

Description: A medical professional that has acquired a MD Degree

Attributes:

- MD Degree: Varchar(40), specifies the type of degree obtained.

Entity: Generic Drug

Description: The base form of a drug

Attributes:

- DrugID: Varchar(16), a unique identification number, Primary Key
- Side Effect: Varchar(100), a brief description of the possible side effects

Entity: Hospital

Description: A Medical Facility that provides Surgery

Attributes:

- No Attributes

Entity: Medical Facility

Description: A business that provides varying options of medical assistance

Attributes:

- No Attributes

Entity: Medical Professional

Description: An individual that provides healthcare services.

Attribute:

- EmployeeID: Varchar(16), a unique identification number, Primary Key

Entity: Medical Research Facility

Description: A facility in which scientific test are run to understand new Medicines and Diseases.

Attributes:

- Research Specialty: Varchar(50), the research type
- Funding: int, the amount of money received for research

Entity: Nurse Practitioner

Description: A Nurse who can treat patients without direct supervision of a doctor

Attributes:

- Certification: Varchar(40), specifies the type of certification

Entity: Patient

Description: An individual seeking medical assistance

Attributes:

- ID: Varchar(16), a unique identification number, Primary Key
- Phone Number: varchar(10), a 10-digit long number
- Name: Varchar(20), the name of the individual
- Sex: Varchar(6), The biological sex of the individual
- Birthday: Varchar(8), The date, month, and year they were born
- Age: int, the age of the individual

Entity: Pharmaceutical Company

Description: A company that creates drugs.

Attribute:

- Country: Varchar(2), a 2-letter abbreviation of the country of operation

Entity: Pharmacy

Description: A location that people can purchase the drugs from

Attributes:

- Pharmacy License: Varchar(16), A unique license number
- Hours: Varchar(30), opening and closing times displayed

Entity: Physician's Assistant

Description: A person who assists a physician with their clinical procedures.

Attributes:

- MS Degree: Varchar(40), specifies the type of degree obtained.
- Certification: Varchar(40), specifies the type of certification

Entity: Prescription

Description: A document that has a duration for a company drug to a patient

Attributes:

- Duration: Varchar(20), establishes a period of time for the use of the drug
- PrescriptionID: Varchar(16), a unique identification number, Primary Key

Entity: Researcher

Description: An individual tasked with the further understanding a specific area

Attributes:

- Research Area: Varchar(20), the research topic

Entity: Surgery (Changed to a Weak Entity)

Description: A intensive medical procedure that a patient will receive that

Attributes:

- Cost: int, the dollar amount of the surgery
- Date: Varchar(20), the day, month, year, and time of the surgery
- Name: Varchar(20), the name of the surgery
- SurgeryID: Varchar(16), a unique identification number, Primary Key

Entity: Urgent Care

Description: A medical facility that provide walk-in availability for medical examination.

Attributes:

- No attributes

Entity: Walk-In

Description: A doctor appointment that does not require pre-existing scheduling

Attributes:

- AppointmentID: Varchar(16) a unique identification number, Weak Key
- Date: Varchar(20), the day, month, year, and time of the walk in
- Reason: Varchar(100), brief description for the appointment

Relation Dictionary

Relationship: Creates

Description: A patient attends a walk-in visit. Walk-in appointments are attended by patients.

Entities: Patient, Walk-In

Cardinality: 1:N

Relationship: Creates

Description: A pharmaceutical company can create many company drugs. Many company drugs are created by a pharmaceutical company.

Entities: Company Drug, Pharmaceutical Company

Cardinality: 1:N

Relationship: Fulfills

Description: A pharmacy can fulfill many prescriptions. Many prescriptions are fulfilled by a pharmacy.

Entities: Pharmacy, Prescription

Cardinality: 1:N

Relationship: Has

Description: A patient can have many prescriptions. There are many prescriptions that can be owned by a patient.

Entities: Prescription, Patient

Cardinality: 1:N

Relationship: Has

Description: A patient can have many appointments. There are many appointments that a single patient can have.

Entities: Patient, Appointment

Cardinality: 1:N

Relationship: Has the properties of

Description: Many company drugs have the property of a generic drug. A generic drug can have the properties of many company drugs.

Entities: Company Drug, Generic Drug

Cardinality: 1:N

Relationship: Holds

Description: A clinic facility holds many appointments. There are many appointments that are held by a clinic.

Entities: Clinic, Appointment

Cardinality: 1:N

Relationship: Interacts with

Description: A generic drug interacts with many generic drugs. Many generic drugs interact with a generic drug.

Entities: Generic Drug, Generic Drug

Cardinality: 1:N

Attributes:

- **Severity:** Varchar(2), a number 1 to 10 describing the severity
- **Cause:** Varchar(20), describes the cause

Relationship: Is for

Description: A company drug is for many different prescriptions. There are several prescriptions that are for a company drug.

Entities: Company Drug, Prescription

Cardinality: 1:N

Relationship: Possesses

Description: Many pharmacies can be in possession of many different drugs. Many company drugs can be possessed by many different companies.

Entities: Pharmacy, Company Drug

Cardinality: M:N

Relationship: Prescribe(s)

Description: A medical professional can prescribe many prescriptions. Many prescriptions are prescribed by a medical professional.

Entities: Prescription, Medical Professional

Cardinality: 1:N

Relationship: Provides (Changed to a Weak Relationship)

Description: A hospital can provide many surgeries. There are many surgeries that are provided by a hospital.

Entities: Hospital, Surgery

Cardinality: 1:N

Relationship: Provides

Description: An urgent care facility can provide many walk-ins. There are many walk-ins that are provided by an urgent care facility.

Entities: Urgent Care, Walk-in

Cardinality: 1:N

Relationship: Receive

Description: A patient can receive many surgeries. There are many surgeries that can be received by a single patient.

Entities: Patient, Surgery

Cardinality: 1:N

Attribute:

- **Date:** Varchar(20), the day, month, year

Relationship: Receives (Changed to a Weak Relationship)

Description: A pharmaceutical company can receive many company drugs. Many company drugs are sent to a pharmaceutical company.

Entities: Company Drug, Pharmaceutical Company

Cardinality: 1:N

Attribute:

- **Date:** Varchar(20), the day, month, year

Relationship: Treats

Description: There are many medical professionals that treat many different patients. Many patients can be treated by many medical professionals.

Entities: Medical Professional, Patient

Cardinality: N:M

Relationship: Work(s) at

Description: There can be many medical professionals that work at different medical facilities. There are many medical facilities where many medical professionals work.

Entities: Medical Professional, Medical Facility

Cardinality: N:M