Assignment-5-DDD

Contents:

- My zip folder contains my eclipse projects: ClinicApp, ClinicDomain, ClinicInit, ClinicRoot.
- My executable file named ClinicApp.ear also included in the zip folder.
- There is a video which demonstrates the deployment of the executable file on payara server.

Testing Operations:

- Created 4 patients: Ishan Pandya, John Doe, Mitul Shah, Malav Patel.
- Created 2 providers: Rohan Mehta, Dilip Mehta.
- Treatment added: Drug-Treatment, Surgery, Radiology.
- Retrieved patient information through getPatient() and getPatientByPatientId() method.
- Retrieved provider information through getProviderById() and getProviderByNPI() method.
- All this testing operations are included in InitBean class of ClinicInit project.

Use of Patterns:

1. **Factory Pattern:** Used to create patient, provider and treatment entities
   a. IPatientFactory: It defined method for creating patient entities.
   b. IProviderFactory: It defines method for creating provider entities.
   c. ITreatmentFactory: It defines method for creating treatment entities.

2. **Repository Pattern:** Used to access and store the patient, provider and treatment entities.
   a. IPatientDAO: Used for persisting and retrieving the patients from database.
   b. IProviderDAO: Used for persisting and retrieving the providers from database.
   c. ITreatmentDAO: Used for persisting and retrieving the treatments from database.

3. **Aggregate Pattern:** Used to access and persist treatment information through patient and provider entities.

4. **Visitor Pattern:** Provides a callback operation for each treatment type.
   a. ITreatmentExporter: Defines a callback object for drugtreatment, surgery, and radiology treatment types.

5. **Entity manager:** It is used for performing query operations on the database.