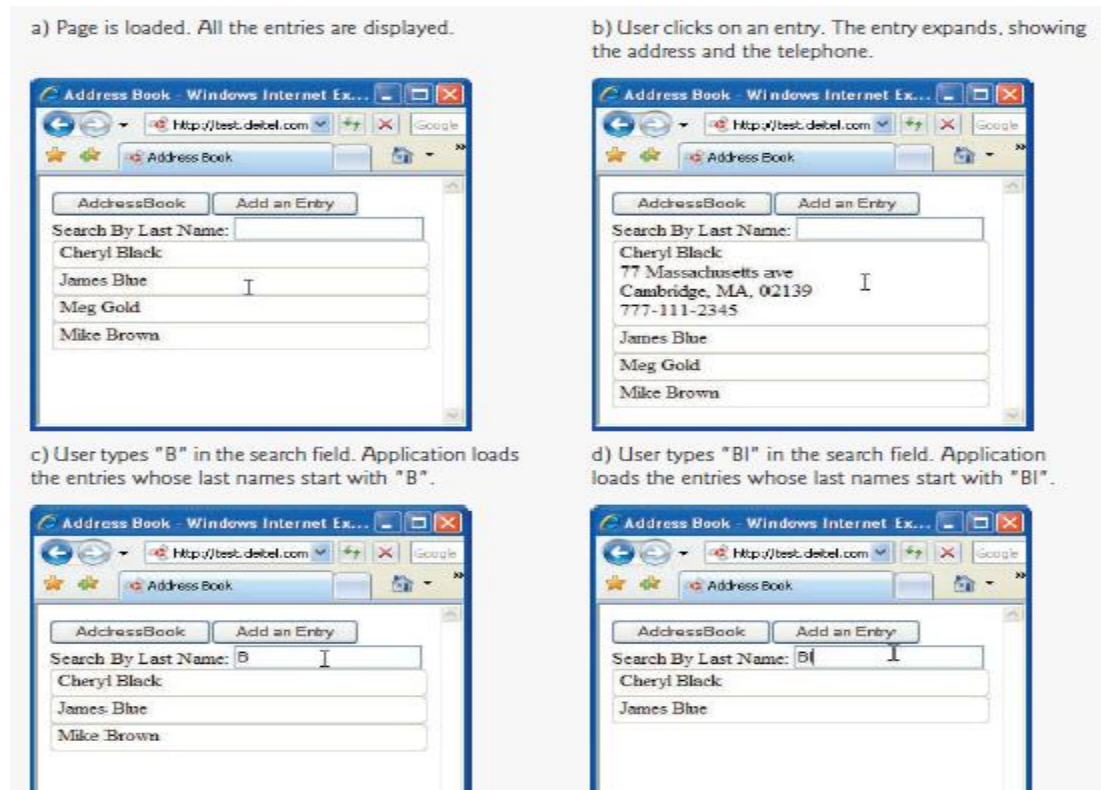


PSG COLLEGE OF TECHNOLOGY, COIMBATORE – 641 004
Department of Applied Mathematics and Computational Sciences
MSc SOFTWARE SYSTEMS – Semester II
18XW28 – Web Designing Lab
PROBLEM SHEET 8 – AJAX, XML, JSON & PHP

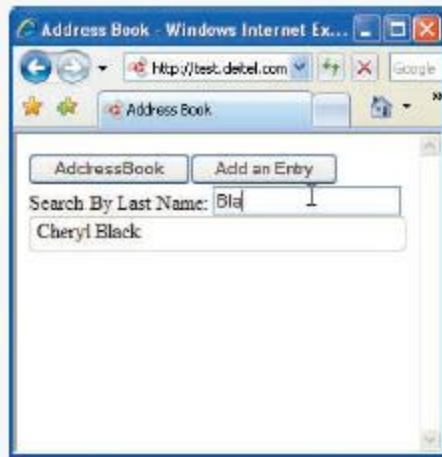
Start Date: 24.03.2020

Complete Date: 26.03.2020

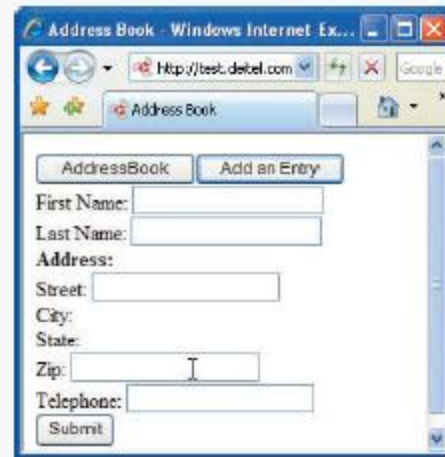
1. Design address book loads a list of entries, each containing a first and last name. Each time the user clicks a name, the address book uses Ajax functionality to load the person's address from the server and expand the entry *without reloading the page* (use XML file) and it does this in parallel with allowing the user to click other names. The application allows the user to search the address book by typing a last name. As the user enters each keystroke, the application asynchronously displays the list of names in which the last name starts with the characters the user has entered so far. The application also enables the user to add another entry to the address book by clicking the ***addEntry*** button. The application displays a form that enables live field validation. As the user fills out the form, the zip-code value is validated and used to generate the city and state. The telephone number is validated for correct format. When the ***Submit*** button is clicked, the application checks for invalid data and stores the values in a database on the server using PHP. The sample form designs shown below:



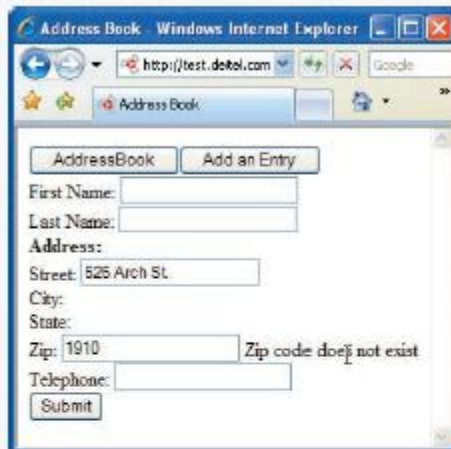
e) User types "Bla" in the search field. Application loads the entries whose last names start with "Bla".



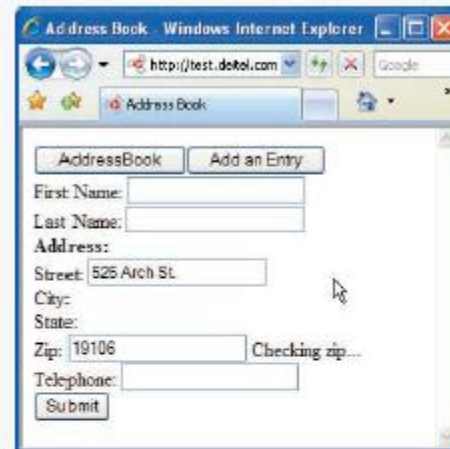
f) User clicks **Add an Entry** button. The form allowing user to add an entry is displayed.



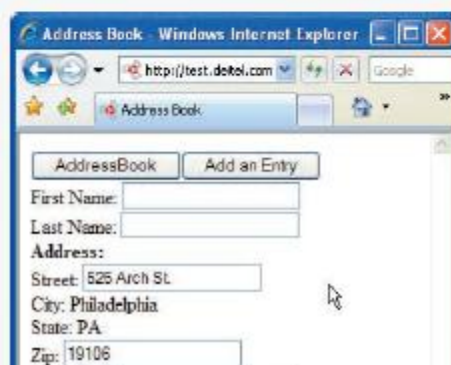
g) User types in a nonexistent zip code. An error is displayed.



h) User enters a valid zip code. While the server processes it, **Checking Zip...** is displayed on the page.



i) The server finds the city and state associated with the zip code entered and displays them on the page.



j) The user enters a telephone number and tries to submit the data. The application does not allow this, because the First Name and Last Name are empty.



k) The user enters the last name and the first name and clicks the Submit button.

l) The address book is redisplayed with the new name added in.

2. Create an AJAX-based product catalog that obtains its data from JSON files located on the server. The data should be separated into four JSON files. The first file should be a summary file, containing a list of products. Each product should have a title, an image filename for a thumbnail image and a price. The second file should contain a list of descriptions for each product. The third file should contain a list of filenames for the full-size product images. The last file should contain a list of the thumbnail image file names. Each item in a catalogue should have a unique ID that should be included with the entries for that product in every file. Next, create an AJAX-enabled web page that displays the product information in a table. The catalog should initially display a list of product names with their associated thumbnail images and prices. When the mouse hovers over a thumbnail image, the larger product image should be displayed. When the user moves the mouse away from that image, the original thumbnail should be redisplayed. You should provide a button that the user can click to display the product description.

Web Resources:

1. https://www.w3schools.com/php/php_ajax_xml.asp
2. https://www.tutorialspoint.com/json/json_ajax_example.htm
3. <https://happycoding.io/tutorials/javascript/ajax>
4. <https://jonsuh.com/blog/jquery-ajax-call-to-php-script-with-json-return/>
5. <https://github.com/processing/p5.js/wiki/Loading-external-files:-AJAX,-XML,-JSON>