

**HACETTEPE UNIVERSITY  
DEPARTMENT OF COMPUTER  
SCIENCE & ENGINEERING**

**Bil488 - WEB Services Laboratory  
Experiment 4**

Subject: Authenticated Web Services

Submission Date: 29.05.2013

Due Date: 11.06.2013

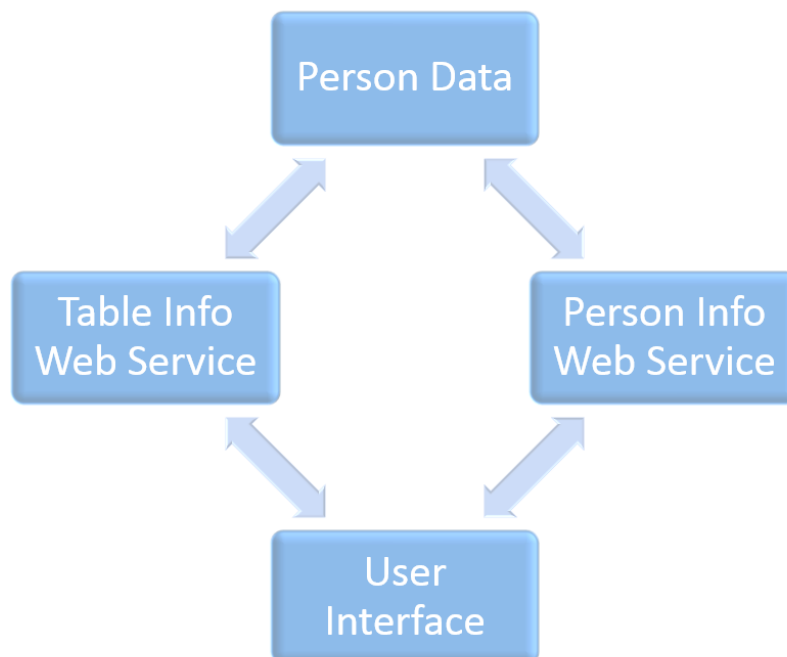
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**Introduction / Aim:**

The aim of this experiment is to create web page using two authenticated web services.

**Details:**

Develop a user interface and two authenticated web service using the given person data. In this experiment you will learn how to work web service layer. You should use web services two different transfer method XML and JSON with authentication.



In this phase you are expected to do the following steps.

- **Person Data (10.000 records given in a file)**
  - You should put data to a database or you can use (xlsx/xml) file to save (read/write) data.
  - Columns are
    - PID : Person Identity Number (Unique)
    - FirstName: First Name
    - LastName: Last Name
    - Birthday: Birthday
    - Email: Electronic Mail Address
    - Address: Address Detail
    - City: City of Address
    - Province: Province of Address
    - Country: Country of Address

- **Table Information web service**
  - You should use **authentication** method
  - You should **XML or JSON** to transfer data
  - It should **have four methods** for All records of Person Data Table
    - **Count**: Record Count
    - **Average**: Average Age
    - **Max**: Maximum Age
    - **Min**: Minimum Age

Methods should **calculate** return values **for every call** because the other web service may change the values.

- **Person Information web service**
  - You should use **authentication** method
  - You should **XML or JSON** to transfer data (if you used XML to transfer data for the other web service you should JSON for this one)
  - It should have three methods
    - **Search**: find people with search criteria (method should work with one or more criteria)
      - Criteria (and/or)
        - PID
        - First Name
        - Last Name
        - Birthday
        - Address
        - City
        - Country
    - **Update**: Update a person data (use PID for unique column)
    - **Delete**: Delete a person from data (use PID for unique column)

- **User Interface**

- Develop a web page
- It should have three division
  - **Header** (Banner)
  - **Table Information** (Count, Average, Max, Min)
  - **Person Information**
    - Users can search one or more people with criteria (e.g. *first name like Emma and Province = Oregon ; results Emma Bryant; Emma Clark; Emma Davis; Emma Harris*)
    - Users can edit a record (first; user should find record(s and select one)
    - Users can delete a record (first; user should find record(s and select one)
- Page should refresh after edit or delete (you can use AJAX for divisions)

Person Search System Alaettin UÇAN									
Record Count = 10.000 Average Age = 33 Max Age = 26 Min Age = 73 <input type="button" value="refresh"/>									
<div style="display: flex; align-items: flex-start;"> <div style="flex: 1;"> <ul style="list-style-type: none"> <li>• <input type="text" value="Emma"/> in <span style="border: 1px solid #ccc; padding: 2px;">First Name</span></li> <li>• <span style="border: 1px solid #ccc; padding: 2px;">AND</span> <span style="border: 1px solid #ccc; padding: 2px;">Oregon</span> in <span style="border: 1px solid #ccc; padding: 2px;">Province</span></li> <li>• <span style="border: 1px solid #ccc; padding: 2px;">OR</span> <span style="border: 1px solid #ccc; padding: 2px;"></span> in <span style="border: 1px solid #ccc; padding: 2px;">Select a Field (optional)</span></li> </ul> <div style="margin-top: 5px;"> <input type="button" value="Search"/> </div> </div> <div style="flex: 1; margin-left: 10px;"> <div style="border: 1px solid #ccc; padding: 2px; font-size: 0.8em;">             Select a Field (optional)              First Name              Last Name              Birthday              Email              Address              City  <span style="background-color: #e0f0ff; display: block;">Province</span>             Country           </div> </div> </div>									
Edit	First Name	Last Name	Birthdate	Email	Address	City	Province	Country	Delete
<input type="button" value="Edit"/>	Emma	Bryant	23	emma64@adventure-works.com	7909 Yorba Linda	Salem	Oregon	United States	<input type="button" value="Del"/>
<input type="button" value="Edit"/>	Emma	Clark	14.06.1942	emma18@adventure-works.com	3709 Leonard Ct.	Lake Oswego	Oregon	United States	<input type="button" value="Del"/>
<input type="button" value="Edit"/>	Emma	Davis	02.09.1978	emma4@adventure-works.com	6405 G St.	Lebanon	Oregon	United States	<input type="button" value="Del"/>
<input type="button" value="Update"/>	Emma	Harris	09.05.1955	emma13@adventure-work	2774 Eagle Peak	Beaverton	Oregon	United States	
Edit Mode									

You should develop a web page works with two different web services and write a report. You should come and show your project in your development environment for evaluation. If you completed project before due date you can submit and show it. You should follow Usenet newsgroup for announcements.

**Submit Format**

epx4.zip/

report/\*.pdf

src/\*.zip

**NOTES AND RESTRICTIONS:**

- 1- You tell us your project with your own words. Report language should be in English.
- 2- You are expected to do this experiment on a hard copy as a report.
- 3- Your experiment should be submitted before due date. Late submissions will not be accepted
- 4- The assignment should be original, **individual** work. Modified experiments will be considered as cheating.