

INFS3202/7202 Practical 2

Client-side programming: javascript and libraries.

Objectives

The goal of this practical is explore client-side programming, in particular how to use Javascript and javascript-based libraries and frameworks. This practical counts 5% towards your assessment. You must present this practical to your lab tutor during your scheduled lab sessions in week 5 that starts 26/03/2012. The prac could be done either in lab, or at home.

This practical exercise is divided into following tasks:

- Creating an animated gallery page (3 marks);
- Creating a page that allows moving images to an album by using drag-n-drop (2 marks);

Preparation

Before attempting this Practical you should have a good working knowledge of HTML & CSS. You should also be familiar with the concept of Web client-side technology, and how JavaScript relates to HTML/XHTML and CSS.

Please Ensure:

- You have covered the material in Lectures 1 - 3.
- You have tried the introductory JavaScript code given in lectures in Week4, slides 36-37, including:
 - Creating an HTML page containing embedded JavaScript codes and viewing it on a browser.
 - Creating a separate JavaScript file, linking to it in an HTML page, and viewing the HTML page in a browser.
 - Understanding the examples of using JavaScript frameworks and libraries “Prototype”, “Scriptaculous” and “Lightbox”.
- You understand how to view JavaScript errors in browsers of your choice, so that you can do debugging. Below are settings for some common browsers:
 - In Firefox, you can view JavaScript errors through the error console, accessible through the menu item *Tools > Error Console* (or *Tools > Javascript_Console* for older browser versions).
 - In Safari (Mac), choose *Develop>Show Error Console*
 - In Microsoft Internet Explorer, turn on error reporting through *Tools > Internet Options > Advanced>Browsing*, unclick “*Disable Script Debugging (Internet Explorer)*”. Errors will show in a dialog box when the browser encounters them.
 - In Opera, the errors are displayed in the console accessible through menu item *Tools > Advanced > Error Console* or *Tools > Advanced > JavaScript console*.
 - If you use a browser different from the above, look up your browser’s documentation to determine how it displays Javascript errors.

- You have a basic understanding of the JavaScript language constructs. A good introductory tutorial is available at:
 - <http://www.w3schools.com/js/default.asp> (complete at least from JS Introduction to JS Guidelines)

Useful links:

Prototype JavaScript Framework <http://www.prototypejs.org/>
 Scriptaculous Library <http://script.aculo.us/>
 Lightbox2 Library <http://lokeshdhakar.com/projects/lightbox2/>

Task 1 (3 marks): Creating an animated gallery page

1. Create a new HTML document, i.e. prac02_1.html. The page must be divided into 2 parts: a list of albums or categories on the left (e.g. City, Beach, Flower, ...) and a gallery (a grid of photographs) on the right.
2. Once we click on an album name, photographs from the chosen album will be shown using fadeout effect (from Scriptaculous library). Hint: you should use two or more overlapping <div> containers.
3. When we click on a photo from the active gallery, the selected image must be shown using Lightbox library.

Your page should be looking like this:

Album list:

- City
- Beach
- Flower
- Insect



Task1.1&1.2

Album list:

- City
- Beach
- Flower
- Insect



Task1.3

Task 2 (2 marks): Creating a page that allows moving images to an album by using drag-n-drop

1. Create a new HTML document, i.e. prac02_2.html. The page must be divided into 2 parts: a gallery (a grid view) containing all photographs on the left and selected images on the right.
2. The page must allow images to be drag-n-dropped from left to the right and back. Use HTML5 specific features to implement the functionality.

Your page should be looking like this:

