Check-in 2 – HTTP sessions

due at 23:59 on ?TBD (20 points)

In this checkin, you will use `curl` to manually log in to a session with a web server, make several requests to that server, and then log out.

The relevant URLs are:

- `http://cs120.liucs.net/session/login`
  This URL should be accessed with a `POST` method. It expects two parameters: `username` (include your first and last name), and `password`. The correct password is always `secret`, but you may want to try other passwords to see what happens.
  Upon a successful login, the response will come back with a `Set-Cookie` of the form `sk=8f90bcc2` (the `sk=` is always the same, and the rest is a random eight-character hexadecimal session key). There will be another `Set-Cookie` with a variable `_SESSION` but you should ignore that one.
  You can pass the `sk` session key in a cookie to both of the URLs below.
- `http://cs120.liucs.net/session`
  This URL should be accessed with a `GET` method. If you are logged in, and you pass the session key (of the form `sk=8f90bcc2`) as a cookie, then this URL will log your visit, and tell you how many times you have visited: "Welcome back, Chris League, visit number 2 in this session." Once it succeeds, you should repeat it several times, so you record at least 4 or 5 visits.
  If you are not passing a valid session key, it will say "403 Permission denied: Invalid session", or if you are not passing any `sk` cookie at all, it will say "403 Permission denied: Please log in first."
- `http://cs120.liucs.net/session/logout`
  This URL can be accessed with either a `GET` or a `POST`. If you are logged in, and you pass the session key (of the form `sk=8f90bcc2`) as a cookie, then this URL will log you out, making that session key invalid in the future.
  After a successful logout, you should try the middle URL `/session` one more time. Rather than saying "Welcome back," it should now say "Invalid session."

You can verify your work by browsing the table of sessions at http://cs120.liucs.net/admin/session. Your name and session key will appear in the first two columns, and the number of visits recorded in that session is in the right-most column. Clicking on the session key will show each access that was part of the session. For full credit, your name should appear next to at least one key that has a *closed* timestamp and more than one visit.

Below, for your reference, are some reminders about `curl` options. The only options not in the HTTP notes are `-b` to pass cookie data and `-X` to specify the request method.

- `-v` will show you the full conversation, including the response headers
- `-d "username=Chris+League"` is how you pass data in a POST request
- `-b sk=8f90bcc2` will send a cookie along with your request
- `-X POST` or `-X GET` let you specify the request method. The default is GET unless you are using `-d` (for POST) or `-I` (for HEAD).
- `-H "Accept-Language: es"` can be used to specify other headers in your request. The server still supports the same languages as in the previous check-in. (It's not necessary to use a different language for this assignment, but you can toy with it if you want.)
- `-H "Cookie: sk=8f90bcc2"` is an alternative to using `-b` to specify a cookie in your request.