CS 548/SOC 542—Enterprise Software Architecture and Design Assignment Five—Domain Driven Design—Rubric

5 Report

5 Factory Pattern:

1. 5 Factory objects for providers.

15 Repository (DAO) Pattern:

- 1. 10 PatientDAO and ProviderDAO
 - a. All DB query and update logic is in DAOs (no exceptions!)
- 2. 5 TreatmentDAO in provider entities
 - a. Declared @Transient
 - b. Setter callback pattern, set when patient/provider is persisted/retrieved
 - c. (Cache the TreatmentDAO in a patient or provider only suggest)
 - d. (Cache the EntityManager in a patient or provider DAO only suggest)

15 Aggregate Pattern:

- 1. -15 if treatments are returned from patients or providers
- 2. Use Visitor pattern to provide client access to treatments, in patient and provider (-10 if they export entity object through visitor)

40 Operations

- 1. 4 Add a patient (complete PatientDAO.addPatient)
- 2. 4 Get patient (PatientDAO.getPatient)
- 3. 4 Get patient by patient id (PatientDAO.getPatientByPatientId)
- 4. 4 Add a provider (ProviderFactory.createProvider and ProviderDAO.addProvider)
- 5. 4 Get provider (ProviderDAO.getProvider)
- 6. 4 Get provider by NPI (ProviderDAO.getProviderByNPI)
- 7. TreatmentFactory methods for radiology and surgery
- 8. 4 Provider.addTreatment and Patient.addTreatment:
 - a. set forward and backward pointers in both
 - b. provider addTreatment calls patient addTreatment
- 9. 4 Patient.getTreatmentIds and Provider.getTreatmentIds
- 10. 4 Patient.exportTreatment and Provider.exportTreatment

20 Testing (video)

Demonstrate creating patient, provider, treatments, and querying treatments.. Testing in test bean, output should be written to the log.