

January 16, 2012

Web Technologies Assignment 10

Please hand in your homework by email to pgiarrusso@informatik. The deadline for this assignment is January 23.

If at all possible, please bring your laptop to the following exercises.

G10.1 JavaScript

1. Explain how the following JavaScript code is executed. Also consider the internal structure of `o`.

```
Object o = new Object ();
o.count = 0;
o.inc = function(val){
  if (val == undefined){
    val = 1;
  }
  o.count += val;
}

for (i=0; i < 5; i++){
  document.write(o.count);
  o.inc(i);
}
```

2. What is dynamic typing (a.k.a. duck typing)? What are its advantages and disadvantages?

G10.2 Cross-site Scripting

1. Explain how cross-site scripting works?
2. What is the same-origin policy and how does it work?

G10.3 Ajax

Discuss the advantages and disadvantages of the approach taken by Ajax as opposed to static web sites and servlets.

H10.1 Ajax

Do group exercise G10.3.

H10.2 Library Management

Implement library management using Ajax.

1. The welcome page (HTML) requests the XML file and stylesheet from the servlet using Ajax (event handler).
2. Extend the stylesheet so that users are presented a form to add elements to the library on the fly. You can use JDOM or JAXB on the servlet side.
3. Try using cross-site scripting to get your hands on some sensitive data, for instance the current session ID.