

CSci 5131: Advanced Internet Programming, Spring 2009**Assignment 2: Programming with JavaScript****Due Date: February 26, 2009**

This assignment is to be done either individually OR in groups of up to three students.

Goals:

In this assignment you will learn about XHTML, CSS, JavaScript, and AJAX programming. You will create an interactive HTML page that will show information about various campus buildings.

This page will support two modes of operation. In the manual mode, it will provide buttons for the user to manually browse the information about various campus buildings.

In this mode, the user may also click on an image thumbnail to display that image as a bigger image.

In the slide show mode, the web page will automatically keep on displaying information about various campus buildings.

This is a two part assignment. In the first part, you will implement the above functionality without using AJAX.

In the second part, you will implement the above functionality with AJAX.

Problem Statement (Part 1) (50 points):

You will have to write JavaScript code to create an interactive campus building information html page.

This html should contain the following:

- Following Buttons: Start, Next, Previous, Display Information, Start Slide Show, Stop Slide Show.
- A Select box that contains the following options: “None”, “Architect”, “Year”, and “Description”.
- Thumbnail building images
- An area to display an image of a campus building in bigger size

Functionality:

- The “Start” button should display the image of the first building. You will also display the type of information that has been selected.
- The “Next” button should display the image of the next building. You will also display the type of information that has been selected.
- The “Previous” button should display the image of the previous building. You will also display the type of information that has been selected.
- If a thumbnail image is clicked, it should be displayed as the bigger image.
- The thumbnail images should have the size 50 by 50.
- The bigger image will have the size of 500 by 300.
- The “Display Information” button will display the selected information type based on the option selected from the select box.
 - The information should appear to the right of the bigger image.
 - The information should appear in bold, and font size of 20.
- The “Start Slide Show” button should start the slide show. Each image should be displayed for a period of 1 second.
- While a slide show is active, it should not be possible to start another slide show. You should display an alert if the “Start Slide Show” button is clicked while the previous slide show is still active.
- The “Stop Slide Show” button should stop the slide show.

- The specific thumbnail image that is being displayed in the bigger image area should be highlighted in red color border box.
 - This requirement should be satisfied in both manual mode, and slide show mode.

Here are the screenshots demonstrating the campus building information HTML page corresponding to above functionality.

- [Screenshot 1](#): This is the initial screen shot when no button has is clicked.
- [Screenshot 2](#): This is the screen shot after “Start” button is clicked. Notice that “Architect” is being displayed.
- [Screenshot 3](#): This is the screen shot after “Next” button is clicked.
- [Screenshot 4](#): This is the screen shot after “Previous” button is clicked.
- [Screenshot 5](#): This is the screen shot after an image is clicked.
- [Screenshot 6](#): This is the screen shot after the slide show has been started (by clicking the “Start Slide Show” button).
- [Screenshot 7](#): This is the screen shot when the “Start Slide Show” button is clicked while a previous slide show is already active.

You can download the images [here](#), and building information [here](#).

We are giving you information about ten campus buildings. You should use the following order while displaying the building information:

Armory, Pillsbury Hall, Folwell Hall, Jones Hall, Pillsbury Statue, Wesbrook Hall, Nicholson Hall, Eddy Hall, Music Education, Wulling Hall.

Problem Statement (Part 2) (50 points):

Implement the above functionality using AJAX. For this you have to download the information about the various buildings. This information can be obtained from below:

- Armory: [Architect](#), [Year](#), [Description](#)
- Pillsbury Hall [Architect](#), [Year](#), [Description](#)
- Folwell Hall [Architect](#), [Year](#), [Description](#)
- Jones Hall [Architect](#), [Year](#), [Description](#)
- Pillsbury Statue [Architect](#), [Year](#), [Description](#)
- Wesbrook Hall [Architect](#), [Year](#), [Description](#)
- Nicholson Hall [Architect](#), [Year](#), [Description](#)
- Eddy Hall [Architect](#), [Year](#), [Description](#)
- Music Education [Architect](#), [Year](#), [Description](#)
- Wulling Hall [Architect](#), [Year](#), [Description](#)

Design Guidelines:

You can assume that the images are stored in the same directory as your HTML files.

Submission Instructions:

Include the following files in your submission: two HTML files and a README file.

Please name the HTML files as follows:

- a. Part I: assignment2.html
- b. Part II: assignment2-ajax.html

Submit the tarred directory containing all the three files.