DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING SUBJECT CODE: 19CS2107 ENTERPRISE PROGRAMMING WORKBOOK

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HIDERNATE-1#0	
Date of the Session://	Time of the Session:to
Prerequisite:	•
☐ Basic idea on Hibernate	
Pre-Lab Task:	
1. What is ORM tool?	
Ans. ORM Stands for object-Relation	rd Mapping is a Programming techniq
for converting data blue relationed data C# etc., An ORM tool Simplifies de	above & ODP larguages of Java,
C# etc. 1 AVIORITIES	The second of th
 Disadvantages of JDBC/ Advantages of JDBC and Hibernate 	Hibernate/ Difference between the
JDBC	tubernate
It needs to write Code to map the	It Self maps Java classes to database
object models data to relational and its	table using x ml of) by using anotation
corresponding Schema. able to need to be create manual in	automatic table creation takes Place.
data base to y-catch blocks are required to hardle 3. Name the 4 layers of hibernate architecture	need by try-cutch blocks, as hibernate handled by converting idsc to exceptions to unchecked exceptions
Ans The Lay leaves of hibernate	architecture

Ans: The four layers of nucon.

(i) java application layer.

(ii) Hubernate' Frame work layer.

(iii) Backend espi layer.

(iv) Database layer.

4. Write the syntax of mapping of xml and configuration of xml?

Syntan +

(hibernate-mapping).

(class name = Poso class " table = tablename").

L'ich name = "Noriable name" Column = "Column name in database)

type = sava / helbernate type"/>.

2 ParoPorty name = "Variable 2 name" column = "column name indalabori type z javal hibernate type "/>.

(Iclass) < bill hibernate -mapping)</p>

Syntan 7

(hilbernale-Configuration)

(Property name = "connection driver class"> Driver class name < (Property).

LPROPORTY name = "Connection . WIL") URL / [Property >,

(Property name = "Connection . user" > wer < 1 Property >.

< Property name > "Correction Password > Password < 1 Property >.

'Property name = "Showsal" > true / false </property .).

< Profesty name > "dealet" > Dalabase dialet class < /Property>

(Property name = " hom 2 adde auto "> create / applate 21 Property >.

(mapping resource 2 hbm file Iname . XML ").

(mapping sesource z"homfile a name xml">.

Usesian factory).

(15: bernate - Configuration)

In Lab Task:

1. Sreenivas, the proprietor of a rice mill, needs to keep up the information about the rice bags produced at his mill. He wants to save the cost, type of the rice (polished/ non-polished) and amount in kilograms for each bag. Write a hibernate application to insert the details of bags manufactured. The application should ask the user whether he wants to insert a details of a bag each time until he says 'no'. For every 'yes' it should gather the details of the bag i.e, the id number, amount, cost and type.

Writing space for the Problem:(For Student's use only)

Poso file (Rio bag isva)

Package my Package;

Public class Rice berg {

Private int id; Private quantity; Private double Cost;

Private String type,

Public int get IdC) {.

gotuen id:

Public void Set Id (int Pd) { Return quantity; }.

Public our get Quartity () { return quartely "3.

Public vord Set Quartely [int quantity) & this quantity = quantity]

Public double get Cost () { return this. Cost; }

Public yord Set WSt () { set this cost = Cost; }.

Public String gret type() { return type; }

Public void Set Type () { this Type = type }

Mapping bile + Package my Padrage;

Public class Rice Doogs ?.

(hillorate - mapping).

Eclass = name = "Ricebay. java" table = "Ricebay").

Lidrame = id " Column 3B-id"> [Property name = "quartity" Glunn = "Quartity" type = "Storing"/> < Property news = "Cost" Column = "Cost type = "String" > (/class) (Thébelnate mapping) Config file: (?xm(version="1.0" enloding=firsf=8"]>. (100 CTYPE hibelnate - Contiguration PUBLIC-4 Hibelnate) Hibelnate Corliguration DTD 3.0 11 EN" " http: 11 hiberneite. Source forge not / hiberneite. Configuration = 3.0 dtd">. Cession efactory 7. < Property name = "Connection, driver Class" > olable idbo. driver. otable Driver (/Property). CProperty name =" Correction. usl" > Connection i dbc; oralle this; (e) Calhor-: 1552: x (C/Property). C Property name 2 Connection Parswold"> manager CProperty name 2 Shoro-Sq. L'Stare (Property) (Property name: Lhomedd1. auto") inplate <1 Property> (Property) true [Property name = dialect ") org. helanate. dialet. oracle Dialet (Property) (mapping Pressurce = "ricetag. hbm.xml"/> (servion -factory). (hilernale Configuration) Logic fire : Package my Package; import sava util. *; impolt sava 20 . *; impolt org. hiberat. "

```
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                Writing space for the Problem:(For Student's use only)
 Public class Delails.
        Public State void mais (String C) args ).
               Scarner Scanner (Systemis);
               Configuration (Fg 2 New Configuration ();
                Cfg. Configure ("hibernate, Cfg. xmt"):
               Session factory Sf = Cfg. build Session factory (5;
while CContinues)
{ Ricebags = new Ricebug();
 System out Print in ("enter "id of lice borg");
   int. ame · bid = Sc. next Int ();
 System out Print In ( enter quantity of sice being in legs),
   int amt = Scineat Int ();
  System out . Print in C"enter Cost of riceborg"),
 double (St= SC-next Double ();
  System. ord. Prent in ("enter type of ricitory");
  String t=Sc-next ()'
  '85013dCbid); 8. Set Quartity (ant); 8. Set Cort (CS+);
   8. Settype ( t);
Transaction tx 25. begin Transaction ();
System.out . paint in ("Do you want to uself (Yes/No):");
 String. Proceed = Sc. nect (3),
```

i'l (Process equals ("Yes"))

{ continues = true;

Che {
Continues: folse;
}
System. out. Print (n L' Dete has been entered");
S. Eclose ();
}

2. Now Sreenivas, wants to sell a bag to a customer. he knows the id number of the bag and needs to retrieve the cost. Sreenivas doesn't encourage bargaining. So if the customer wants to buy the bag at the same value then he sells the bag and erases information about that bag. Write the hibernate application which asks the id number of the bag, displays the price of that bag, and then asks whether the customer wants to purchase the bag or not. If 'yes' then the details of the bag should be erased. (Note: Write only the java file with logic. While executing, implement the POJO, mapping, configuration files of previous question, since we are operating on same data)

Writing space for the Problem:(For Student's use only)

```
Java util . +; import java io . +; import org. hilbernale . +;
Public class Sell Bag {.
   Public Statie void main (String [] args).
     E garner Scaner (System. is);
  Configuration (+9 = new Contiguration ();
       Cfg. Conbigure ("helserrade, Cfg. XmL");
       Servin Factory SP = CFg. build Session Factory ();
        Session S; Sp. open Session ();
     System. out Print (n("enter id of rice bas")).
   int X= Sc-next Int ();
Object 0 = 5- Load (Rice borg. Class, new Integer (x));
System out paint in (" the lost of rice boug is "+ 9. get lost ());
System out Print Ln ("voant to Purchas burg (yes/no)");
Storing y2 Sc-next L>%
          Bronsaction & 25. blegin Transaction ();
   ·y (y.equals("Yes")){
            S. delete (8);
            tx. Commit();
    System-out · Print h ("Bag 'y Sole");
```

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Writing space for the Problem:(For Student's use only)

Writing space for the Problem: (For Stur System. out Print In (" a lot Sold"); 3. close(); 3.

Post Lab Task:

- Gokul Fabrics has wide range of various fabrics in different colours. The owner of the shop needs to keep up the information of the fabrics he have. He want to save the type, colour, available length and cost per metre for each fabric. He also wants to update the length of the fabric when he sells it to the customer.
 - a) Write a Hibernate application to insert the details of the fabric.
 - b) Write a Hibernate application which requests the id number of the fabric and its length sold, displays the total selling cost and then updates the data with the remaining length.

Writing space for the Problem:(For Student's use only)

Package my Package; Public class Goland Fabrics E. Private in bid; Private String type;
Private double Cost Primites;
Rose Private double awailability; Pouvate double loss Per meter; Public get go Fid () { return fid; ?. public String get type { return type; }. Public void Set Fird (int find) Ethis-Fird = Fied; 3. Public void Set type (String type) { this, type=type}. Public void Set Availability (double availability) {. this availability;

Public void Set Cost Per meter (double Cost Per meter) {.

Prublic void Set Cost Per meter = Cost Per meter;

this Cost Per meter = Cost Per meter;

27 xml Nerson <! DOC type to hibernate mapping Public "Itilbernate Itellernate mapping - 30 DTD 3.01/EN" http://hibernate Source borge red | hilernate mapping - 30 83

Lhibernate - Configuration >. (Session - Factory) (Session - factory).

(Property name = "Connection obruser - class") orable is disc. driver Facle Oriver (Proporty) 2 property name = "arrection wol" > idsc-oracle: this: locally 1552: xe 2/Property >-[Property name = "Connection uses" > System < | Property >.) LProperty name: "Connection password"> manager </property). (Property name; "Show Sql"> true 2/ Property > [Property name = "hbm2ddl.auto") update/ Property) (Property name = "dialcut" > org hildrande. dealest drade Dialect (Property) (mapping resource = "gokulfabosics hilom. xml"/> (Session - Factory (helvernate - Contiguration) mapping bile -L? xml Version= "1.0" encoding = "UTF-8"?) < hibernate -mapping > Class name ="my Package, Gokul Fabrics" fable = "Fabrics">. Lid name = "Fid" column z"id no" > (generated class = "assigned") Ludz. 2 property name = "type" Column type"/> 1 Property name = "availability" Column="length"/> 1 Paraparty name = "Cost Parameter" column = "cost "/> (1 class'> I thibernate - mapping).

```
logi file:
```

Writing space for the Problem:(For Student's use only)

Package my Package; impost java util *; impost org hibornate . *; import my Package: Rice bag; Public class Insert Poblic & Public State void mais (String [] algs). Scarner Sc = new Scarner (System. is); Bodean Continues = torue; Configuration CP3 = new Configuration (); Cfg. Eurlique ("hilernate, hbm. xml"); Session Factory SF=CFg. build Session Factory (); Cassion S = SF. Open Session (); while (Continues) Grokul fabrics 9 = neus Grokul fabrics (); System out. Print in ("Enter id of fabrice"); int id=Sc. next 3nt (>) System. out. Paint is ("enter type of fabric"), String type = SC. rent(); System out Paint or C"enter availability of Palotice is meters.); double avail-screet Double(); System. out Print in C'enter cost Per meter"), Stouble . C = SC. next Double (s; g.selftdx; g. ser Type (type); g. Set Availability (avail) S. Serve (9); Transaction to = S. begin Transactions

```
Lx. Commit ()
System. out Print W" Do you want to insert ( fes/no): ");
 String Proceed = Sc. next ();
   "y (Proceed equals (" yes")).
       E continues = toue;
   System-out Print in L'1 Oute hasbeen extens entered ");
    S. CLOSE () 1, 33.
Package my Package's
import java. util. *; import sava. is. *, import org. hiborate *;
Public class update fabric {.
       Public Static void mais (String [] args).
    Scarrer Sc - new Scarner (System in ),
    System-out Print In ("enter id of bablie");
      int Y=SCREETING ();
    System out Paid in ("entes longth of ballie"),
     double 4= Sc. next Double ();
     Consiguration ( Rg = new Consiguration
        Cfg. Contigure ("hibernate Cfg. xm");
     Session factory SF = CFg. build Session Factory ();
          Session S = St. open Session Co:
           object o = S. load (Groker Fabrics, Class, new Integers (x));
      Groku Pabries 9 = (Go kul Fabrics) 0;
       System out Paint in ("The Selling Cost of baldie is "+ Selling (of));
         9. Set Availability (rem);
           In - Commit Li;
```

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System. out · Print (n (" Date is uploaded");
Sclose();

S-closeco;