

## Quiz 1 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	10	
2	10	
Total	20	

## Problem 1 – Evolution of HTML

- a) (3 points) Briefly describe the meaning of the terms forward compatibility and backward compatibility as they relate to the evolution of HTML.

*In the context of the evolution of the HTML standards, forward compatibility means that browsers aware of the new version of the standard can also display correctly documents written to conform to an older version of the standard and backward compatibility means that browsers unaware of the new version of the standard can display with some limitations a document written to conform to the newer version of the standard.*

- b) (3 points) Briefly explain how the DOCTYPE declaration makes it easier for the HTML/XHTML standards to evolve.

*The DOCTYPE declaration allows the browser to recognize without any ambiguity which version of the standard the document uses. Forward compatibility is trivial when the meaning of a language element is changed. Without this declaration, the browser needs to use heuristics to guess which version of the standard the document writer assumes and this leads to forward compatibility problems if the meaning of elements is changed.*

- c) (4 points) The HTML fragment below can be rendered by all popular browsers, but it is not valid XHTML. Please write down the valid XHTML fragment that produces the same output with the only change that the numbering of list items starts from 41.

```
<br>Recent presidents of the U.S.A.<br>
<ol>
  <li>George H. W. Bush
  <li>William J. Clinton
  <li>George W. Bush
</ol>

<br />Recent presidents of the U.S.A.<br />
<ol start="41">
  <li>George H. W. Bush</li>
  <li>William J. Clinton</li>
  <li>George W. Bush</li>
</ol>
```

## Problem 2 – CSS

a) (3 points) Give the CSS selectors for the following families of elements

1. All paragraphs
2. All paragraphs from the class “sidenote”
3. All paragraphs inside the div with the identifier “contentarea”
4. All paragraphs inside a table

*p*

*p.sidenote*

*div#contentarea p*

*table p*

b) (2 points) Assume that there are paragraphs to which more than one of these selectors apply. Please give their order of precedence.

*3, 2, 4, 1*

c) (5 points) Briefly explain how the CSS attributes `position` and `float` affect the placement of the HTML element they apply to. Give the name of two of the four **other** important **attributes** that work in conjunction with `position` to determine the placement of the element they apply to.

*The attributes top, left, right, and bottom indicate the offset(s) at which the element should go. When position is set to absolute the element does not affect the layout of the surrounding text and it is positioned with respect to the surrounding box (usually the parent of the element) when it is set to fixed, the element is positioned within the current view (ignores scrolling), and when it is set to relative the surrounding text leaves space for the element as normal but the element is shifted by the given offsets from the position it would normally go into. When the float attribute is set to left or right the element aligns to the edge of the surrounding box and the text flows around it.*