

CSE-C3210 Web Software Development : Exam

15.2.2016

- All answers should easily fit on a single answer sheet.
- Write on each paper your **name**, your **student number** including any checking characters, the **code and name of this course**, **examination hall**, **date**, the **number of papers returned** and your **signature**.
- If the question number is followed by an asterisk *, you should select all options that apply. If there is no asterisk, select only one.
- No additional materials, calculators etc. allowed.

HTML & CSS

1. What is the key difference between div and span elements? (max 2 sentences) (2 points)
2. What does the following CSS snippet do? (max 1 sentence, 1 point)

```
p.top {  
  font-style: italic;  
}
```

HTTP

3. Explain **briefly** what is a *conditional* HTTP Request and what is it used for. (max 2 sentences, 2 points)
4. Consider the URL <https://www.example.com/foobar?q=banana&id=561> Explain briefly the following parts: (2 points)

- a) https://
- b) www.example.com
- c) /foobar
- d) ?q=banana&id=561

JavaScript & jQuery

5. The following JavaScript is executed. What, if anything, will be the contents of variable **b**? (1 point)

```
var a = [1,2,4];  
function foo(n) {  
  return n*n;  
}  
var b = a.map(foo);
```

6. Explain briefly **what happens** in the following line of jQuery code snippet. You can refer to the line numbers in your explanation. **When** are the different parts of the code executed? (3 points)

```
1. $(".btn").click(  
2.   function() {  
3.     $("#contents").append("<p>Hello.</p>");  
4.   }  
5. );
```

APIs

7. Explain briefly the key concepts of a RESTful interface (max 4 sentences, **3 points**)

Sessions & Security

8. Explain briefly what is meant by **authorization** and **authentication** (**1 point**)
9. What is Cross Site Scripting (XSS), How would you protect your site against this? (max 3 sentences) (**2 point**)

Django

10. ★ Which claims below are **true** about Django's models (**1 point**)
- a. Django's models don't have to be designed for a specific relational database (MySQL, Postgres, etc..)
 - b. Models are typically changed in templates
 - c. Models convert data from relational database form to objects and vice versa
 - d. ForeignKey fields can be used to refer to other objects
11. ★ Which of the following statements are **true** for Django templates? (**1 point**)
- a. It is possible to make a for-loop over a list of items in a template
 - b. Variables can be used in templates this way: `{% variable_name %}`
 - c. Templates can contain and execute arbitrary Python code
 - d. Templates can specify HTTP Headers for the response
12. Choose which of the following is done by Django's views... (**1 point**)
- a. Defines the structure of the database
 - b. Collects the required information for the output
 - c. It handles executing JavaScript code
 - d. Defines the layout of the output