

## First Version Web 1.0: customer.jsp

```
<jsp:useBean id="cb" class="timlin.csm.CustomerBean" scope="page">
<jsp:setProperty name="cb" property="*" />
<%
    if (request.getParameter("btnSave") != null)
        cb.getSaveResult();
    else if (request.getParameter("customerId") != null)
        cb.getRecord();
%>

<html>

<head>
<meta http-equiv="Content-Language" content="en-us">
<meta http-equiv="Content-Type" content="text/html; charset=windows-1252">
<script language="javascript">
    var calledFrom = 0;

    function City_OnBlur ()
    {
        var zip = document.getElementById('city').value;

        if (zip.length != 5) return;

        var url = "zipLookup.jsp?zip="+zip;
        top.frames["hiddenFrame"].location=url;
    }

    function City_OnBlur_Callback (city, state, zip)
    {
        document.getElementById('city').value = city;
        document.getElementById('state').value =state;
        document.getElementById('zipCode').value =zip;
    }
</script>
<title>Customer Input</title>
```

```
</head>

<iframe src="about:blank" name="hiddenFrame" id="hiddenFrame"
        style="display:none;position:absolute;width:148;height:194;z-index=100">
</iframe>

<body>

<form action="customer.jsp">
  <p>Last Name: <input type="text" name="lastName" value="<%=cb.getLastName() %>" size="20"> </p>
  <p>First Name: <input type="text" name="firstName" value="<%=cb.getFirstName() %>" size="20"></p>
  <p>Street: <input type="text" name="street" value="<%=cb.getStreet() %>" size="20"></p>
  <p>City: <input type="text" name="city" id="city" value="<%=cb.getCity() %>" size="20"
onblur="City_OnBlur()"></p>
  <p>State: <input type="text" name="state" id="state" value="<%=cb.getState() %>" size="20"></p>
  <p>Zip Code: <input type="text" name="zipCode" id="zipCode" value="<%=cb.getZipCode() %>" size="20"></p>
  <p>Credit Limit: <input type="text" name="creditLimit" value="<%=cb.getCreditLimit() %>" size="20"></p>
  <p>ID: <input type="text" name="customerId" id="customerId" value="<%=cb.getCustomerId() %>" readonly"
size="6"></p>
  <p><input type="Submit" value="Save" name="btnSave">
  <input type="reset" value="Reset" name="B2">
  </p>
</form>

</body>

</html>
</jsp:useBean>
```

## zipLookup.jsp:

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">

<HTML>

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<%
    String zip = request.getParameter("zip");
    String city = "Not Found";
    String state = "NF";

    if (zip != null && zip.indexOf(";") < 1 && zip.indexOf("|") < 1 && zip.length() == 5)
    {
        timlin.util.Database database = new timlin.util.Database (
            "sun.jdbc.odbc.JdbcOdbcDriver",
            "jdbc:odbc:Driver={Microsoft Access Driver
(*.mdb)};DBQ=c:/timlin/csm/cis111/dw.mdb;DriverID=22;READONLY=false}",
            null, null);

        //System.out.println ("SELECT city, state FROM zipcodes WHERE zipcode = '"+zip+"'");

        if (database.query("SELECT city, state FROM zipcodes WHERE zipcode = '"+zip+"'"))
        {
            city = database.getColumnValue(1);
            state = database.getColumnValue(2);
        } else
            System.err.println(database.getErrorMessage());
    }
%><!-- end JSP script -->
<script language="javascript">
    parent.City_OnBlur_Callback ("<%=city%>", "<%=state%>", "<%=zip%>");
</script>
</HEAD>

</HTML>
```

## Second Version Ajax/Web 2.0: customer2.jsp

```
<html>

<head>
<meta http-equiv="Content-Language" content="en-us">
<meta http-equiv="Content-Type" content="text/html; charset=windows-1252">
<script language="javascript">
    var calledFrom = 0;

    function City_OnBlur ()
    {
        if (!http) {
            alert ("Unable to perform Zip Code lookup at this time");
            return;
        }
        var url = "zipLookup2.jsp?zip="+document.getElementById('city').value;
        http.open("GET", url, true);
        http.onreadystatechange = useHttpResponse;
        http.send(null);
    }

    function getXMLHttpRequest()
    {
        try {
            req = new XMLHttpRequest();
        } catch (ex1) {
            try {
                req = new ActiveXObject ("msxml1.XMLHTTP");
            } catch (ex2) {
                try {
                    req = new ActiveXObject ("Microsoft.XMLHTTP");
                } catch (ex3) {
                    req = false;
                }
            }
        }
    }
    return req;
}
```

```

}

var http = getXMLHttpRequest();

function useHttpResponse ()
{
    if (http.readyState == 4) {
        if (http.status == 200) {
            //alert ("response");
            var retval = http.responseText.split("|");
            document.getElementById('city').value = retval[0];
            document.getElementById('state').value = retval[1];
            document.getElementById('zipCode').value = retval[2];
        }
        //alert ("response: "+retval[0]);
    }
}
}
</script>
<title>Customer Input</title>
</head>

<iframe src="about:blank" name="hiddenFrame" id="hiddenFrame"
        style="display:none;position:absolute;width:148;height:194;z-index=100">
</iframe>

<body>

<form onsubmit="return form_Submit(this);">
  <p>Last Name: <input type="text" name="lastName" size="20"> ID:
  <input type="text" name="customerId" id="customerId" readonly size="6"></p>
  <p>First Name: <input type="text" name="firstName" size="20"></p>
  <p>Street: <input type="text" name="street" size="20"></p>
  <p>City: <input type="text" name="city" id="city" size="20" onblur="City_OnBlur()"></p>
  <p>State: <input type="text" name="state" id="state" size="20"></p>
  <p>Zip Code: <input type="text" name="zipCode" id="zipCode" size="20"></p>
  <p>Credit Limit: <input type="text" name="creditLimit" size="20"></p>
  <p><input type="Submit" value="Save" name="btnSave">
  <input type="reset" value="Reset" name="B2">

```

```
    </p>
</form>

</body>

</html>
```

## zipLookup2.jsp:

```
<%
String zip = request.getParameter("zip");
String city = "Not Found";
String state = "NF";

if (zip != null && zip.indexOf(";") < 1 && zip.indexOf("|") < 1 && zip.length() == 5)
{
    timlin.util.Database database = new timlin.util.Database (
        "sun.jdbc.odbc.JdbcOdbcDriver",
        "jdbc:odbc:Driver={Microsoft Access Driver
(*.mdb)};DBQ=c:/timlin/csm/cis111/dw.mdb;DriverID=22;READONLY=false}",
        null, null);

//System.out.println ("SELECT city, state FROM zipcodes WHERE zipcode = '"+zip+"'");

    if (database.query("SELECT city, state FROM zipcodes WHERE zipcode = '"+zip+"'"))
    {
        city = database.getColumnValue(1);
        state = database.getColumnValue(2);
    } else
        System.err.println(database.getErrorMessage());
    }
out.print(city+"|" +state+"|" +zip);
%>
```

### Third Version Ajax/Web 2.0: customer3.jsp

```
<html>

<head>
<meta http-equiv="Content-Language" content="en-us">
<meta http-equiv="Content-Type" content="text/html; charset=windows-1252">
<script language="javascript">
    var calledFrom = 0;

    function getXMLHttpRequest()
    {
        try {
            req = new XMLHttpRequest();
        } catch (ex1) {
            try {
                req = new ActiveXObject ("msxml1.XMLHTTP");
            } catch (ex2) {
                try {
                    req = new ActiveXObject ("Microsoft.XMLHTTP");
                } catch (ex3) {
                    req = false;
                }
            }
        }
        return req;
    }

    var http = getXMLHttpRequest();

    function useHttpResponse ()
    {
        if (http.readyState == 4) {
            if (http.status == 200) {
                //alert ("response");
                var retval = http.responseText.split("|");
                switch (calledFrom) {
                    case 1:
```



```

        document.getElementById('city').value = retval[0];
        document.getElementById('state').value = retval[1];
        document.getElementById('zipCode').value = retval[2];
        break;
    case 2:
        document.getElementById('customerId').value = retval[0];
        alert ("Customer Record Saved!");
        break;
    case 3:
        document.customerForm.lastName.value = retval[1];
        document.customerForm.firstName.value = retval[2];
        document.customerForm.street.value = retval[3];
        document.customerForm.city.value = retval[4];
        document.customerForm.state.value = retval[5];
        document.customerForm.zipCode.value = retval[6];
        document.customerForm.creditLimit.value = retval[7];
    }
}
//alert ("response: "+http.responseText);
}
}

function callServer (url, from)
{
    calledFrom = from;
    http.open("GET", url, true);
    http.onreadystatechange = useHttpResponse;
    http.send(null);
}

function City_OnBlur ()
{
    if (!http) {
        alert ("Unable to perform Zip Code lookup at this time");
        return;
    }
    var zip = document.getElementById('city').value;

```

```
        if (zip.length != 5) return;

        var url = "zipLookup.jsp?zip="+zip;
        callServer (url, 1);
    }

function ID_OnBlur ()
{
    if (!http) {
        alert ("Unable to perform Zip Code lookup at this time");
        return;
    }
    var url = "getCustomer.jsp?customerId="+document.getElementById('customerId').value;
    callServer (url, 3);
}

function form_Submit(frm)
{
    var url = 'saveCustomer.jsp?customerId='+frm.customerId.value
        + '&lastName='+frm.lastName.value
        + '&firstName='+frm.firstName.value
        + '&street='+frm.street.value
        + '&city='+frm.city.value
        + '&state='+frm.state.value
        + '&zipCode='+frm.zipCode.value
        + '&creditLimit='+frm.creditLimit.value;

    callServer (url, 2);
    return false;
}
</script>
<title>Customer Input</title>
</head>

<iframe src="about:blank" name="hiddenFrame" id="hiddenFrame"
    style="display:none;position:absolute;width:148;height:194;z-index=100">
</iframe>
```

```
<body>

<form name="customerForm" onsubmit="return form_Submit(this);">
  <p>Last Name: <input type="text" name="lastName" size="20"></p>
  <p>First Name: <input type="text" name="firstName" size="20"></p>
  <p>Street: <input type="text" name="street" size="20"></p>
  <p>City: <input type="text" name="city" id="city" size="20" onblur="City_OnBlur()"></p>
  <p>State: <input type="text" name="state" id="state" size="20"></p>
  <p>Zip Code: <input type="text" name="zipCode" id="zipCode" size="20"></p>
  <p>Credit Limit: <input type="text" name="creditLimit" size="20"></p>
  <p>ID: <input type="text" name="customerId" id="customerId" onblur="ID_OnBlur()" size="6"></p>

  <p><input type="Submit" value="Save" name="btnSave">
    <input type="reset" value="Reset" name="B2">
  </p>
</form>

</body>

</html>
```

### **getCustomer.jsp:**

```
<jsp:useBean id="cb" class="timlin.csm.CustomerBean" scope="page">
<jsp:setProperty name="cb" property="*" />
<%
    out.print(cb.getRecord());
%>
</jsp:useBean>
```

### **saveCustomer.jsp:**

```
<jsp:useBean id="cb" class="timlin.csm.CustomerBean" scope="page">
<jsp:setProperty name="cb" property="*" />
<%
    out.print(cb.getSaveResult());
%>
</jsp:useBean>
```