Lab exam: Hibernate MM: 60 Mtime :1 Hr 30 Min

Refactoring exsiting jdbc appliation:

You find attached project that is an existing jdbc application from an book publication house with following database design;

CREATE DATABASE bookstore;

USE bookstore;

CREATE TABLE PUBLISHER (

CODE VARCHAR(4) NOT NULL,

PUBLISHER\_NAME VARCHAR(100) NOT NULL,

PRIMARY KEY (CODE)

);

CREATE TABLE BOOK (

ISBN VARCHAR(50) NOT NULL,

BOOK\_NAME VARCHAR(100) NOT NULL,

PUBLISHER\_CODE VARCHAR(4),

PRIMARY KEY (ISBN),

FOREIGN KEY (PUBLISHER\_CODE) REFERENCES PUBLISHER (CODE)

);

CREATE TABLE CHAPTER (

BOOK\_ISBN VARCHAR(50) NOT NULL,

CHAPTER\_NUM INT NOT NULL,

TITLE VARCHAR(100) NOT NULL,

PRIMARY KEY (BOOK\_ISBN, CHAPTER\_NUM),

FOREIGN KEY (BOOK\_ISBN) REFERENCES BOOK (ISBN)

);

Domain model of existing application:

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public class Book {

private String isbn;

private String name;

private Publisher publisher;

private List<Chapter> chapters;

}

public class Chapter {

private String title;

private Integer chapterNumber;

}

public class Publisher {

private String code;

private String name;

}

1. Run above mentioned quary with database and populate some records.

2. Import the attached project with eclipse and run it.

3. In the service layer, existing application consist of two methods one to addObjectGraph to database and other to read it back using jdbc, go through it and run it

4. Document problem with existing application ( You can refer SO)

4. Refector application with hibernate with proper layers ie web layer , service layer, persistance layer, Use Java 8 straem to print all books from application along with publisher information.