Assignment 2: Web Catalog Server (2)

In this assignment, you will again make a catalog of furniture, consisting of an index page and a details page. When clicking on one of the pictures on the index page, you will be transferred to the item's details page. In this assignment, you have to implement the functionalities given by com.sun.net and java.net.HttpCookie packages used in the previous assignment yourself. From the user's perspective, nothing will change in the application, as the interface will look exactly the same as the previous assignment.

When a client requests a Web page, the servier issues a cookie for the client that is returned to the client in the Set-Cookie header line of the corresponding HTTP response message. The cookie will be stored in the browser and conveyed as part of subsequent HTTP request messages, i.e., in the Cookie header of the request, to the same server. For the value of the cookie, use your own student ID number.

You may find that this assignment can be quite a challenge and time-consuming, so make sure you start on time.

Rules:

- You are to use Java for this assignment
- All network traffic handling is to be done by TCP socket classes.
- You are not allowed to use external packages.
- You are not allowed to use any packages related to HTTP, URL or cookies
- Exception: If deemed required in your implementation, you are allowed to use a package to handle JSON.
- When handing in the assignment, you have to provide a design document that describes your work. (if this is missing, you receive a 50% penalty)

Notes:

- The HTML pages will be provided to you
- Use localhost:8080 as your port for the Webserver to make it easier for us to check.
- For ease of checking your work, make a log statement in your Java code every time something happens with the cookies (see cookie screenshots) and when a Web page is requested
- The furniture.json file shows all the details you need to describe the furniture. You do not have to dynamically load this data, but you may copy the detail pages for each furniture object with the correct data (ex: chairDetails.html, tableDetails.html)
- If you want to earn extra points, instead of copying the json data by hand, you may use a JSON package to insert the data in the JSON files in the HTML programmatically.

Grading criteria:

Grading will be done by opening the index page in the **Chrome** Web browser, and visiting the three detail pages, checking if the cookies are set properly after each step. If this works correctly, we will check the code to see if the given rules have been followed.

- The application works as described
- No forbidden packages were used (knockout)
- Cookies are used as described
- The design document is comprehensive

Submission:

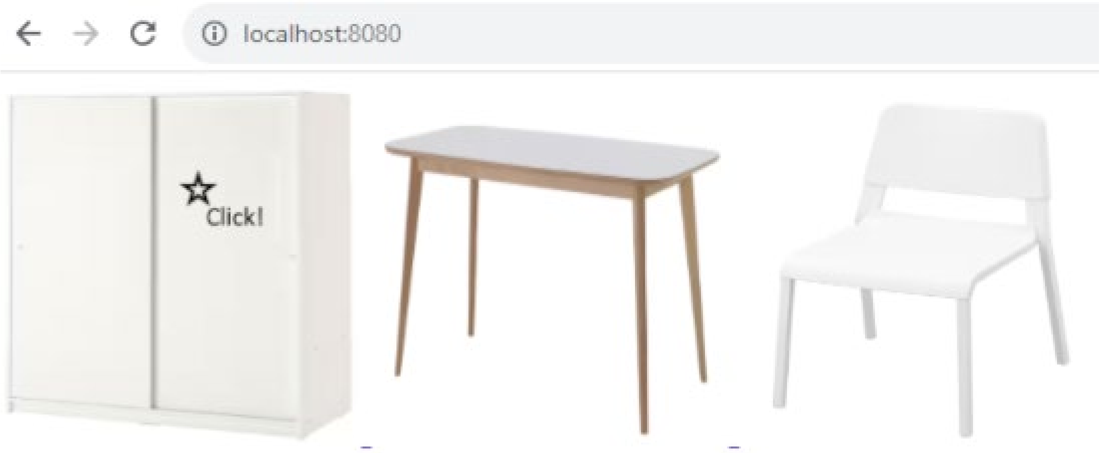
Submit your program code package(Assignment2_code_이름_학번) and design document (Assigment2_이름_학번) in LMS. (Korean/English)

Deadline: **30th of November (11 월 30 일) 23:59**

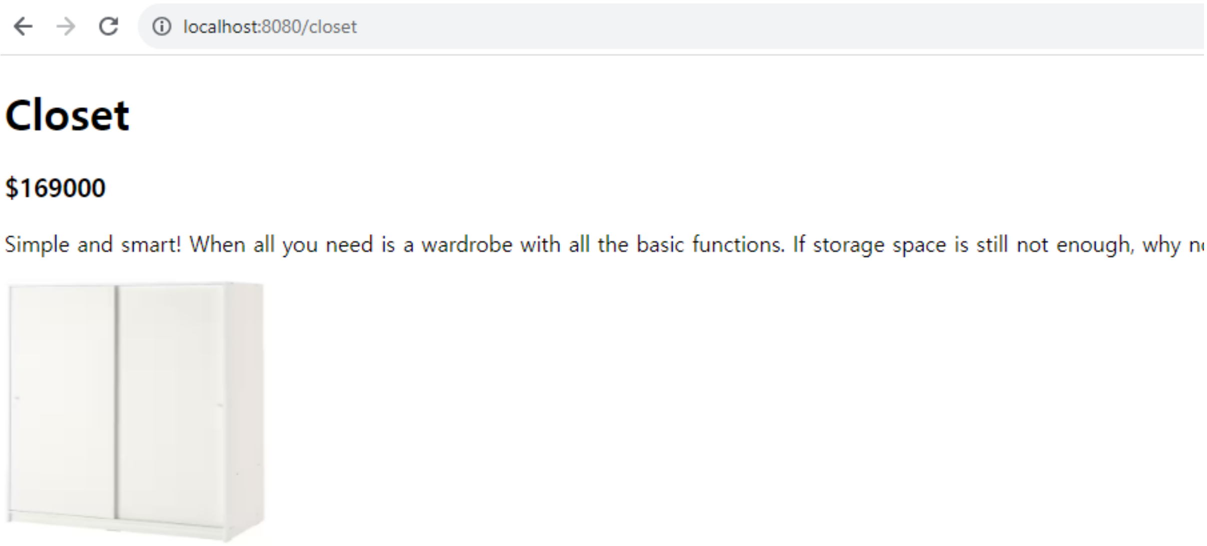
Late penalties:
Up to 24 hours = -25%,
24-48 hours = -50%,
48-72 hours = -75%
After 72 Hours you get an automatic 0.

Example screenshots:

Homepage:



Closet detail page:



Closet

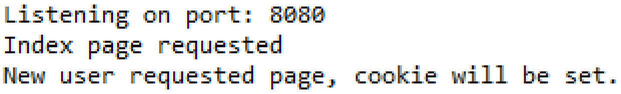
$169000

Simple and smart! When all you need is a wardrobe with all the basic functions. If storage space is still not enough, why n

Cookies:

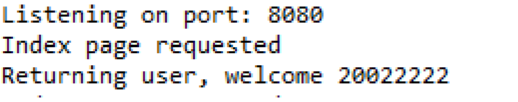
Below are the results where your Server issues a cookie value “StudentNumber=20022222” to a newly arriving client.

Console, new user



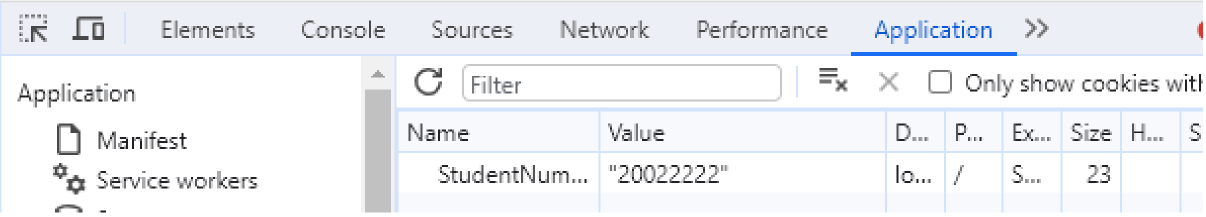
```
Listening on port: 8080
Index page requested
New user requested page, cookie will be set.
```

Console, returning user



```
Listening on port: 8080
Index page requested
Returning user, welcome 20022222
```

Cookie set in chrome browser (f12->application->cookies)



Name	Value	D...	P...	Ex...	Size	H...	S
StudentNum...	"20022222"	lo...	/	S...	23		