

# WEB FUNDAMENTALS: FINAL LAB





### **Objective**

To assess what you've learned during the course.

#### Overview

In this test you'll write code to practise using the web programming concepts which you've learned during the course. There are no detailed step by step instructions, but you'll find sufficient instructions for each task.

There is no pass/fail mark for this assessment. However, your work will be uploaded to Canvas as a record of the progress you have made on the course.

You will have two hours to complete this task.

#### a) Examine the web service

- 1. First of all, you will run a web server on your own compute:
  - Locate the **WebService** folder.
  - Double-click on the **Runme.bat** file to run the web service.
  - When finished (but not yet!), **press Ctrl-C** to end the web server.
- 2. Open a web browser, then navigate to the following web service URLs:
  - a) <a href="http://localhost:5000/customers">http://localhost:5000/customers</a>
  - b) <a href="http://localhost:5000/ordersbycustomerid/alfki">http://localhost:5000/ordersbycustomerid/alfki</a> where alfki is the id of a customer
- 3. Examine the output from the web service, which is in JSON format, and make sure you understand what it is doing. Understand that <u>customers</u> returns an array of customers, and <u>ordersbycustomerid</u> returns an array of orders.

**Hint:** You can copy and paste the JSON string into a web site such as <a href="http://jsonviewer.stack.hu/">http://jsonviewer.stack.hu/</a> to format it for easy reading

#### b) Build an application

- 4. You will now build a web application which will:
  - a) Show a list of customers in a table. Please only display the following attributes:

#### **CustomerID, ContactName, City**

- b) Use CSS to highlight a table row when cursor hovers over.
- c) When the user selects a customer row, your code should display orders by the selected customer in a separate table. Please see the example below this page.



## Please show the following attributes: OrderID, EmployeeID, ShipCountry, Freight

- 5. You may choose whichever web technology you like from this course JavaScript, jQuery, or AngularJS (recommended).
- 6. You should decide what your web application will look like (see the example below for a start).

Tip: To put the two tables side-by-side with a scrollbar you can use the simple CSS script below.

ID	Contact Name	City	<u>^</u>	CusromerID	OrderID	EmployeeID	ShipCountry	Freight
ALFKI	Maria Anders	BERLIN		BLONP	10265	2	France	55.28
ANATR	Ana Trujillo	MÉXICO D.F.		BLONP	10297	5	France	5.74
ANTON	Antonio Moreno	MÉXICO D.F.		BLONP	10360	4	France	131.7
AROUT	Thomas Hardy	LONDON		BLONP	10436	3	France	156.66
BERGS	Christina Berglund	LULEÅ		BLONP	10449	3	France	53.3
BLAUS	Hanna Moos	MANNHEIM		BLONP	10559	6	France	8.05
BLONP	Frédérique Citeaux	STRASBOURG	_	DT ONTD	10566	n	Franco	00 /

```
table {
    display: block;
    height: 200px;
    width: 50%;
    overflow: auto;
}
```



