














## Lab 5 Part 1 Grading Form

Student name:

Student Login:

Date and lab time:

TA: \_\_\_\_\_

| Description  | Observations<br>(TAS: Write notes for<br>grading later) | Max | Current |
|--|---|-----|---------|
| <b>Vanilla Server</b>  |   |     |         |
| Run your server in iterative mode.<br><b>Server Test:</b><br> 1. Clean the cache in the browser.<br> 2. Connect to your server using a browser<br>connected to<br><b>http://data.cs.purdue.edu:port.</b><br> 3. Does the main page appear?<br> 4. Does the simple test work?<br> 5. Does the complex test work?<br> 6. Reload three times.<br> 7. Load in both chrome and firefox |   | 4   |         |
| <b>Basic HTTP Authentication</b>   |   |     |         |
|  1. Connect to <b>http://data.cs.purdue.edu:port</b><br> 2. Type wrong password and make sure<br>access is denied.<br> 3. Type Right password.  |   | 4   |         |
| <b>Process mode</b>  |   |     |         |
|  In another window type <b>ps -u \$USER</b> and see<br>the number of zombie processes.<br>Run the server using the <b>-f</b> option.<br>Go through the <b>Server Test</b> steps as above.<br><b>telnet data &lt;port&gt;</b> and then with the browser<br>try to connect to<br><b>http://data.cs.purdue.edu:port.</b> Does the<br>server answer?   |   | 2   |         |
|  Type <b>ps -u \$USER</b> . Has the number of<br>zombie processes increased?   |   | 2   |         |
| <b>Thread per request</b>  |   |     |         |
|  Run the server using the <b>-t</b> option.<br>Go through the <b>Server Test</b> steps as above.   |   | 2   |         |

|   |  |    |  |
|---|--|----|--|
|   | <p><b>telnet data &lt;port&gt;</b> and then with the browser try to connect to <b>http://data.cs.purdue.edu:port</b>. Does the server answer?</p> <p>type <b>ps -u \$USER o nlwp,pid,cmd</b>; Does the process show more than one thread? (it should show the thread serving telnet).</p>  |    |  |
|   | <b>Pool of Threads</b>   |    |  |
| ✓ | <p>Run the server using the <b>-p</b> option. Go through the <b>Server Test</b> steps as above. type <b>ps -u \$USER o nlwp,pid,cmd</b>; Does the process show the threads in the pool? (it should show only 5 or 6 threads).</p>  | 2  |  |
| ✓ | <b>Robustness</b>  |    |  |
| ✓ | <ul style="list-style-type: none"> <li>✓ (2pt) Did the server crash? How many times (-1pt for every crash up to 2pts)?</li> <li>✓ (1pt Mem Leak &gt; 1KB) Are there resource leaks (memory, fds,...). Run<br/> valgrind --leak-check=full --track-fds=yes ./myhttpd -t 5644<br/> (Crashing in valgrind yields 0 points)</li> </ul> <p>Run complex test and reload three times. Then type ctrl-c. Write the number of leaks.</p> <ul style="list-style-type: none"> <li>✓ (1pt) Does the server serve documents above the <b>http-root-dir</b> directory?<br/> curl --user &lt;USER&gt;:&lt;PASSWORD&gt;<br/> --path-as-is<br/> <a href="http://data.cs.purdue.edu:port/./myhttpd.cc">http://data.cs.purdue.edu:port/./myhttpd.cc</a><br/> curl &lt;USER&gt;:&lt;PASSWORD&gt; --path-as-is<br/> <a href="http://data.cs.purdue.edu:port/./myhttpd.cc">http://data.cs.purdue.edu:port/./myhttpd.cc</a><br/> (the server shouldn't serve documents above the <b>http-root-dir</b> directory)</li> </ul> | 4  |  |
|   | <b>GIT</b>   |    |  |
|   | <p>Using the lab machine<br/> cd lab5-src;<br/> git shortlog -sn --author=\$USER<br/> Write number of commits<br/> See commits and write comments in form.</p>   |    |  |
|   | <b>Total</b>   | 20 |  |
|   | <b>Extra Credits</b>   |    |  |

