

AJAX, JSON and Server-Side Programming

- ✳ In this lab exam, you are asked to design and implement a Web interface using Bootstrap. Your Web interface should allow the user to search for products by category name and dynamically displays the result of the search
- ✳ Your Web interface must have an input field that enables the user to enter a search keyword and a button called search
- ✳ When the search button is clicked, your application should place an AJAX call and pass the entered category name as parameter to a PHP script called *search.php* in order to retrieve a list of matching products which is returned to the client as a JSON document
- ✳ The list of products is stored in an XML file called *products.xml* and contains the following list of categories: TV, DVD, Player, Cell Phone, Tablet, Ebook, Printer Laptop
- ✳ The *search.php* and *products.xml* files are provided.

Files/Folder to Use and Create

- ✳ Download the provided PHP script and XML document from LEA and put them in a folder called **final** that you must create.
- ✳ Deploy your **final** folder on your Web server. Then, create a JavaScript file called **ajax.js** and an HTML file called **index.html** in the folder you just created. Please don't create any subfolders.

Functions to Implement

1. *makeAjaxCall()*: this function does not receive any parameters and must be called when the search button is clicked. It gets what the user entered in the input field, creates an AJAX request and sends it to *search.php* in order to retrieve a list of matching products. The category name must be passed as parameter to *search.php*. The key name of the parameter must be *query*.
2. *processResponse()*: this function does not receive any parameters. It does the following:
 - ✳ It validates and processes the AJAX response. The obtained JSON document should be parsed and the information about the received products should be displayed on the Web interface. When the search button is clicked, clear the previous results on the page
 - ✳ The information about the items contained in the JSON document should be displayed using Bootstrap Table
 - ✳ The number of matched items should be displayed using *Bootstrap Badge*.

What to Submit

Compress the folder named ***final*** that contains all your files and upload it to LEA.