

## Investigating OpenU Sheilta Website for building Session Keeper

The main goal of this project is to create a chrome extension for OpenU students that will keep their session cookie alive even if no fetches have been done in a 30 minutes period.

Ive started by exploring the login and logout mechanism of the Sheilta website

Title	URL
Login to Sheilta	<a href="https://sso.apps.openu.ac.il/login?T_PLACE=https://sheilta.apps.openu.ac.il/pls/dmyopt2/sheilta.main">https://sso.apps.openu.ac.il/login? T_PLACE=https://sheilta.apps.openu.ac.il/pls/ dmyopt2/sheilta.main</a>
Sheilta home screen	<a href="https://sheilta.apps.openu.ac.il/pls/dmyopt2/myop.myop_screen">https://sheilta.apps.openu.ac.il/pls/dmyopt2/ myop.myop_screen</a>  ** note that if no session cookie is alive on the chrome, this URL will redirect to the first URL.

Upon successful login to Sheilta, a session cookie named opus\_user\_id is set under the .openu.ac.il domain. This cookie appears to serve as the primary session identifier.

While Ive researched some more interesting actions on the OpenU site, ive noticed that if a Sheilta tab is open, and a course tab is also open, and a logout is performed in the Sheilta tab, the course tab session is still alive and on refresh the tab keep works just fine.

BUT!, When both Sheilta and course site tabs are open, logging out from Sheilta does **not** immediately terminate the session in the course site. However, logging out from the course site **does** terminate the Sheilta session as well.

The logout API's:

Title	URL
Logout from Sheilta tab	<a href="https://sso.apps.openu.ac.il/logout?T_PLACE=https://opal.openu.ac.il/auth/ouilssso/logout.php?urltogo=https://opal.openu.ac.il/">https://sso.apps.openu.ac.il/logout? T_PLACE=https://opal.openu.ac.il/auth/ouilssso/ logout.php?urltogo=https://opal.openu.ac.il/</a>
Logout from a specific course tab (course site)	<a href="https://opal.openu.ac.il/login/logout.php?sesskey=&lt;SESSION_KEY&gt;">https://opal.openu.ac.il/login/logout.php? sesskey=&lt;SESSION_KEY&gt;</a> + The first API also triggered  ** sesskey is probably a string of size 10 of letters (capital and no capital)

The difference:

When a Sheilta login is performed, the client gets a session cookie that called opus\_user\_id under the [sheilta.apps.openu.ac.il](https://sheilta.apps.openu.ac.il) domain,  
And when he first enter to a course site, he gets a cookie called ModuleSessionopal under the [opal.openu.ac.il](https://opal.openu.ac.il) domain.

## **The Extension**

How it works?

During the Sheilta site research, I've found that on Sheilta page load, a script called session-guard-1.0.js script is loaded in the background, and by looking at the source code of it I found the refreshUrl:

[https://sheilta.apps.openu.ac.il/pls/dmyopt2/session\\_guard?p\\_refresh=1](https://sheilta.apps.openu.ac.il/pls/dmyopt2/session_guard?p_refresh=1)

This URL refreshes the Session Cookie on the server side and makes the session keep working while no real action is performed by the user in the sheilta tabs.

**\*\*The session-guard-1.0.js script\*\***

Because this script is nice and thought me a lot about the session management in the sheilta site, im adding a little writeup to it also:

as we said, when the sheilta page is loaded, the session guard script is loaded with it

The script has 3 important fields:

**checkUrl** - a URL that responds in the seconds left for the current session.

**refreshUrl** - a URL for refreshing the session - so checkUrl response is back to 1800 seconds (30 minutes)

**logoutUrl** - when the checkUrl responds in 0 - meaning the session expired, the logoutUrl is called - which performs the regular logout steps and redirects to login page.

For the ones interested - u can set the KEEPALIVE\_INTERVAL\_MINUTES variable of the background.js file of the extension to a small number (like 0.2 - which means 12 seconds interval), and u can hit the checkUrl multiple times and see how after 12 seconds the number returned jumps back to 1800 - meaning the session reload works perfectly.

The URL's:

**checkUrl:** [https://sheilta.apps.openu.ac.il/pls/dmyopt2/session\\_guard](https://sheilta.apps.openu.ac.il/pls/dmyopt2/session_guard)

**refreshUrl:** [https://sheilta.apps.openu.ac.il/pls/dmyopt2/session\\_guard?p\\_refresh=1](https://sheilta.apps.openu.ac.il/pls/dmyopt2/session_guard?p_refresh=1)

**logoutUrl:** <https://www.openu.ac.il/students/pages/default.aspx?logout=1>