**Implementation of creating persistent objects using JDO and OODB**

**IDE Eclipse**

**Jar file required : JDO-1.0.1.jar**

**Objectdb.jar**

**Steps**

**1** Create new project

**2** Add above two external jar files

**3** Create following four files

Person.java, Person.jdo, JDOTest.java, EMain.java

**4** Run eMain or JDOTest

Objects will be stored into Person.odb.

Please refer JDO and OODB manual.

**Person.java**

**package** jdoapp;

**import** javax.persistence.Entity;

@Entity

**public** **class** Person {

// Persistent Fields:

**private** String firstName;

**private** String lastName;

**private** **int** age;

// Constructors:

**public** Person() {}

**public** Person(String firstName, String lastName, **int** age) {

**this**.firstName = firstName;

**this**.lastName = lastName;

**this**.age = age;

}

// String Representation:

**public** String toString() {

**return** firstName + " " + lastName + " (" + age + ")";

}

}

**Person.jdo**

<?xml version="1.0" encoding="UTF-8"?>

<!DOCTYPE jdo SYSTEM "http://java.sun.com/dtd/jdo\_1\_0.dtd">

<jdo>

<package name="">

<class name="Person" />

</package>

</jdo>

**JDOTest.java**

package jdoapp;

import java.util.\*;

import javax.jdo.\*;

import com.objectdb.Utilities;

public class JDOTest {

public static void main(String[] args) {

Properties properties = new Properties();

properties.setProperty("javax.jdo.PersistenceManagerFactoryClass", "com.objectdb.jdo.PMF");

properties.setProperty("javax.jdo.option.ConnectionURL", "Person.odb");

PersistenceManagerFactory pmf =JDOHelper.getPersistenceManagerFactory(properties);

PersistenceManager pm = pmf.getPersistenceManager();

**//Create persistent objects**

pm.currentTransaction().begin();

Person person = new Person(args[0], args[1], Integer.parseInt(args[2]));

pm.makePersistent(person);

System.out.println("Successful....");

**//Print all persons in the database**

Extent extent = pm.getExtent(Person.class, false);

Iterator itr = extent.iterator();

while (itr.hasNext())

System.out.println(itr.next());

extent.closeAll();

**//First Query display all persons whose age>=35**

Query query = pm.newQuery(Person.class, "this.age >=45");

Collection result = (Collection)query.execute();

Iterator itr1 = result.iterator();

while (itr1.hasNext())

System.out.println(itr1.next());

query.close(result);

pm.currentTransaction().commit();

pm.close();

}

}

**eMain.java**

**package** jdoapp;

**public** **class** eMain {

**public** **static** **void** main(String[] args) {

// Enhance the Person class if necessary:

com.objectdb.Enhancer.*enhance*("Person");

// Now run the real main:

JDOTest.*main*(args);

}

}