

DIG4503 Assignment 1

Due By: 02/06/12 11:59pm

Delivery Method: Your assignment folder should be ~/public_html/dig4503/assignment1

Overview

Design and develop a simple Question + Answer application that contains a list of questions and asynchronously returns answers via an XMLHttpRequest object.

Specifications

General – Site

- Code should be indented to show element parent/child relationships.
- The root directory for this assignment should be **~/public_html/dig4503/assignment1**
- The image directory for this assignment should be **~/public_html/dig4503/assignment1/img**
- Your XHTML pages should be located in the root directory for this assignment. Your assignment should have two pages named **questions.html** and **answers.html**.
 - o **questions.html** should contain valid XHTML and be the only page that the user loads via a traditional HTTP request.
 - o **answers.html** should contain HTML fragments and should only be requested via XMLHttpRequest methods.
- The <title> of **questions.html** should be “DIG4503 – first_name last_name Assignment 1”. For example, “DIG4503 – Jon Friskics – Assignment 1”.
- No spaces or uppercase letters should be used in file names or directory names.

XHTML Validation

- **questions.html** should validate as XHTML Strict 1.0 (<http://validator.w3.org>).

CSS

- All styles must be documented in an external CSS file called **styles.css** and linked to the document using the <link /> element in the <head> of the document.
- All presentational HTML attributes should be replaced with CSS rules.
- You may (and are encouraged to) use a reset stylesheet.
- You may design your site on a grid and implement it using the 960.gs grid system.
- The CSS directory for this assignment should be **~/public_html/dig4503/assignment1/css**

General – JavaScript

- The JavaScript directory for this assignment should be **~/public_html/dig4503/assignment1/js**
- You may not use any JavaScript libraries or any piece of a JavaScript tutorial presented outside of lectures in this course.
- You may use the innerHTML property in this assignment.
- All JavaScript code must be documented in an external JavaScript file named **a1.js** and linked in the <head> of **questions.html**.

- You should only use unobtrusive JavaScript, and no JavaScript should appear in your HTML outside of the <head> element.
- Event listeners should be used when needed instead of event handlers, with the only exception being the onreadystatechange event.

Behaviors – “Number of answers” clicked

- When the user clicks the “number of answers” graphic/text next to each question a JavaScript function should execute that performs the following operations:
 - o **answers.html** is asynchronously requested from the server via an XMLHttpRequest object.
 - o A JavaScript block should iterate through each of the answers returned in responseText and look for answers that correspond to the clicked question.
 - o If an answer starts with **qx***, where **x** is the question number, that answer should be immediately displayed underneath the corresponding question on **questions.html** without the **qx*** prefix.
 - o If there is more than 1 answer for a question, all answers should display with no more than one answer per line (element).
 - o Once an answer/answer set has been displayed, clicking on the “number of answers” graphic/text should not display duplicate answers.

Presentation

- Each question in **questions.html** should be displayed in an unordered list, and next to each question there should be a styled number or graphic that represents the number of answers to that question.
- The layout of **questions.html** is left up to your discretion, but there should be evidence that you planned out your design before turning it in. There is a quick content layout sketch in the assignment folder on the class website that can be used as a starting point if you can't come up with your own ideas, but I strongly encourage you to spend some amount of time planning your layout.

Content

- There should be at least 6 unique questions in **questions.html**, and at least 2 questions should have multiple answers.
- There should be at least 10 different answers in **answers.html**.
- The format of each question should follow a pattern with a delimiter of * (asterisk). For example: **q3*The sky is blue** means that Question 3's answer is “The sky is blue”. *Note that the common delimiter that separates each line will most likely be a \n character.*

Rubric

	Implementation General specs followed (-10 per error)
	Implementation XHTML spec followed (-10 per error, -5 per warning)
	Implementation CSS specs followed (-10 per error)
/20	Site Design + Presentation specs followed
/80	Behavior Scripting
	/40 XMLHttpRequest object successfully asynchronously requests answers.html at the appropriate time in the script
	/40 “number of answers” functionality works as described
	-100 if all requested site content is not included
	-100 if any XHTML tables (for site layout), frames, or iframes are used
	-100 if any JavaScript libraries or frameworks are used
/100	TOTAL