<Servlet Code>

**Main.Java**

package midtermProject;

import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.Servlet;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import java.sql.\*;

@WebServlet("/Main")

public class Main extends HttpServlet implements Servlet {

private static final long serialVersionUID = 1L;

public Main() {

super();

}

protected void doGet(HttpServletRequest req, HttpServletResponse res) throws IOException, ServletException {

res.setContentType("text/html");

PrintWriter out = res.getWriter();

String title = "NJIT Registration System";

int radio = -1;

radio = Integer.parseInt(req.getParameter("rd"));

String query = "";

String semester\_select = "";

String reg\_result="";

try {

Class.forName("com.mysql.jdbc.Driver");

Connection con = DriverManager

.getConnection("jdbc:mysql://localhost:3306/NJIT?user=root&password=root1234");

Statement stmt = con.createStatement();

String SQL = "DROP TABLE courses";

stmt.execute(SQL);

stmt.execute("CREATE TABLE IF NOT EXISTS courses( courseId char(30), semester char(30), courseName char(30))");

stmt.execute("Insert into courses values('CS670', 'Fall2021', 'Artificial Intelligence')");

stmt.execute("Insert into courses values('CS677', 'Fall2021', 'Deep Learning')");

stmt.execute("Insert into courses values('CS675', 'Spring2022', 'Machine Learning')");

stmt.execute("Insert into courses values('CS680', 'Spring2022', 'Linux Programming')");

switch (radio) {

case 0: {

semester\_select = req.getParameter("semester-select");

if (semester\_select.equals("Fall2021"))

query = "select \* from courses where semester='Fall2021'";

else if (semester\_select.equals("Spring2022"))

query = "select \* from courses where semester='Spring2022'";

ResultSet rs = stmt.executeQuery(query);

out.println("<html>\n" + "<head><title>" + title + "</title></head>\n" + "<body bgcolor= \"#ccf2ff\">\n"

+ "<table align=\"center\" border=1 width=30% height=30%>");

out.println("<tr><th>Course ID</th><th>Semester</th><th>Course Name</th><tr>");

while (rs.next()) {

String id = rs.getString("courseId");

String s = rs.getString("semester");

String c = rs.getString("courseName");

out.println("<tr><td>" + id + "</td><td>" + s + "</td><td>" + c + "</td></tr>");

}

out.println("</table>");

out.println("</html></body>");

stmt.close();

break;

}

case 1: {

String cId = req.getParameter("courseid");

String sem = req.getParameter("semester");

if(!cId.equals("") && !sem.equals("")) {

query ="Select \* from Courses where semester = \'"+sem +"\' and courseid =\'"+cId+"\'";

}

ResultSet rs = stmt.executeQuery(query);

if(rs.next())

{

String c = rs.getString("courseName");

reg\_result = "You are registered in " + c + " for " + sem + "!";

}

else {

if(!cId.equals("") && !sem.equals(""))

reg\_result= "The course is not offered!";

}

out.println("<html>\n" + "<head><title>" + title + "</title></head>\n" +

"<body bgcolor= \"#ccf2ff\">\n" + "</br></br></br>" +

"<h1 align=\"center\"> <font color='black'>" + reg\_result + "</font></h1>\n" + "<br><br><br>"+

"</body></html>");

stmt.close();

break;

}

}

con.close();

} catch (Exception ex) {

System.out.println(ex);

out.println("<html>\n" + "<head><title>" +

title + "</title></head>\n" + "<body bgcolor= \"#ccf2ff\">\n" + "</br></br></br>");

if(radio==0)

out.println("<h2 align=\"center\"> <font color='red'>" + "Kindly Select Semester!" + "</h2>");

else

out.println("<h2 align=\"center\"> <font color='red'>" + "Course Id or Semester should not be empty!" + "</h2>");

out.println("</body></html>");

//System.exit(0);

}

}

}