

Exercises: HTTP Status Codes

Make a new Eclipse project called exercises-status-codes (or some such).

- 1.** Write a servlet that sends about half the users to `http://www.google.com` and about half to `http://www.bing.com`. Choose at random (compare the output of `Math.random()` to 0.5). As a starting point, copy/paste a servlet from one of your previous projects, but remember that when you do `response.sendRedirect`, you should *not* do `response.setContentType` or `out.println`.

Question to ponder: Suppose you entered the address of the servlet and ended up at `google.com`. Now you hit the Reload button on your browser. What is the probability that you now go to `bing.com`?

- 2.** Write a servlet that returns a “page not found” error page (404) unless the user supplies a `favoriteLanguage` request (form) parameter with a value of “Java.”
- 3.** Write a servlet that sends the first 9 requests to `washingtonpost.com` (an organization that uses servlets and JSP extensively, by the way), the next request to `nytimes.com`, and then repeats. That is, every tenth request should get sent to `nytimes.com` and the rest should get sent to `washingtonpost.com`. Don’t just use probabilities (i.e., don’t compare `Math.random` to 0.9); actually count the overall requests. So, for example, if the server received between 1000 and 1009 overall requests since last being booted, exactly 100 of them should have sent users to `nytimes.com`, and the rest should have sent users to `washingtonpost.com`.

Hint: use an instance variable (aka field, data member).