

CS 548—Enterprise Software Architecture and Design

Assignment Four—Object Relational Mapping—Rubric

1. Report -30

- a. E-R description -5
- b. SQL scripts for creating tables -10
- c. Video showing generation of SQL scripts -15

2. Patient entity: -15

- a. @Id @GeneratedValue Declare primary key -5
- b. @Temporal for birthdate -5
- c. @OneToMany relationship to Treatment -5
 - i. cascading removal
 - ii. mappedBy attribute set

3. Treatment entity: -35

- d. Base class already provided
- e. Subclasses for radiology, surgery (drug treatment already provided) -15
- f. @Id @GeneratedValue Declare primary key -5
- g. @ManyToOne relationship to Patient, Provider -5
- h. @Inheritance, use join strategy or table-per-subclass strategy -5
 - i. Discriminator column is *not* required except for single-table strategy
- i. @Temporal for date fields -5 (if only omitted in radiology -2)
- j. Radiology dates: either @ElementCollection or define separate entity for each Radiology date -5

4. Provider entity: -20

- k. Class definition (NPI, specialization) -10
- l. @Id Declare primary key (may be NPI or auto-generated) -5
- m. @OneToMany relationship to Treatment -5
 - i. cascading removal
 - ii. mappedBy attribute set