­Today’s Objectives

Revise Entity States , auto dirty checking , Session API

Any specific questions ?

New Topics

1. Image Handling
2. Advanced Hibernate
3. JPA Inheritance
4. Establish bi dir association between entities
5. Cascading
6. Orphan removal
7. JPA Fetch Types and LazyInitializationException
8. **Image Handling**

1.1 **Save user image in DB**

i/p - user id , image file name(path)

o/p – message

1.2 **Restore user image from DB**

i/p - user email ,new image file name(path) - where the image from DB will be stored

o/p – message

Instead of using File I/O methods -

**Use FileUtils class** from Apache supplied , commons-io.jar

Its dependency is already added in pom.xml

**Methods**

1. public static byte[] readFileToByteArray(File file) throws IOException

Reads the contents of a file into a byte array. The file is closed afterwards.

2. public static void writeByteArrayToFile(File file, byte[] data) throws IOException

Writes a byte array to a file creating the file if it does not exist. Closes the file later.

1. Use **Lombok annotations** to reduce boilerplate code from Java classes (typically POJOs)

Refer - " day9\_help\readmes\Regarding Lombok.txt"

**Enter advanced hibernate**

Refer - " day9-data\day9\_help\Advanced Hibernate sequence.txt"

1. Inheritance
2. Associations

Establish bi directional association between entities.

* Problems , cause n solutions.

1. **Solve objectives**

* **Add new restaurant**
* **Add single food item to the restaurant**
* **Add multiple food items to the restaurant**
* **Remove specified food item from the specified restaurant**
* i/p – food item id , restaurant id

o/p – mesg

DB action – child rec should be deleted from food items table

* **Get Restaurant details , by its name**

i/p **Restaurant** name

o/p **Restaurant** details or exception in case of invalid name

* **Get Restaurant n food item details, by restaurant name**

i/p **Restaurant** name

o/p **Restaurant** + food item details or exception in case of invalid name