

# CSE-C3210 Web Software Development : Exam

April 2014

- 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.
- All questions except 11 are worth one point. Some are easier, some are harder.
- No additional material allowed.

## HTML & CSS

1. What is the key difference between a div and a span? (max 2 sentences)






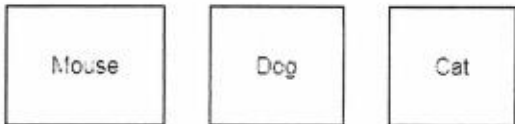
2. For the following fragment of HTML

```
<ul id="species">
  <li>Cat</li>
  <li>Dog</li>
  <li>Mouse</li>
</ul>
```

and CSS style definition

```
#species li {
  list-style-type: none; /* removes the ul bullet */
  border : 1px solid black;
  margin : 1em;
  padding : 2em;
  float : left;
}
```

Which of these images best describes the resulting layout?

- a)  b) 
- c)  d) 
- e) 
- f) 

## HTTP

3. Explain **briefly** the difference in how GET and POST parameters are sent to a server. (2 sentences.)
4. How does a server set cookies?
  - a. Browser automatically requests for cookies from a standardized URL
  - b. Cookies are given in the HTTP headers
  - c. Cookies are included in the `head` element of html pages
  - d. Cookies are given using the `link` tag and loaded as separate files
  - e. None of the above

## JavaScript & jQuery

5. Explain **briefly** what each element a-f **does** in the following piece of code. **Don't explain the syntax but rather why the element is necessary.** It might be a good idea to start from the innermost parts first so that you don't have to repeat yourself.

```

      a
    b      d
   c      e      f
$( "#myButton" ).click( function(){ alert("Plop"); } );
```

## Sessions & Security

6. When you are using Django's session framework, what data is stored on the server and what on client (i.e. browser)? (max 3 sentences)
7. James signed up in the photo service we built as the course project and typed in some weird image captions for an image of a cat. The **beginnings** of the texts he wrote are shown below. What is he trying to do? Explain briefly.
  - a) Cat'); INSERT INTO ..... rest of the text not shown ....
  - b) Cat<script> ..... rest of the text not shown ....

## Web Services

8. ★ Which of the following are **true**?
- In REST, each resource gets a unique URL
  - A GET request can be used instead of a PUT to create REST resources
  - REST interfaces are always used with forms
  - All Django apps have a REST interface

## Django

9. ★ Which claims below are **true** about Django's Models
- Models are typically changed in templates
  - Django's models don't have to be designed for a specific relational database (MySQL, Postgres, etc..).
  - Models convert data from relational database form to objects and vice versa
  - ForeignKey fields are used to refer to other objects.
10. ★ Which of the following statements are **true** for Django templates?
- In addition to HTML, templates should always be used to render css files
  - It is possible to make a for-loop over a list of items in a template
  - Variables can be used in templates this way: {% variable\_name %}
  - Templates can contain and execute arbitrary Python code
  - Templates can specify HTTP Headers for the response

11. (total 3 points)

The following is a Django view that could have been in someone's course project (it wasn't) The purpose of this view is to delete a page from an album you own. Explain the code line by line. (2 point)

There is a security problem in the code. What is it and how would you fix it? (1 point)

```
@login_required
def delete_page(request, album, page_num):
    Page.objects.get_object_or_404(album=album,number=page_num).delete()
    return HttpResponseRedirect("/albums/")
```