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(1), The biological sex of the individual being: F or M
- 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: int, 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: date, 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: date, 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: int, 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: date, 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: date, 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