Reminder: This task is to implement an auto-completing form textbox for USA states. As the user enters letters into the textbox, a pop-up box appears with suggestions to complete the name of the state being entered by the user. As the user continues to type letters, the suggestions in the pop-up box are refined.

The xml file containing names of the states is read in using AJAX. This occurs just the once.

Please enter your state:<br />

<input type="text" id="searchField" autocomplete="off" onkeyup= “searchSuggest” /> <br />

var ajaxRequest = new XMLHttpRequest();

ajaxRequest.onreadystatechange = setStatesArray;

ajaxRequest.open("GET", "us-states.xml", true);

ajaxRequest.send(null);

Here’s where we read that file in, looking at each item node, finding the label node inside, and then storing label’s firstChild—the name of the state itself. Each of them goes into a slot in the

statesArray array.

function setStatesArray() {

if (ajaxRequest.readyState == 4) {

if (ajaxRequest.status == 200) {

if (ajaxRequest.responseXML) {

var allStates = ajaxRequest.responseXML.getElementsByTagName("item");

for (var i=0; i<allStates.length; i++) {

statesArray[i] = allStates[i].getElementsByTagName("label")[0].firstChild;

}

}

}

}

}

You need an event handler (searchSuggest()) to handle the letters as each is typed into the textbox. The event handler has to create the pop-up box with a list of suggestions based on the letters typed so far. As the user continues typing, the list shrinks until there is only one state left; this is then automatically put into the entry field, and the list goes away.

Checks to make in searchSuggest()

1. One of more letters have been typed.

2. Do comparison with everything converted to lower-case

3. Do comparison with typed letters and the start of each state name

e.g. if user types “Ka”, do not want a match with “Arkanas”, but with “Kansas” is OK.

4. On a match, add the state name to a list of matching state names in pop-up box.

5. When the entire array of state names has been checked, pop-up the list for the user.