

# Assignment 8

## 03.12.2014

### HTTP Proxy, Cache Filter

**Purpose:**

In this assignment, a cache filter will be added to the HTTP proxy.

Cached pages must be stored in disk and retrieved when a GET request for the same resource arrives. By using caching, bandwidth usage can be greatly reduced for static content.

**Notes:**

The simplest approach is to store each received webpage on its own file. Because many URLs may contain characters that aren't allowed as part of a filename, a derivative filename must be used (e.g.: use the *md5* checksum of the URL).

In HTTP, all content can be cached except when the server's reply specifies otherwise, e.g.:

```
HTTP/1.1 200 OK
Cache-Control: no-cache
Date: Wed, 01 Dec 2010 01:05:15 GMT
[...]
```

Keywords that are often used to disable caching are *no-cache*, *no-store* and *max-age=0*

If you did not finish the exercise from last time, you can use a sample base proxy written in Java available at Ilias.

**References:**

RFC 2616 (HTTP), Section 14.9 Cache Control  
<http://www.w3.org/Protocols/rfc2616/rfc2616-sec14.html#sec14.9>

**Hand-In:**

A demonstration of the software. The source files and project files must be submitted to the appropriate Ilias assignment.

**Deadline:**

One week (10.12.2014)