```
// ShoppingCart.java
package De_Compras ;
import java.io.*;
import javax.servlet.ServletException ;
import javax.servlet.http.*;
import java.util.Date;
import java.text.SimpleDateFormat;
public class ShoppingCart extends HttpServlet {
  String [] items = new String [] { "Bote con 3 Pelotas de Tenis",
                       "Bat de Baseball de madera deBeer W1610LL",
                       "Porterías y balón de FootBall rápido",
                       "Velero de madera de balsa" };
  String [] imagenes = new String[] { "tenis.gif",
                        "bat.gif",
                        "porterias.gif",
                        "velero.gif" };
  float [] Precio = new float[] { 12.95f, 36.50f, 35.00f, 15.45f };
  float Imp1 = .02f; // 2%
  float Imp2 = .035f; // 3.5%
  float Imp3 = .04f; // 4%
  float DHL = .04f; //4\%
  float UPS = .06f; // 6%
  float MEX_POST = .08f; // 8%
  public void doPost( HttpServletRequest request, HttpServletResponse response )
   throws IOException, ServletException {
    doGet( request, response );
  }
  public void doGet( HttpServletRequest request, HttpServletResponse response )
   throws ServletException, IOException {
    response.setContentType( "text/html" );
    PrintWriter out = response.getWriter();
    HttpSession session = request.getSession();
    int [] purchases = (int [])session.getValue( "purchases" );
    if (purchases == null) {
       purchases = new int [ items.length ];
       session.putValue( "purchases", purchases );
    if ( request.getParameter( "compra" ) != null )
       Compra( out, purchases, request );
    else {
```

```
out.println( "<html>" );
     out.println( "<head><title>Shopping Cart</title></head>");
     out.println( "<body BGCOLOR=\"#FFFF99\">" );
     if ( request.getParameter( "checkout" ) != null &&
        ! EmptyCar( purchases ) )
      Checkout( out, purchases, request.getRequestURI() );
     else {
        if ( request.getParameter( "add" ) != null )
           addPurchases( request, purchases );
        else
          if ( request.getParameter( "clear" ) != null ||
            request.getParameter("cancelar")!= null)
             for(int i=0; i<purchases.length; i++)
               purchases[i] = 0;
          else
          if ( request.getParameter( "update" ) != null )
            for(int i=0; i<items.length; i++)
             if (purchases[i]!=0)
                  if ( (String) request.getParameter( "Ch" + items[ i ] ) != null )
                    purchases[i] = 0;
        doForm( out, purchases, request.getRequestURI() );
        showPurchases( out, purchases);
        }
    out.close();
  void addPurchases( HttpServletRequest request, int [] purchases ) {
    for (int i=0; i<items.length; i++) {
      String added = (String)request.getParameter( items[ i ] );
      if (!added.equals(""))
         purchases[ i ] += Integer.parseInt( added );
    }
  void doForm( PrintWriter out, int [] purchases, String requestURI ) {
    out.println( "<form method=POST action="+ requestURI +">" );
    out.println( "<h1><center><i>Almacenes Deportivos</i></center></h1>" );
    out.println( "<h2><center>Selecciona tus Artículos de Temporada !</center></h2>" );
    out.println( "<TABLE BORDER=1 ALIGN=CENTER>\n" +
            "<TR BGCOLOR=\"#FFAD00\">\n" +
            "<TH><TH>Artículo<TH>Precio<TH>Cantidad");
    for(int i=0; i < items.length; i++)
      out.println( "<TR BGCOLOR=\"#FFFF00\"><TD BGCOLOR=\"#FFFFFF\"
ALIGN=\"CENTER\"><img src=\"/servlets-examples/" + imagenes[i] +
              "\"><TD ALIGN=\"CENTER\">" + items[i] + "<TD>$ " + Float.toString( Precio[i] ) +
"<TD><input name=\"" +
              items[i] + "\"value=0 size=3 align=\"right\">");
    out.println( "</TABLE>" );
```

```
out.println( "<center><input type=submit name=add value=\"Add To Cart\">&nbsp&nbsp \n"
                 + "<input type=submit name=checkout value=\"Check Out\">&nbsp&nbsp \n"
                 + "<input type=submit name=clear value=\"Clear Cart\">&nbsp&nbsp \n"
                 + "<input type=submit name=update value=\"Update Cart\">"
             + "</center>");
    out.println( "<hr><h2>Tu Carrito de Compras :</h2>" );
  void showPurchases( PrintWriter out, int [] purchases )
    throws IOException {
    float Subtotal = 0.0f;
    float Total = 0.0f;
    String ColEliminar;
    out.println( "<TABLE BORDER=1 ALIGN=CENTER>\n" +
            "<TR BGCOLOR=\"#FFAD00\">\n" +
            "<TH>Artículo<TH>Precio<TH>Cantidad<TH>Eliminar<TH>Total");
    for(int i=0; i<items.length; i++)
       if ( purchases[ i ] != 0 )
          Subtotal = Precio[i] * purchases[i];
          out.println( "<TR BGCOLOR=\"#FFFF00\"><TD>" + items[i] + "<TD>$ " +
Float.toString( Precio[i] ) + "<TD ALIGN=\"RIGHT\">" +
                  Integer.toString( purchases[ i ] ) + "<TD ALIGN=\"CENTER\"> <input</pre>
type=\"checkbox\" name=\"" + "Ch" + items[i] +
                  "\" value=\"" + "Checked" + "\">" + "<TD>$ " + Float.toString( Subtotal ) );
          Total = Total + Subtotal;
      }
     out.println( "<TR BGCOLOR=\"#FFFF00\"><TD>" + " " + "<TD>" + " " + "<TD>" + " " +
"<TD>" +
             "Total: " + "<TD>$ " + Float.toString( Total ) );
     out.println( "</TABLE>" );
     out.println( "<br>");
     out.println( "<h5><center>IMPORTANTE: Considera un 12% más sobre el costo total por
impuestos y gastos de envío</center></h5>");
     out.println( "</form>" );
     out.println( "</body>" );
     out.println( "</Html>" );
  }
 void Checkout( PrintWriter out, int [] purchases, String requestURI )
   throws IOException {
    float TotalConImp = 0.0f;
    float Subtotal = 0.0f;
    float Total = 0.0f;
    out.println( "<form method=POST action="+ requestURI +">" );
    out.println( "<h1><center><i>Almacenes Deportivos</i></center></h1>" );
```

```
out.println( "<h2><center>Compra de Artículos</center></h2>" );
    out.println( "<TABLE BORDER=1 ALIGN=CENTER>\n" +
           "<TR\ BGCOLOR=\"#FFAD00\">\n"+
           "<TH>Artículo<TH>Precio<TH>Cantidad<TH>Total");
    for(int i=0; i<items.length; i++)
      if (purchases[i]!=0)
         Subtotal = Precio[i] * purchases[i];
         out.println( "<TR BGCOLOR=\"#FFFF00\"><TD>" + items[i] + "<TD>$ " + Float.toString(
Precio[i] ) + "<TD ALIGN=\"RIGHT\">" +
                Integer.toString( purchases[ i ] ) +
                 "<TD>$" + Float.toString(Subtotal));
         Total = Total + Subtotal;
    out.println( "<TR BGCOLOR=\"#FFFF00\"><TD>" + " " + "<TD>" + " " + "<TD>" +
           "Total: " + "<TD>$ " + Float.toString( Total ) );
    if ( Total \leq 3567.00 )
       out.println( "<TR BGCOLOR=\"#FFFF00\"><TD>" + " " + "<TD>" + " " + "<TD>" +
               "Impuesto: " + "<TD>$ " + Float.toString( Total * Imp1 ) );
       TotalConImp = Total + Total * Imp1;
       out.println( "<TR BGCOLOR=\"#FFFF00\"><TD>" + " " + "<TD>" + " " + "<TD>" +
               "Total: " + "<TD>$ " + Float.toString( TotalConImp ) );
    else
     if (Total > 3567.00 && Total <= 5678.00)
         out.println( "<TR BGCOLOR=\"#FFFF00\"><TD>" + " " + "<TD>" + " " + "<TD>" +
                 "Impuesto: " + "<TD>$ " + Float.toString( Total * Imp2 ) );
         TotalConImp = Total + Total * Imp2;
         out.println( "<TR BGCOLOR=\"#FFFF00\"><TD>" + " " + "<TD>" + " " + "<TD>" +
                 "Total: " + "<TD>$ " + Float.toString( TotalConImp) );
        }
     else
      if (Total > 5678.00)
          out.println( "<TR BGCOLOR=\"#FFFF00\"><TD>" + " " + "<TD>" + " " + "<TD>" +
                  "Impuesto: " + "<TD>$ " + Float.toString( Total * Imp3 ) );
          TotalConImp = Total + Total * Imp3;
          out.println( "<TR BGCOLOR=\"#FFFF00\"><TD>" + " " + "<TD>" + " " + "<TD>" +
                  "Total: " + "<TD>$ " + Float.toString( TotalConImp) );
      out.println( "<TR BGCOLOR=\"#FFAD00\"><TH ALIGN=\"CENTER\">Empresa de Envío
<TH ALIGN=\"CENTER\">Importe <TH ALIGN=\"CENTER\">Elegir <TH</pre>
ALIGN=\"CENTER\">Total" );
      out.println( "<TR BGCOLOR=\"#FFFF00\"><TD> DHL Envío en 48 Hrs. <TD>" +
Float.toString( TotalConImp * DHL ) +
```

```
"<TD ALIGN=\"CENTER\"><input type=\"radio\" name=\"Envio\" checked
value=\"DHL\"> <TD>" + Float.toString( TotalConImp + TotalConImp * DHL ) + "\n" +
              "<TR BGCOLOR=\"#FFFF00\"><TD> UPS Envío en 24 Hrs. <TD>" + Float.toString(
TotalConImp * UPS ) +
              "<TD ALIGN=\"CENTER\"><input type=\"radio\" name=\"Envio\" value=\"UPS\">
<TD>" + Float.toString( TotalConImp + TotalConImp * UPS ) + "\n" +
              "<TR BGCOLOR=\"#FFFF00\"><TD> MEX POST Envío en 12 Hrs. <TD>" +
Float.toString( TotalConImp * MEX POST ) +
              "<TD ALIGN=\"CENTER\"><input type=\"radio\" name=\"Envio\"
value=\"MexPost\"> <TD>" + Float.toString( TotalConImp + TotalConImp * MEX_POST ) );
      out.println( "</TABLE>" );
      out.println( "<br>");
      out.println( "Número de Tarjeta de Crédito: &nbsp&nbsp <input name=\"TarjCred\" value=\" \"
size=16 align=\"right\"><br>");
      out.println( "NIP de Tarjeta de Crédito: &nbsp&nbsp <input name=\"NIP\" value=\" \" size=4
align=\"right\"><br>");
      out.println( "Código de Transacción: &nbsp&nbsp <input name=\"Cod\" value=\" \" size=3
align=\"right\"><br>");
      out.println( "<center><input type=submit name=cancelar value=\"Cancelar\">&nbsp&nbsp
n'' +
              "<input type=submit name=compra value=\"Realizar Compra\">" +
              "</center>");
      out.println( "</form>" );
      out.println( "</body>" );
      out.println( "</Html>" );
  }
   void Compra( PrintWriter out, int [] purchases, HttpServletRequest request )
     throws IOException {
    float TotalConImp = 0.0f;
    float Subtotal = 0.0f;
    float Total = 0.0f;
    Date the Date:
    String Meses[] = { "Enero", "Febrero", "Marzo", "Abril", "Mayo", "Junio", "Julio", "Agosto",
"Septiembre", "Octubre", "Noviembre", "Diciembre" };
    String patron;
    String fecha;
    SimpleDateFormat formato;
    patron = "dd/MM/yyyy";
    formato = new SimpleDateFormat( patron );
    theDate = new Date();
    fecha = formato.format( theDate ) ;
    out.println( "<html>" );
    out.println( "<head><title>Shopping Cart</title></head>" );
    out.println( "<body>" );
    out.println( "<h1><center><i>Almacenes Deportivos</i></center></h1>" );
    out.println( "<h2><center>Comprobante de Compra de Artículos</center></h2>" );
    out.println( "Fecha: " + fecha.substring(0, 2).trim() + " de " +
```

```
Meses[Integer.parseInt(fecha.substring(3, 5).trim()) - 1] +
            " del " + fecha.substring(6, 10).trim() + ".<br>");
    out.println("Hora: " + theDate.toString().substring(11, 20) + "<br/> );
    out.println( "Número de Pedido: " + NumePedido() + "<br>" );
    out.println( "Número de Guía de Pedido: " + NumeroGuia() + "<br/>br>" );
    out.println( "Número de Tarjeta de Crédito: " + (String)request.getParameter( "TarjCred" ) +
"<br>");
    out.println( "<TABLE BORDER=0 ALIGN=CENTER>\n" +
            "<TR>\n" +
            "<TH>Artículo<TH>Precio<TH>Cantidad<TH>Total");
    for(int i=0; i<items.length; i++)
       if (purchases[i]!=0)
          Subtotal = Precio[i] * purchases[i];
            out.println( "<TR><TD>" + items[i] + "<TD>$ " + Float.toString( Precio[i] ) + "<TD
ALIGN=\"RIGHT\">" +
                    Integer.toString( purchases[ i ] ) + "&nbsp&nbsp" +
                    "<TD>$ " + Float.toString( Subtotal ) );
          Total = Total + Subtotal;
     }
    out.println( "<TR><TD>" + " " + "<TD>" + " " + "<TD><b>" +
            "Total:" + "<TD>$ " + Float.toString( Total ) );
    if ( Total \leq 3567.00 )
        out.println( "<TR><TD>" + " " + "<TD>" + " " + "<TD><b>" +
                "Impuesto:" + "<TD>$ " + Float.toString( Total * Imp1 ) );
        TotalConImp = Total + Total * Imp1;
        out.println( "<TR><TD>" + " " + "<TD>" + " " + "<TD><b>" +
                "Total:" + "<TD>$ " + Float.toString( TotalConImp ) );
       }
    else
     if (Total > 3567.00 && Total <= 5678.00)
         out.println( "<TR><TD>" + " " + "<TD>" + " " + "<TD><b>" +
                 "Impuesto:" + "<TD>$ " + Float.toString( Total * Imp2 ) );
         TotalConImp = Total + Total * Imp2;
         out.println( "<TR><TD>" + " " + "<TD>" + " " + "<TD><b>" +
                 "Total:" + "<TD>$ " + Float.toString(TotalConImp));
       }
     else
      if (Total > 5678.00)
          out.println( "<TR><TD>" + " " + "<TD>" + " " + "<TD><b>" +
                  "Impuesto: " + "<TD>$ " + Float.toString( Total * Imp3 ) );
          TotalConImp = Total + Total * Imp3;
          out.println( "<TR><TD>" + " " + "<TD>" + " " + "<TD><b>" +
                  "Total:" + "<TD>$ " + Float.toString( TotalConImp) );
```

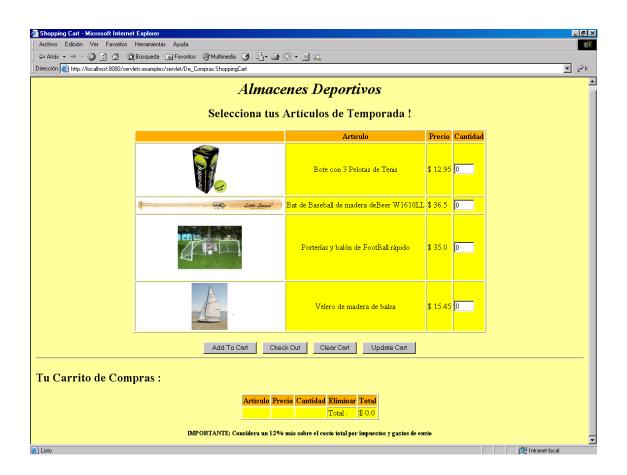
```
if ( ((String)request.getParameter( "Envio" )).equals( "DHL" ) ) {
         out.println( "<TR><TH ALIGN=\"CENTER\">Empresa de Envío" );
         out.println( "<TR><TD> DHL Envío en 48 Hrs. <TD> <TD><b>Importe :<TD>$ " +
Float.toString( TotalConImp * DHL ) );
         out.println( "<TR><TD> <TD> <TD> <b>Total :<TD>$ " + Float.toString( TotalConImp +
TotalConImp * DHL ) );
         out.println( "</TABLE><br>" ):
         out.println( "<h4><center>Puedes consultar en la siguiente página el estado de envío de tu
compra:</center></h4>");
         out.println( "<h4><center><BLOCKQUOTE><A
HREF=\"http://dhl.com/\"><PRE>http://dhl.com/</PRE></A></center></h4></BLOCKOUOTE>");
      if ( ((String)request.getParameter( "Envio" )).equals( "UPS" ) ) {
         out.println( "<TR><TH ALIGN=\"CENTER\">Empresa de Envío" );
         out.println( "<TR><TD> UPS Envío en 24 Hrs. <TD> <TD><b>Importe :<TD>$ " +
Float.toString( TotalConImp * UPS ) );
         out.println( "<TR><TD> <TD> <TD> <b>Total :<TD>$ " + Float.toString( TotalConImp +
TotalConImp * UPS ) );
         out.println( "</TABLE><br>" );
         out.println( "<h4><center>Puedes consultar en la siguiente página el estado de envío de tu
compra:</center><h4>");
         out.println( "<h4><center><BLOCKQUOTE><A
HREF=\"http://ups.com/\"><PRE>http://ups.com/</PRE></A></center></h4></BLOCKQUOTE>");
      if ( ((String)request.getParameter( "Envio" )).equals( "MexPost" ) ) {
         out.println( "<TR><TH ALIGN=\"CENTER\">Empresa de Envío" );
         out.println( "<TR><TD> MEX POST Envío en 12 Hrs. <TD> <TD><b>Importe :<TD>$ " +
Float.toString( TotalConImp * MEX_POST ) );
         out.println( "<TR><TD> <TD> <TD> <b>Total :<TD>$ " + Float.toString( TotalConImp +
TotalConImp * MEX_POST ) );
         out.println( "</TABLE><br>");
         out.println( "<h4><center>Puedes consultar en la siguiente página el estado de envío de tu
compra:</center><h4>");
         out.println( "<h4><center><BLOCKQUOTE><A
HREF=\"http://mexpost.com/\\"><PRE>http://mexpost.com/</PRE></A></center></h4></BLOCKQU
OTE>");
      out.println( "<br>");
      out.println( "<h1><center><i>Gracias por tu compra !<i></center></h1>" );
      out.println( "</body>" );
      out.println( "</Html>" );
  boolean EmptyCar( int [] purchases ){
    for(int i=0; i<items.length; i++)
     if ( purchases [i]!=0 )
      return (false);
    return( true );
```

```
String NumePedido() {

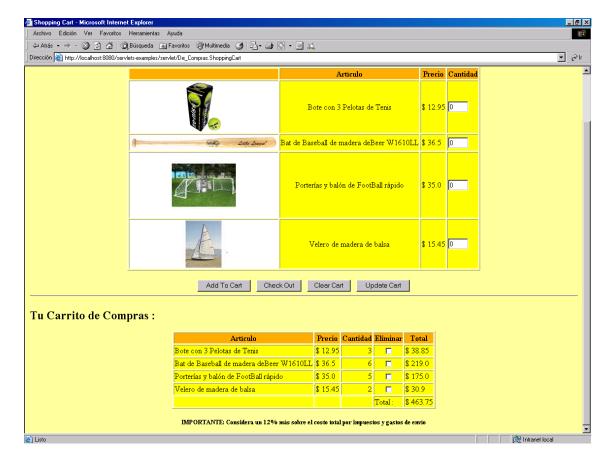
return "67293AWT";
}

String NumeroGuia() {

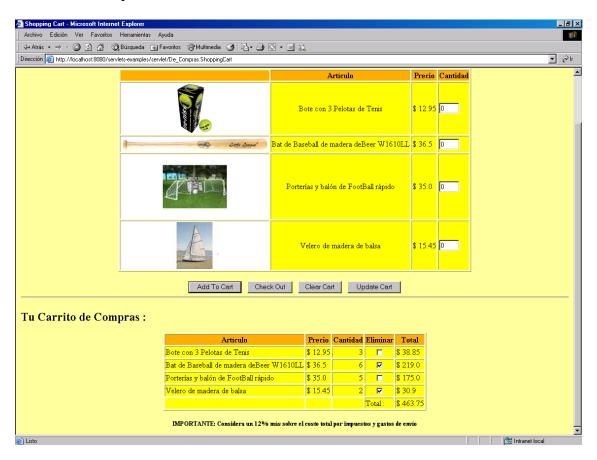
return "FA45CX78";
}
```



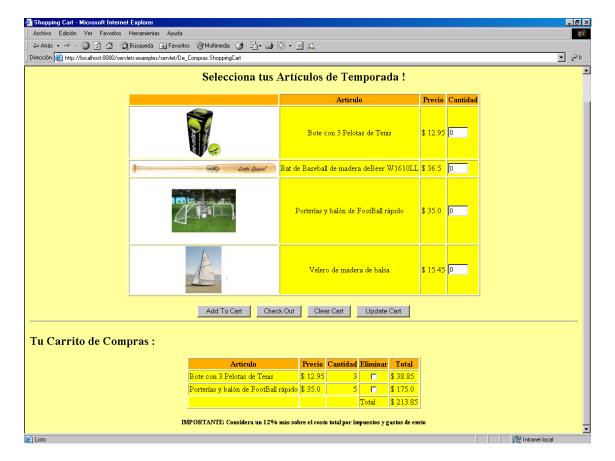
Después de capturar las cantidades y oprimir el botón Add To Cart:



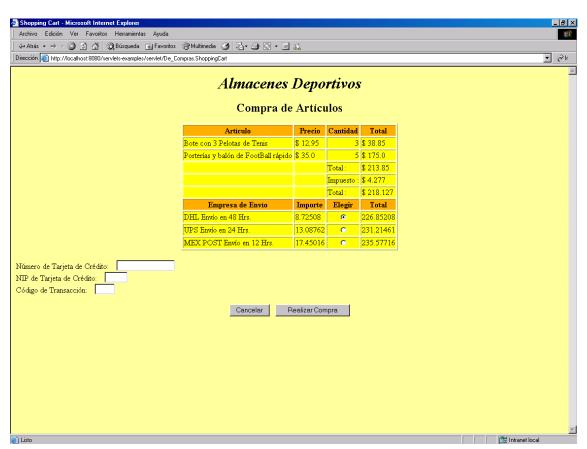
Se marcan dos artículos para eliminar:



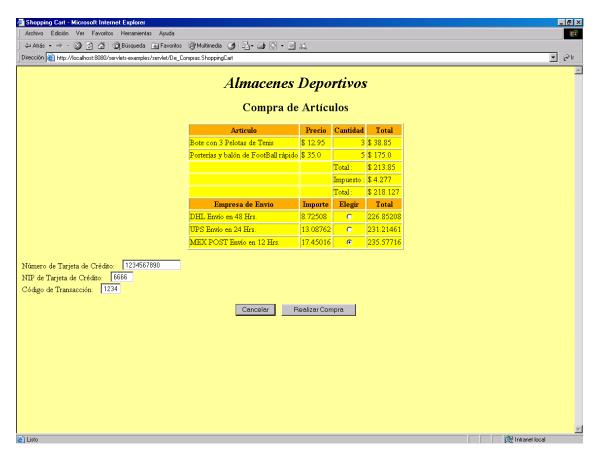
Se actualiza el carrito de compras al oprimir el botón *Update Cart* :



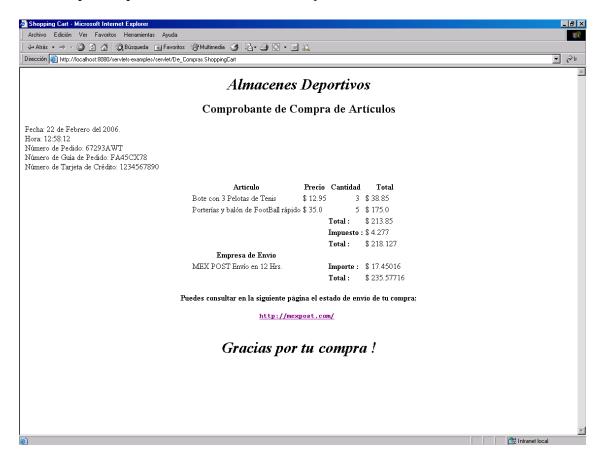
Se realiza el pedido al oprimir el botón Check Out:



Se acompletan los campos solicitados y se selecciona la empresa de envío :



Se realiza la compra al oprimir el botón Realizar Compra:



Al consultar el estado de envío de la compra en internet :

