Quiz 6 solution

Write your name on the exam. Write something for every question. Students who do not write something for everything lose out over students who write down wild guesses. You will get some points if you attempt a solution but nothing for a blank sheet of paper. Write something down, even wild guesses. Problems take long to read but can be answered concisely.

Problem	Maximum	Score
1	8	
2	12	
Total	20	

Problem 1 – XPath

Describe what XML document elements will the following XPath patterns match.

a) (2 points) "/studentlist/student"

All student elements that are children of the studentlist element which is the root

b) (2 points) "student"

All student elements

c) (2 points) "/studentlist//name"

All name elements that are descendents of the studentlist element which is the root

d) (2 points) "/studentlist/*/address/@zipcode"

The zipcode attributes of all address elements that are children of children of the studentlist element which is the root

Problem 2 – AJAX

a) (4 points) Briefly describe the difference between using asynchronous requests and postbacks in web applications.

Postbacks load a full new document from the server whereas asynchronous requests do not. They typically load smaller amounts of data that are used to update portions of the current page.

b) (8 points) Describe a user interface technique common to desktop applications or a metaphor for real-world objects that can be implemented by AJAX. Briefly sketch how it is implemented.

Tabbed panels are an analogy to tabs used with binders or filing cabinet. The tabs themselves can be implemented as table cells with graphics as background that make it easy to distinguish the currently selected tab which is on top. The event handlers associated with clicks on the tabs manipulate the DOM of the document to change the appearance of tabs and to load into the table cell or div that represents the body of the panel the information that corresponds to the selected tab.