CODES DEVELOPED FOR CRUD OPERATIONS

For the development of our web page we have written codes in front end i.e in Eclipse where we have written codes for Insert , Retrieve , Update , Delete. The Insert code helps us to insert a record of DRDL employee which are in turn stored in the database in the backend software i.e Oracle SQL Developer. The Retrieve code is used to access the records present in the database where we have inserted the records. It displays all the records present in the database. The Update code is used to update specific record in the database where the existing record is updated with the new record and saved in the database. Similarly, the Delete code is used to delete specific record in the database which also affects the table as a record gets deleted in the database. Now we will be seeing the codes written in Eclipse Software.

CODES FOR INSERTING THE DETAILS OF AN EMPLOYEE

• Code 1(Registration insert.jsp)

```
<input type="text" name="FName" id="FName" size="69"
placeholder='Enter first name' required=""></font></b>
                                                                                                                                                                                                                                                                                                                                                 <b><font face="Italian" size="4"
color="purple">&nbsp;&nbsp;&nbsp;
                                                                                                                                                                                                                                                                                                                                                  2.    Last Name 
         
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          &n
                    pageEncoding="ISO-8859-1"%>
                                                                                                                                                                                                                                                                                                                                               sinsp, ainsp, ains
                         <%@ page import="java.io.*,java.util.*"%>
    <title>List of DRDL Employees with New</title>
   <body bgcolor="pink">
align="center"><b><font face="Cambria" size="5"</pre>
   color="red">Welcome</font></b>
                                                                                                                                                                                                                                                                                                                                                 3.   
Designation       
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          &n
  Date date=new Date();
out.print(" "+date.toString()+" ");
%></center><br/>br>
                                                                                                                                                                                                                                                                                                                                              dbr>
<a href="Display page.htm"><center><button><font
face="Cambria" size="5" color="blue">Main
page</button></center></a>
align="Center"><b>font face="Cambria" size="5"
color="blue">Formansps; & for fanbsp; & for fa
                                                                                                                                                                                                                                                                                                                                                 <form name="f1" action="insert.jsp"
  method="POST">
                                                                                                                                                                                                                                                                                                                                                                  <select name="Directorate" id="Directorate">
<option value=placeholder='SELECT'></option>
<option value="ARCSE" >ACSE</option>
<option value="ARASH" >AIL</option>
<option value="ARASH" >ARASH</option>
<option value="ARASH MK-15" >ARASH MK-15</option>
<option value="ARASH-NG" >ARASH MK-16</option>
<option value="ARASH-NG" >ARASH-PRIME</option>
<option value="ARASH-PRIME" >ARASH-PRIME</option>
                                                                                        <table border='1px' width='100%'
 nbsp;                
                                                                                                                                                                                                                                                                                                                                                                    <option value="AMMPDE" >AMMPDE
<option value="ANSP" >ANSP</option>
<option value="ASTRA MK-I UT" >ASTRA MK-I UT</option>
                     
                                :      
                                                                                                                                                                                                                                                                                                                                                                     <option value="ASTRA MK-II" >ASTRA MK-II
```

```
<option value="HSTDV" >HSTDV</option>
<option value="HYFD-636" >HYFD-636</option>
<option value="K4" >K4</option>
<option value="K5" >K5</option>
<option value="KUSHA-IAF" >KUSHA-IAF</option>
<option value="KUSHA-IAF" >KUSHA-IAF</option>
                                                                                                                                                                                                                                                                                <input type="text" name="Ext" size="69"
placeholder='Enter extension no'</pre>
                                                                                                                                                                                                                                                                                <option value="LFRJ" >LFRJ</option>
<option value="LRSAM-IAF" >LRSAM-IAF</option>
<option value="LRSAM-IN" >LRSAM-IN</option>
                                                                                                                                                                                                                                                                                Noanbsp;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       
                                                                                                                                                                                                                                                                                 bsp;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       &nbs
 <option value="MAG" >MAG</option>
<option value="MPATGM" >MPATGM</option>
                                                                                                                                                                                                                                                                                :        
<input type="text" name="Mobile" size="69"
placeholder='Enter mobile no' required=""></font></b>
 coption value="MRSAM(IN)-PS" >MRSAM(IN)-PS/option>
coption value="MRSAM(IN)-PS" >MRSAM(IN)-PS/option>
coption value="NAG MR-II" >NAG MK-II
coption value="NCARN" >NGARM
coption value="PGAD" >FGAD
coption value="PGAD" >FGAD
coption value="PJIO (WCX)" >FJIO (WCX)
coption value="PJIO -MS" >FJIO -MS
coption value="PJIO-MS" >FJIO -MS
coption value="PMT AF" >FMT AF
coption value="PSPI-NAG" >FSPI-NAG
coption value="PSPI-NAG" >FSPI-NAG
coption value="PSPAM" >QRSAM
coption value="PSAM" >QRSAM-(option>
coption value="RASAT" >RAST
coption value="RASAT" >FAST
coption value="SCPT" >SCPT
coption value="SFDR" >SFDR</pri>
coption value="SFDR" >SFDR-651
coption value="SFDR" >SLMC
coption>
                                                                                                                                                                                                                                                                                                     <b><font color="purple"
"Italian" size="4">&nbsp;&nbsp;&nbsp;
                                                                                                                                                                                                                                                                                7.   E-mail
Id           
                                                                                                                                                                                                                                                                                sp;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       &nbsp
                                                                                                                                                                                                                                                                                nbsp;    
                                                                                                                                                                                                                                                                               <option Value="SIDN-051" >STDN-0518/Option>
<option Value="SICM" >SLCM</option>
<option value="SMART" >SMART</option>
<option value="STAR" >STAR</option>
<option value="STAR" >VI-SRSAM</option>
                                                                                                                                                                                                                                                                               <input type="reset" value="Reset"
name="B2">
//select>//font>//b>//b>/

//select>//font>//b>//b>/
/palign="left">/b>/font color="purple"
face="Italian" size="4" >sahsp; sahsp; sahsp;
5.sahsp; sahsp; sahsp; Sternion No
                                                                                                                                                                                                                                                                                </form> </body>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         &n
           
                         :
```

• Code 2(insert.jsp)

```
<%0 page import="java.sql.*"%>
  <%0 page import="java.io.*,java.util.*"%>
  <%0 page language="java" contentType="text/html;
charset=ISO-8859-1"</pre>
                                                                                                 String st1=request.getParameter("FName");
                                                                                                 String st2=request.getParameter("LName");
                                                                                                 String st3=request.getParameter("Desn");
String st4=request.getParameter("Directorate");
String st5=request.getParameter("Ext");
    pageEncoding="ISO-8859-1"%>
                                                                                                 String st6=request.getParameter("Mobile");
String driver="oracle.jdbc.driver.OracleDriver";
String connectionUrl="jdbc:oracle:thin:@localhost:1521:xe";
String database="test";
                                                                                                 String st7=request.getParameter("Email id");
                                                                                         try{
String username="system";
                                                                                                 con=DriverManager.getConnection(connectionUrl,usernam
String password="system";
                                                                                         e,password);
Statement st=null;
                                                                                                 st=con.createStatement();
                                                                                            int j=st.executeUpdate("insert into
ResultSet rs=null;
                                                                                         REGISTRATION(first name,last name,designation,directorate,e xtension,mobile no,email id) values('"+st1+
"','"+st2+"','"+st3+"','"+st4+"','"+st5+"','"+st6+"','"+st7
Connection con=null;
int i=0;
try{
                                                                                          +"')");
       Class.forName(driver);
                                                                                            con.close();
con=DriverManager.getConnection(connectionUrl,username,pass
                                                                                                 catch (Exception e) {
word);
         st=con.createStatement();
                                                                                                         System.out.print(e);
}catch(ClassNotFoundException e) {
                                                                                                         e.printStackTrace();
       e.printStackTrace();
                                                                                                  <center><a href="1_retrieve.jsp"><button>ALL
                                                                                         RECORDS</button></a></center><br>
<html>
<head>
                                                                                            </hody>
<meta http-equiv="Content-Type" content="text/html;</pre>
charset=windows-1252">
                                                                                         </html>
<title>List of DRDL Employees with New</title>
</head>
<body>
<b><font face="Cambria" size="5"</pre>
color="#800080">List of
DRDL Employees with New CIAG Registrations</font></b>
       <8
```

CODE FOR VIEWING THE DETAILS OF AN EMPLOYEE

Code 1: reg view.jsp

```
<%@ page import="java.sql.DriverManager"%>
<%@ page import="java.sql.Connection"%>
<%@ page import="java.sql.Statement"%>
<%@ page import="java.sql.ResultSet"%>
                                                                            <b><font face="Cambria"
                                                                 color="#0000FF">E-mail Id ( 
                                                                      @gov.in) </font></b>
String driver="oracle.jdbc.driver.OracleDriver";
String connectionUrl="jdbc:oracle:thin:@localhost:1521:xe"; String datebase="test";
String username="system";
                                                                 //String EXTENSION=request.getParameter("EXTENSION");
String password="system";
                                                                 try{
                                                                       con=DriverManager.getConnection(connectionUrl,usernam
     Class.forName(driver);
                                                                 e, password);
}catch (Exception e) {
                                                                       st=con.createStatement();
                                                                 String s="select * from registration";
//String sql="select * from registration where
EXTENSION=""+EXTENSION+"" ";
     System.out.print(e);
     e.printStackTrace();
Statement st=null;
                                                                        rs=st.executeQuery(s);
ResultSet rs=null;
                                                                            while (rs.next()) {
                                                                                  String st5=rs.getString("Extension");
Connection con=null;
                                                                                  String st6=request.getParameter("Mobile");
int i=0;
                                                                                  String
                                                                 st7=request.getParameter("Email id");
<html>
                                                                 //out.println("<center><h2>You are
Here</h2></center>");
<body bgcolor="#66FF99">
<font face="Cambria" color="#800080"
style="font-size: 16pt">
<br/>b>List of Employees registered for CIAG New
                                                                                 //out.println(st5);
                                                                            i++;
Internet</b></font>
<b><font color="#0000FF"
font>
color="#0000FF">Designation</font></b>
                                                                 face="Cambria"><%out.print(rs.getString("last_name"));%></f</pre>
           <b><font face="Cambria"
color="#0000FF">
                                                                 ont>
           Directorate/Project</font></b>
color="#0000FF">Extension No</font></b>
```

```
font
face="Cambria"><%out.print(rs.getString("designation"));%><
/font>
<font
face="Cambria"><\sout.print(rs.getString("directorate"));\s><</pre>
/font>
face="Cambria"><%out.print(rs.getString("extension"));%></f</pre>
face="Cambria"><%out.print(rs.getString("mobile_no"));%></f</pre>
ont>
nt>
      con.close();
      catch(Exception e) {
    System.out.print(e);
            e.printStackTrace();
<a href="Display page.htm"><center><button><font
face="Cambria" size="5" color="blue">Main
page/button>/center>/spadia
</html>
```

CODE FOR MODIFYING THE DETAILS OF AN EMPLOYEE

Code 1(reg_update.jsp)

```
<b><font face="Cambria" color="#0000FF">
<%@ page import="java.sql.DriverManager"%>
<%@ page import="java.sql.Connection"%>
<%@ page import="java.sql.Statement"%>
<%@ page import="java.sql.ResultSet"%>
                                                                                                                                                                                                                                                           String driver="oracle.jdbc.driver.OracleDriver";
String connectionUrl="jdbc:oracle:thin:@localhost:1521:xe";
String datebase="test";
String username="system";
String password="system";
 try{
                      Class.forName(driver);
 }catch (Exception e) {
        System.out.print(e);
        e.printStackTrace();
}
                                                                                                                                                                                                                                                               //String EXTENSION=request.getParameter("EXTENSION");
Statement st=null;
ResultSet rs=null;
Connection con=null;
int i=0;
                                                                                                                                                                                                                                                                                  con=DriverManager.getConnection(connectionUrl,usernam
                                                                                                                                                                                                                                                            con=DriverManager.getConnection(connectionUrl,u
e,password);
    st=con.createStatement();
    String s="select * from registration";
    //String sql="select * from registration where
EXTENSION=""+EXTENSION+"" ";
  <html>
                                                                                                                                                                                                                                                                                        rs=st.executeQuery(s);
while(rs.next()){
 <body bgcolor="#FFCC99">
                                                                                                                                                                                                                                                                                                                             String st5=rs.getString("Extension");
String st6=request.getParameter("Mobile");
String
<font face="Cambria" color="#800080"
style="font-size: 16pt">
<br/>
<
                                                                                                                                                                                                                                                             st7=request.getParameter("Email id");
                                                                                                                                                                                                                                                             //out.println("<center><h2>You are
Here</h2></center>");
                                                                                                                                                                                                                                                                                                     //out.println(st5);
i++;
<font
face="Cambria"><%out.print(rs.getString("first_name")); %></
                                                                                                                                                                                                                                                              font>
```

```
e.printStackTrace();
ace="Cambria"><%out.print(rs.getString("last_name")); %></f
                                                                            <br>
                                                                            da href="Display page.htm"><center><button><font
face="Cambria" size="5" color="blue">Main
pages/button></center></a>
ace="Cambria"><%out.print(rs.getString("designation"));%><
font>
                                                                            </body>
ace="Cambria"><%out.print(rs.getString("directorate"));%><
<font
ace="Cambria"><%out.print(rs.getString("extension")); %></f</pre>
nt>
ace="Cambria"><%out.print(rs.getString("mobile_no")); %></f
nt>
ace="Cambria"><%out.print(rs.getString("email_id")); %></fo
ref="reg modify.jsp?extension=<%=rs.getString("extension")
">Update</a></
     con.close();
           System.out.print(e);
```

Code 2(reg modify.jsp)

```
<%@page import="java.sgl.*,java.util.*"%>>
<head>
<body bgcolor="#99FF99">
String extension=request.getParameter("extension");
Class.forName("oracle.jdbc.driver.OracleDriver");
Connection conn =
connection conn =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:15
21:xe","system","system");
Statement st=conn.createStatement();
ResultSet rs=null;
int i=0;
String s="SELECT * FROM REGISTRATION WHERE
extension="+extension+"";
//String sql="select * from registration where
EXTENSION=""+EXTENSION+"";
 rs=st.executeQuery(s);
         while (rs.next()) {
                 String st5=rs.getString("Extension");
                 String st6=request.getParameter("Mobile");
String st7=request.getParameter("Email id");
                  String st1=rs.getString("first_name");
                  String st2=rs.getString("Last_Name");
                 String std=rs.getString("Last Name");
String st3=rs.getString("Designation");
String st4=rs.getString("DIRECTORATE");
String st6=rs.getString("MOBILE NO");
String st7=rs.getString("Email_id");
```

```
      1.       First
 Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       &nbs
                  
                                                                                                   :            
<input type="text" name="FName" size="69"
placeholder="enter text"</pre>
Name         &
nbsp;        
                  
    
ambsp, ambsp, ambsp; ambs
                                 3.      
 Designation@nbsp;@nbsp;@nbsp;@nbsp;@nbsp;@nbsp;@nbsp;
                  
  anbsp; anbsp; anbsp; anbsp; anbsp; anbsp; anbsp; anbsp;
    
 %nosp; %nosp; &nosp; %nosp; %nos
                                 4.      
 Directorate/Project      &nbsp
```

```
4. %nbsp;
```

```
nbsp;       
                                                                                                                                                                                                                                                                                                                                            &
```

• Code 3(update.jsp)

```
+"',directorate='"+st4+"',mobile_no='"+st6+"',email_id='"+s
t7+"' where extension='"+st5+"'";
   int j=st.executeUpdate(s);
<%@page import="java.sql.*" %>
<head>
<body>
                                                                                                                            out.println("Updated successfully!!!");
                                                                                                                            con.close();
%
String driver="oracle.jdbc.driver.OracleDriver";
String connectionUrl="jdbc:oracle:thin:@localhost:1521:xe";
String datebase="test";
String username="system";
String password="system";
                                                                                                                            catch (Exception e)
                                                                                                                            System.out.print(e);
e.printStackTrace();
Statement st=null;
ResultSet rs=null;
                                                                                                                  Connection con=null;
try{
          Class.forName(driver);
con=DriverManager.getConnection(connectionUrl,username,pass
word);
                                                                                                                   </html>
           st=con.createStatement();
}catch (Exception e) {
    System.out.print(e);
          e.printStackTrace();
String st1=request.getParameter("FName");
String st2=request.getParameter("rName");
String st3=request.getParameter("Desn");
String st4=request.getParameter("Directorate");
String st5=request.getParameter("Ext");
String st6=request.getParameter("Mobile");
String st7=request.getParameter("Email_id");
try{
         con=DriverManager.getConnection(connectionUrl,usernam
st=con.createStatement();

String s="update registration set

first_name='"+st1+"',last_name='"+st2+"',designation='"+st3
```

CODE FOR DELETING THE DETAILS OF AN EMPLOYEE

• Code 1 (k delete.jsp)

```
<%0 page import="java.sql.DriverManager"%>
<%0 page import="java.sql.Connection"%>
<%0 page import="java.sql.Statement"%>
<%0 page import="java.sql.ResultSet"%>

                                                                                            <b><font face="Cambria"
                                                                              color="#0000FF">
                                                                                            Directorate/Project</font></b>
                                                                                             <b><font face="Cambria"</pre>
                                                                              color="#0000FF">Extension No</font></b>
String driver="oracle.jdbc.driver.OracleDriver";
String connectionUrl="jdbc:oracle:thin:@localhost:1521:xe";
String datebase="test";
                                                                                            <b><font face="Cambria"
                                                                              color="#0000FF">Mobile No</font></b>
                                                                                            <b><font face="Cambria"
String username="system";
String password="system";
                                                                              color="#0000FF">E-mail Id ( 
@gov.in)</font></b>

vidth="105"><b><font face="Cambria"</td>
try{
                                                                              color="#0000FF"> Operations</font></b>
       Class.forName(driver);
}catch (Exception e) {
       System.out.print(e);
e.printStackTrace();
                                                                              <%
                                                                               //String EXTENSION=request.getParameter("EXTENSION");
                                                                              try{
Statement st=null;
                                                                                     con=DriverManager.getConnection(connectionUrl,usernam
ResultSet rs=null;
                                                                              e, password);
                                                                              st=con.createStatement();
    string s="select * from registration";
    //String sql="select * from registration where
EXTENSION=""+EXTENSION=" ";
Connection con=null;
int i=0;
<br/>
<br/>
dy bgcolor="#CCFFFF">
                                                                                       rs=st.executeQuery(s);
                                                                                            while (rs.next()) {
                                                                                                  String st5=rs.getString("Extension");
String st6=request.getParameter("Mobile");
<font face="Cambria" color="#800080"</pre>
                                                                                                   String
style="font-size: 16pt">
<b>Deletion of Employees' details registered for CIAG New
                                                                              st7=request.getParameter("Email id");
                                                                              //out.println("<center><h2>You are Here</h2></center>");
Internet</b></font>
//out.println(st5);
                                                                                           i++:
              <b><font color="#0000FF"
<font
face="Cambria"><%out.print(rs.getString("first name"));%>
color="#0000FF">Designation</font></b>
```

```
e.printStackTrace();
face="Cambria"><%out.print(rs.getString("last_name"));%></f</pre>
                                                                            ont>
                                                                            ca href="Display page.htm"><center><button><font
face="Cambria" size="5" color="blue">Main
page</button></center></a>
face="Cambria"><%out.print(rs.getString("designation")); %><
/font>
face="Cambria"><%out.print(rs.getString("directorate")); %><</pre>
/font>
face="Cambria"><%out.print(rs.getString("extension"));%></f</pre>
ont>
face="Cambria"><%out.print(rs.getString("mobile_no"));%></f</pre>
ont>
face="Cambria"><%out.print(rs.getString("email_id"));%></fo</pre>
nt>
href="reg_delete.jsp?extension=<%=rs.getString("extension")
>">DELETE</a></td
      con.close();
      catch (Exception e) {
             System.out.print(e);
```

• Code 2(reg_delete.jsp)

```
<%@page import="java.sql.*,java.util.*"%>
<head>
<body bgcolor="#FFCC99">
String extension=request.getParameter("extension");
Class.forName("oracle.jdbc.driver.OracleDriver");
Connection conn =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:15
21:xe","system","system");
Statement st=conn.createStatement();
int i=st.executeUpdate("DELETE FROM REGISTRATION WHERE
extension='"+extension+"'");
out.println("Data Deleted Successfully!");
catch (Exception e)
System.out.print(e);
e.printStackTrace();
<br>
<a href="Display page.htm"><center><button><font
face="Cambria" size="5" color="blue">Main
page</button></center></a>
</head>
</html>
```

CODES DEVELOPED FOR FRONT PAGE(User Interface)

For the development of front page user interface of our web application we have developed codes for the banner of the web page, the operations page where the operations such as insert, retrieve, update and delete are present in the form of buttons and there is a display page where the output on clicking these buttons is displayed on it. We have created codes namely 'Frontpage.htm', 'banner.htm', 'Display_page.htm', 'Operations_page.htm'. We shall now look into the codes of how our web application is given a design.

• Front page.htm

```
<html>
<head>
<meta http-equiv="Content-Type" content="text/html;</pre>
charset=windows-1252">
<title>Front page</title>
<base target="_self">
</head>
target="contents" src="banner.htm">
   <frameset cols="281,*">
           <frame name="contents" target="main"</pre>
src="Operations page.htm" scrolling="auto">
           <frame name="main" src="Display page.htm"</pre>
scrolling="auto" target=" self">
     </frameset>
     <noframes>
     <body>
     This page uses frames, but your browser doesn't
support them.
     </body>
     </noframes>
</frameset>
</html>
```

• banner.htm

```
<font size="5" color="#FF5050">Defence
                                                                                                    <meta http-equiv="Content-Type" content="text/html;</pre>
                                                                                                    Directorate of Information Technology</b></font><font
size="5" color="#00cc00"><b><br>
Computer Network Division</b></font>
charset=windows-1252">
<title>Advanced Numerical Research & Analysis Group
<title>Advanced Numerical Research & Analys
(ANURAG)./title>
<script type="text/javascript"
src="menu/stlib.js"></script>
<!-- <script type="text/javascript"
src="menu/stlib.js"></script>
<script type="text/javascript"
src="anuragXP.files/dtree.js"></script>-->
<style>
<!--</pre>
                                                                                                            .style14 {color: #CC33FF}
.style16 {color: #FF9933}
</style>
<base target="contents">
</head>
<body topmargin="0" leftmargin="0" bgcolor="#052736">
<div align="center">
ctable border="0" cellpadding="0" cellspacing="0"
height="208" width="1255" bgcolor="#30539A">

<font color="#FFFF00"><b>
<span style="font-size: 8.0pt;
line-height: 115%">ISO 9001:2015
Certified</span></b></font>&nbsp;
```

• Display page.htm

```
<html>
<meta http-equiv="Content-Type" content="text/html;</pre>
charset=windows-1252">
<title>Display page</title>
<base target=" self">
</head>
<body bgcolor="yellow">
<br>
<hr>>
<br>>
<br>
<br>
<br>
<br>
<br>
<b><i><font face="Cambria" size="8"</pre>
color="blue">---WELCOME---</i>
<b><font face="Cambria" size="10"</pre>
color="blue">You are here</b>

</html>
```

• Operations page.htm

```
<html>
<head>
<meta http-equiv="Content-Type" content="text/html;</pre>
charset=windows-1252">
<base target="main">
</head>
<body bgcolor="#00FFFF">
<button style="width: 199; height: 32">
<a target="main"
href="Registration%20insert.jsp">INSERT</a></button>
 <button style="width: 199px; height: 33px">
<a target="main" href="1 retrieve.jsp">VIEW</a></button>
<button style="width: 200px; height: 32px">
<a target="main"
href="reg update.jsp">MODIFY</a></button>
<button style="width: 201px; height: 28px"><a target="main"</pre>
href="k delete.jsp">DELETE</a></button>
<br>
</body>
</html>
```