Junhao Du

```
Scripts Position:/scripts.txt
Video Position:/Assignment4.mp4
EntityClass Position:/Entity/*
Patient Entity:
package edu.stevens.cs548.clinic.domainmodel;
import java.io.Serializable;
import java.lang.String;
import java.util.ArrayList;
import java.util.Date;
import java.util.List;
import javax.persistence.*;
import static javax.persistence.CascadeType.REMOVE;
/**
 * Entity implementation class for Entity: Patient
 */
```

```
@Entity
@Table(name = "PATIENT")
public class Patient implements Serializable {
   private static final long serialVersionUID = 1L;
   @ld
   @GeneratedValue
   private long id;
   private long PatientId;
   @Column(name="PATIENT NAME")
   private String name;
   @Temporal(TemporalType.DATE)
   private Date dob;
   @OneToMany(cascade = REMOVE, mappedBy = "patient")
   @OrderBy
   private List<Treatment> treatments;
   public Patient() {
      super();
      treatments = new ArrayList<Treatment>();
```

```
}
public long getId() {
   return id;
}
public void setId(long id) {
   this.id = id;
}
public long getPatientId() {
   return this.PatientId;
}
public void setPatientId(long PatientId) {
   this.PatientId = PatientId;
}
public String getName() {
   return this.name;
}
public void setName(String name) {
```

```
this.name = name;
   }
   public Date getDob() {
      return this.dob;
   }
   public void setDob(Date dob) {
      this.dob = dob;
   }
   public List<Treatment> getTreatments() {
      return treatments;
   }
   public void setTreatments(List<Treatment> treatments) {
      this.treatments = treatments;
   }
Provider Entity:
package edu.stevens.cs548.clinic.domainmodel;
```

}

```
import static javax.persistence.CascadeType.REMOVE;
import java.io.Serializable;
import java.util.ArrayList;
import java.util.List;
import javax.persistence.*;
import static javax.persistence.CascadeType.ALL;
/**
 * Entity implementation class for Entity: Provider
 */
@Entity
@Table(name="PROVIDER")
public class Provider implements Serializable {
   /**
    */
                                         serialVersionUID
   private
                                long
              static
                       final
7025511983314295144L;
```

```
private enum specialization{surgery,radiology,oncology};
@Id
@Column(name="NPI")
private long NPI;
@Column(name="PROVIDER_NAME")
private String name;
@Column(name="SPECIALIZATION")
private String spec;
@OneToMany(cascade = REMOVE, mappedBy = "provider")
@OrderBy
private List<Treatment> treatments;
private specialization special;
public Provider() {
  super();
  treatments = new ArrayList<Treatment>();
}
public long getNPI() {
   return NPI;
}
public void setNPI(long nPI) {
```

```
NPI = nPI;
   }
   public String getName() {
      return name;
   }
   public void setName(String name) {
      this.name = name;
   }
   public String getSpec() {
      return spec;
   }
   public void setSpec(specialization special) {
      this.spec = special.name();
   }
}
Treatment Entity:
package edu.stevens.cs548.clinic.domainmodel;
import java.io.Serializable;
```

```
import javax.persistence.*;
@Entity
@Inheritance(strategy=InheritanceType.JOINED)
@DiscriminatorColumn(name="TTYPE")
@Table(name="TREATMENT")
public abstract class Treatment implements Serializable {
   private
                    final
                           long
                                   serialVersionUID
            static
6375011083514153849L;
   /**
    */
   @Id
   @GeneratedValue
   private long id;
   @Column(name="DIAGNOSIS")
   private String diagnosis;
   @ManyToOne
   @JoinColumn(name = "patient_fk", referencedColumnName
= "id")
```

```
private Patient patient;
   @ManyToOne
                                                "provider_fk",
   @JoinColumn(name
referencedColumnName = "NPI")
   private Provider provider;
   @Column(name="TTYPE",length=2)
   private String treatmentType;
   public Treatment()
   {
      super();
   }
   public String getTreatmentType() {
      return treatmentType;
   }
   public void setTreatmentType(String treatmentType) {
      this.treatmentType = treatmentType;
   }
```

```
public long getId() {
       return id;
   }
   public void setId(long id) {
      this.id = id;
   }
   public String getDiagnosis() {
       return diagnosis;
   }
   public void setDiagnosis(String diagnosis) {
       this.diagnosis = diagnosis;
   }
   public Patient getPatient() {
       return patient;
   }
   void setPatient(Patient patient) {
      this.patient = patient;
   }
}
```

Scripts:

```
[EL Config]: metadata: The access type for the persistent class [class edu.stevens.cs548.clinic.domainmodel.Treatment] is set to [FIELD].
```

- [EL Config]: metadata: The target entity (reference) class for the many to one mapping element [field provider] is being defaulted to: class edu.stevens.cs548.clinic.domainmodel.Provider.
- [EL Config]: metadata: The target entity (reference) class for the many to one mapping element [field patient] is being defaulted to: class edu.stevens.cs548.clinic.domainmodel.Patient.
- [EL Config]: metadata: The access type for the persistent class [class edu.stevens.cs548.clinic.domainmodel.DrugTreatment] is set to [FIELD].
- [EL Config]: metadata: The access type for the persistent class [class edu.stevens.cs548.clinic.domainmodel.Patient] is set to [FIELD].
- [EL Config]: metadata: The target entity (reference) class for the one to many mapping element [field treatments] is being defaulted to: class edu.stevens.cs548.clinic.domainmodel.Treatment.
- [EL Config]: metadata: The access type for the persistent class [class edu.stevens.cs548.clinic.domainmodel.Radiology] is set to [FIELD].
- [EL Config]: metadata: The target class (reference) class for the element collection mapping element [field dates] is being defaulted to: class java.util.Date.
- [EL Config]: metadata: The access type for the persistent class [class edu.stevens.cs548.clinic.domainmodel.Surgery] is set to [FIELD].
- [EL Config]: metadata: The access type for the persistent class [class edu.stevens.cs548.clinic.domainmodel.Provider] is set to [FIELD].
- [EL Config]: metadata: The target entity (reference) class for the one to many mapping element [field treatments] is being defaulted to: class edu.stevens.cs548.clinic.domainmodel.Treatment.
- [EL Config]: metadata: The alias name for the entity class [class edu.stevens.cs548.clinic.domainmodel.DrugTreatment] is being defaulted to: DrugTreatment.
- [EL Config]: metadata: The alias name for the entity class [class edu.stevens.cs548.clinic.domainmodel.Treatment] is being defaulted to: Treatment.
- [EL Config]: metadata: The column name for element [id] is being defaulted to: ID.
- [EL Config]: metadata: The table name for entity [class
 edu.stevens.cs548.clinic.domainmodel.DrugTreatment] is being defaulted to:
 DRUGTREATMENT.
- [EL Config]: metadata: The primary key column name for the inheritance class [class edu.stevens.cs548.clinic.domainmodel.DrugTreatment] is being defaulted to: ID.
- [EL Config]: metadata: The foreign key column name for the inheritance class [edu.stevens.cs548.clinic.domainmodel.DrugTreatment] is being defaulted to: ID.
- [EL Config]: metadata: The column name for element [dosage] is being defaulted to: DOSAGE.

- [EL Config]: metadata: The column name for element [drug] is being defaulted to: DRUG.
- [EL Config]: metadata: The alias name for the entity class [class edu.stevens.cs548.clinic.domainmodel.Patient] is being defaulted to: Patient.
- [EL Config]: metadata: The column name for element [dob] is being defaulted to: DOB.
- [EL Config]: metadata: The column name for element [PatientId] is being defaulted to: PATIENTID.
- [EL Config]: metadata: The column name for element [id] is being defaulted to: ID.
- [EL Config]: metadata: The alias name for the entity class [class edu.stevens.cs548.clinic.domainmodel.Radiology] is being defaulted to: Radiology.
- [EL Config]: metadata: The table name for entity [class edu.stevens.cs548.clinic.domainmodel.Radiology] is being defaulted to: RADIOLOGY.
- [EL Config]: metadata: The primary key column name for the inheritance class [class edu.stevens.cs548.clinic.domainmodel.Radiology] is being defaulted to: ID.
- [EL Config]: metadata: The foreign key column name for the inheritance class [edu.stevens.cs548.clinic.domainmodel.Radiology] is being defaulted to: ID.
- [EL Config]: metadata: The alias name for the entity class [class edu.stevens.cs548.clinic.domainmodel.Surgery] is being defaulted to: Surgery.
- [EL Config]: metadata: The table name for entity [class edu.stevens.cs548.clinic.domainmodel.Surgery] is being defaulted to: SURGERY.
- [EL Config]: metadata: The primary key column name for the inheritance class [class edu.stevens.cs548.clinic.domainmodel.Surgery] is being defaulted to: ID.
- [EL Config]: metadata: The foreign key column name for the inheritance class [edu.stevens.cs548.clinic.domainmodel.Surgery] is being defaulted to: ID.
- [EL Config]: metadata: The column name for element [date] is being defaulted to: DATE.
- [EL Config]: metadata: The alias name for the entity class [class edu.stevens.cs548.clinic.domainmodel.Provider] is being defaulted to:
- [EL Config]: metadata: The column name for element [special] is being defaulted to: SPECIAL.
- [EL Config]: metadata: The collection table name for the basic collection/map mapping [field dates] is being defaulted to:

```
[EL Config]: metadata: The primary key column name for the mapping element
[field dates] is being defaulted to: ID.
[EL Config]: metadata: The foreign key column name for the mapping element
[dates] is being defaulted to: Radiology ID.
[EL Config]: metadata: The value column name for the basic collection/map
mapping element mapping element [dates] is being defaulted to: DATES.
[EL Warning]: transaction: PersistenceUnitInfo ClinicDomainModel has
transactionType RESOURCE LOCAL and therefore jtaDataSource will be ignored
[EL Info]: EclipseLink, version: Eclipse Persistence Services -
2.5.2.v20140319-9ad6abd
[EL Fine]: connection: Detected database platform:
\verb|org.eclipse.persistence.platform.database.PostgreSQLPlatform|\\
[EL Config]: connection: Connection(1593245055)--connecting(DatabaseLogin(
    platform=>PostgreSQLPlatform
    user name=> "serf"
    datasource URL=> "jdbc:postgresql://ec2-34-228-254-157.compute-
1.amazonaws.com:5432/serfdb"
))
[EL Config]: connection: Connection(1446243714)--Connected:
jdbc:postgresql://ec2-34-228-254-157.compute-1.amazonaws.com:5432/serfdb
   User: serf
   Database: PostgreSQL Version: 9.2.22
   Driver: PostgreSQL JDBC Driver Version: 42.1.4.jre7
[EL Config]: connection: Connection(1987154353)--connecting(DatabaseLogin(
    platform=>PostgreSQLPlatform
    user name=> "serf"
    datasource URL=> "jdbc:postgresql://ec2-34-228-254-157.compute-
1.amazonaws.com:5432/serfdb"
[EL Config]: connection: Connection(886386381)--Connected:
jdbc:postgresql://ec2-34-228-254-157.compute-1.amazonaws.com:5432/serfdb
   User: serf
   Database: PostgreSQL Version: 9.2.22
    Driver: PostgreSQL JDBC Driver Version: 42.1.4.jre7
[EL Info]: connection:
file:/E:/EclipseWorkspace/ClinicDomainModel/build/classes/ ClinicDomainMode
1_url=jdbc:postgresql://ec2-34-228-254-157.compute-
1.amazonaws.com:5432/serfdb_user=serf login successful
[EL Fine]: sql: Connection(1446243714)--ALTER TABLE TREATMENT DROP
CONSTRAINT FK_TREATMENT_provider_fk
[EL Fine]: sql: Connection(1446243714)--ALTER TABLE TREATMENT DROP
CONSTRAINT FK_TREATMENT_patient_fk
[EL Fine]: sql: Connection(1446243714)--ALTER TABLE DRUGTREATMENT DROP
```

Radiology_DATES.

- CONSTRAINT FK_DRUGTREATMENT_ID
- [EL Fine]: sql: Connection(1446243714)--ALTER TABLE SURGERY DROP CONSTRAINT FK SURGERY ID
- [EL Fine]: sql: Connection(1446243714)--ALTER TABLE RADIOLOGY DROP CONSTRAINT FK RADIOLOGY ID
- [EL Fine]: sql: Connection(1446243714)--ALTER TABLE Radiology_DATES DROP
 CONSTRAINT FK_Radiology_DATES_Radiology_ID
- [EL Fine]: sql: Connection(1446243714)--DROP TABLE PATIENT CASCADE
- [EL Fine]: sql: Connection(1446243714)--DROP TABLE TREATMENT CASCADE
- [EL Fine]: sql: Connection(1446243714)--DROP TABLE DRUGTREATMENT CASCADE
- [EL Fine]: sql: Connection(1446243714)--DROP TABLE SURGERY CASCADE
- [EL Fine]: sql: Connection(1446243714)--DROP TABLE RADIOLOGY CASCADE
- [EL Fine]: sql: Connection(1446243714)--DROP TABLE PROVIDER CASCADE
- [EL Fine]: sql: Connection(1446243714)--DROP TABLE Radiology_DATES CASCADE
- [EL Fine]: sql: Connection(1446243714)--CREATE TABLE PATIENT (ID BIGINT NOT NULL, PATIENTID BIGINT, DOB DATE, PATIENT_NAME VARCHAR(255), PRIMARY KEY (ID))
- [EL Fine]: sql: Connection(1446243714)--CREATE TABLE TREATMENT (ID BIGINT NOT NULL, TTYPE VARCHAR(31), DIAGNOSIS VARCHAR(255), patient_fk BIGINT, provider_fk BIGINT, PRIMARY KEY (ID))
- [EL Fine]: sql: Connection(1446243714)--CREATE TABLE DRUGTREATMENT (ID BIGINT NOT NULL, DOSAGE FLOAT, DRUG VARCHAR(255), PRIMARY KEY (ID))
- [EL Fine]: sql: Connection(1446243714)--CREATE TABLE SURGERY (ID BIGINT NOT NULL, DATE DATE, PRIMARY KEY (ID))
- [EL Fine]: sql: Connection(1446243714)--CREATE TABLE RADIOLOGY (ID BIGINT NOT NULL, PRIMARY KEY (ID))
- [EL Fine]: sql: Connection(1446243714)--CREATE TABLE PROVIDER (NPI BIGINT NOT NULL, PROVIDER_NAME VARCHAR(255), SPECIALIZATION VARCHAR(255), SPECIAL INTEGER, PRIMARY KEY (NPI))
- [EL Fine]: sql: Connection(1446243714)--CREATE TABLE Radiology_DATES
 (Radiology_ID BIGINT, DATES DATE)
- [EL Fine]: sql: Connection(1446243714)--ALTER TABLE TREATMENT ADD CONSTRAINT FK_TREATMENT_provider_fk FOREIGN KEY (provider_fk) REFERENCES PROVIDER (NPI)
- [EL Fine]: sql: Connection(1446243714)--ALTER TABLE TREATMENT ADD
 CONSTRAINT FK_TREATMENT_patient_fk FOREIGN KEY (patient_fk) REFERENCES
 PATIENT (ID)
- [EL Fine]: sql: Connection(1446243714)--ALTER TABLE DRUGTREATMENT ADD
- CONSTRAINT FK_DRUGTREATMENT_ID FOREIGN KEY (ID) REFERENCES TREATMENT (ID)
- [EL Fine]: sql: Connection(1446243714)--ALTER TABLE SURGERY ADD CONSTRAINT
- FK_SURGERY_ID FOREIGN KEY (ID) REFERENCES TREATMENT (ID)
- [EL Fine]: sql: Connection(1446243714)--ALTER TABLE RADIOLOGY ADD
- CONSTRAINT FK_RADIOLOGY_ID FOREIGN KEY (ID) REFERENCES TREATMENT (ID)
- [EL Fine]: sql: Connection(1446243714)--ALTER TABLE Radiology_DATES ADD

```
CONSTRAINT FK_Radiology_DATES_Radiology_ID FOREIGN KEY (Radiology_ID)

REFERENCES TREATMENT (ID)

[EL Fine]: sql: Connection(1446243714)--DELETE FROM SEQUENCE WHERE SEQ_NAME = SEQ_GEN

[EL Fine]: sql: Connection(1446243714)--SELECT * FROM SEQUENCE WHERE SEQ_NAME = SEQ_GEN

[EL Fine]: sql: Connection(1446243714)--INSERT INTO SEQUENCE(SEQ_NAME, SEQ_COUNT) values (SEQ_GEN, 0)

[EL Config]: connection: Connection(1446243714)--disconnect

[EL Info]: connection:

file:/E:/EclipseWorkspace/ClinicDomainModel/build/classes/_ClinicDomainMode

l_url=jdbc:postgresql://ec2-34-228-254-157.compute-

1.amazonaws.com:5432/serfdb_user=serf logout successful

[EL Config]: connection: Connection(1593245055)--disconnect
```

[EL Config]: connection: Connection(886386381)--disconnect