```
package sem12122.sse3305;
import java.io.IOException;
import java.text.DecimalFormat;
import java.util.ArrayList;
import javax.servlet.RequestDispatcher;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import sem12122.sse3305.service.PensionServiceIMP;
public class PensionController extends HttpServlet {
      private static final long serialVersionUID = 1L;
      RequestDispatcher dispatcher = null;
      DecimalFormat df = new DecimalFormat("#.00");
      protected void doPost(HttpServletRequest request, HttpServletResponse response)
                  throws ServletException, IOException {
            String action = request.getParameter("Button");
            System.out.println("action=" + action);
            switch (action) {
            case "CALCULATE":
                  calculatePension(request, response);
                  break;
            case "README":
                  dispatcher = request.getRequestDispatcher("/readme.jsp");
                  dispatcher.forward(request, response);
            default:
                  break:
```

```
private void calculatePension(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
      response.getWriter().append("Served at: ").append(request.getContextPath());
      PensionServiceIMP psi = new PensionServiceIMP();
      ArravList<String> details = new ArravList<String>();
      ArrayList<String> output = new ArrayList<String>();
      details = getPensionDetail(request, response);
      output = psi.kirapencen(details);
      request.setAttribute("tlahir1", details.get(0));
      request.setAttribute("tlahir2", details.get(1));
      request.setAttribute("tlahir3", details.get(2));
      request.setAttribute("tmkhidmat1", details.get(3));
      request.setAttribute("tmkhidmat2", details.get(4));
      request.setAttribute("tmkhidmat3", details.get(5));
      request.setAttribute("gaji", details.get(6));
      request.setAttribute("imbuhant", details.get(7));
      request.setAttribute("gcuti", details.get(8));
      request.setAttribute("cutihari", details.get(9));
      request.setAttribute("cutibulan", details.get(10));
      request.setAttribute("cutitahun", details.get(11));
      request.setAttribute("tsarapilih1", details.get(12));
      request.setAttribute("tsarapilih2", details.get(13));
      request.setAttribute("tsarapilih3", details.get(14));
      request.setAttribute("jantina", details.get(15));
      request.setAttribute("listimewa", details.get(16));
      String tiadaganjaran = output.get(2);
      System.out.println("tiadaganjaranx=" + tiadaganjaran);
      if (tiadaganjaran.equals("0")) {
            request.setAttribute("umursara2", output.get(0));
            request.setAttribute("umursara1", output.get(1));
            request.setAttribute("bulankhid", output.get(3));
```

```
request.setAttribute("jumpencen", output.get(4));
                  request.setAttribute("jumganjaran", output.get(5));
                  request.setAttribute("iumgcr", output.get(6));
                  request.setAttribute("tbayar tahun", output.get(7));
            } else if (tiadaganjaran.equals("1")) {
                  request.setAttribute("umursara2", output.get(0));
                  request.setAttribute("umursara1", output.get(1));
                  request.setAttribute("bulankhid", output.get(3));
                  request.setAttribute("jumpencen", "0.00");
                  request.setAttribute("jumganjaran", "0.00");
                  request.setAttribute("jumgcr", "0.00");
                  request.setAttribute("tbayar tahun", "");
                  request.setAttribute("NOTIFICATION",
                              "Tidak layak untuk besara pilihan pada tarikh yang telah diberikan kerana umur kurang
dari 40 tahun!");
            } else {
                  request.setAttribute("umursara2", output.get(0));
                  request.setAttribute("umursara1", output.get(1));
                  request.setAttribute("bulankhid", output.get(3));
                  request.setAttribute("jumpencen", "0.00");
                  request.setAttribute("jumganjaran", "0.00");
                  request.setAttribute("jumgcr", "0.00");
                  request.setAttribute("tbayar tahun", "");
                  request.setAttribute("NOTIFICATION",
                              "Tidak layak untuk menerima ganjaran kerana tempoh perkhidmatan yang boleh dimasukkira
kurang dari 10 tahun (120 bulan)");
            dispatcher = request.getRequestDispatcher("/index.jsp");
            dispatcher.forward(request, response);
      public ArrayList<String> getPensionDetail(HttpServletRequest request, HttpServletResponse response)
                  throws ServletException, IOException {
            ArrayList<String> PensionDetail = new ArrayList<String>();
            String tlahir1 = request.getParameter("tlahir1");
            String tlahir2 = request.getParameter("tlahir2");
            String tlahir3 = request.getParameter("tlahir3");
```

```
String tmkhidmat1 = request.getParameter("tmkhidmat1");
String tmkhidmat2 = request.getParameter("tmkhidmat2");
String tmkhidmat3 = request.getParameter("tmkhidmat3");
String gaji = request.getParameter("gaji");
String imbuhant = request.getParameter("imbuhant");
String gcuti = request.getParameter("gcuti");
String cutihari = request.getParameter("cutihari");
String cutibulan = request.getParameter("cutibulan");
String cutitahun = request.getParameter("cutitahun");
String tsarapilih1 = request.getParameter("tsarapilih1");
String tsarapilih2 = request.getParameter("tsarapilih2");
String tsarapilih3 = request.getParameter("tsarapilih3");
String jantina = request.getParameter("jantina");
String listimewa = request.getParameter("listimewa");
PensionDetail.add(tlahir1);
PensionDetail.add(tlahir2);
PensionDetail.add(tlahir3);
PensionDetail.add(tmkhidmat1);
PensionDetail.add(tmkhidmat2);
PensionDetail.add(tmkhidmat3);
PensionDetail.add(gaji);
PensionDetail.add(imbuhant);
PensionDetail.add(gcuti);
PensionDetail.add(cutihari);
PensionDetail.add(cutibulan);
PensionDetail.add(cutitahun);
PensionDetail.add(tsarapilih1);
PensionDetail.add(tsarapilih2);
PensionDetail.add(tsarapilih3);
PensionDetail.add(jantina);
PensionDetail.add(listimewa);
return PensionDetail;
```