Assignment 3

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| **Problem Statement** | To develop any distributed application with CORBA program using JAVA  IDL. |

**Code**

**urlreader.idl**

**module** URLReaderApp

{

interface URLReader

{

long urlbytes(in string url);

oneway void shutdown();

};

};

**URLReaderObj.java**

**import** URLReaderApp.\*;

**import** org.omg.\*;

**import** java.io.InputStream;

**import** java.net.MalformedURLException;

**import** java.net.URL;

**import** java.util.\*;

**public** **class** URLReaderObj **extends** URLReaderApp.URLReaderPOA {

**private** org.omg.CORBA.ORB orb;

**public** **void** setORB(org.omg.CORBA.ORB orb2) {

orb=orb2;

}

@Override

**public** **int** urlbytes(String url) {

URL url2;

**int** length=0;

**try** {

url2 = **new** URL(url);

InputStream is = **null**;

is = url2.openStream();

length = is.available();

**if** (is != **null**)

is.close();

} **catch** (Exception e) {

*// TODO Auto-generated catch block*

e.printStackTrace();

}

**return** length;

}

@Override

**public** **void** shutdown() {

*// TODO Auto-generated method stub*

orb.shutdown(**false**);

}

}

**StartServer.java**

**import** URLReaderApp.\*;

*//import org.omg.\*;*

**import** org.omg.CORBA.ORB;

**import** org.omg.CORBA.ORBPackage.InvalidName;

**import** org.omg.CosNaming.NameComponent;

**import** org.omg.CosNaming.NamingContextExt;

**import** org.omg.CosNaming.NamingContextExtHelper;

**import** org.omg.PortableServer.POA;

**import** org.omg.PortableServer.POAHelper;

**import** java.util.\*;

**public** **class** StartServer {

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

**try** {

*// init orb*

ORB orb = ORB.init(args,**null**);

*// reference to POAHelper*

POA rootpoa = POAHelper.narrow(orb.resolve\_initial\_references("RootPOA"));

*// activate poamanager*

rootpoa.the\_POAManager().activate();

*// make servant*

URLReaderObj urlreadobj = **new** URLReaderObj();

*// register with orb*

urlreadobj.setORB(orb);

*// Get object reference from servant*

org.omg.CORBA.Object ref = rootpoa.servant\_to\_reference(urlreadobj);

*// get href ie helper reference*

URLReader href = URLReaderHelper.narrow(ref);

*//*

org.omg.CORBA.Object objref = orb.resolve\_initial\_references("NameService");

*//*

NamingContextExt ncRef = NamingContextExtHelper.narrow(objref);

NameComponent path[] = ncRef.to\_name("ABC");

ncRef.rebind(path, href);

**while**(**true**)

orb.run();

} **catch** (Exception e) {

*// TODO Auto-generated catch block*

e.printStackTrace();

}

}

}

**StartClient.java**

**import** URLReaderApp.\*;

*//import org.omg.\*;*

**import** org.omg.CORBA.ORB;

**import** org.omg.CORBA.ORBPackage.InvalidName;

**import** org.omg.CosNaming.NamingContextExt;

**import** org.omg.CosNaming.NamingContextExtHelper;

**import** java.util.\*;

**public** **class** StartClient {

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

**try** {

ORB orb = ORB.init(args,**null**);

org.omg.CORBA.Object objref = orb.resolve\_initial\_references("NameService");

NamingContextExt ncRef = NamingContextExtHelper.narrow(objref);

URLReader urlobj = URLReaderHelper.narrow(ncRef.resolve\_str("ABC"));

Scanner s = **new** Scanner(System.in);

**while**(**true**) {

System.out.println("Enter url:");

String surl = s.nextLine();

**int** len = urlobj.urlbytes(surl);

System.out.println("Bytes got are url:"+ len);

}

} **catch** (Exception e) {

*// TODO Auto-generated catch block*

e.printStackTrace();

}

}

}

**Output**





