Using code coverage to debug your plugin

Renaat Debleu, eWallah
Code coverage

Wikipedia:

In computer science, code coverage is a measure used to describe the degree to which the source code of a program is tested by a particular test suite. A program with high code coverage has been more thoroughly tested and has a lower chance of containing software bugs than a program with low code coverage.
Run

```
php admin/tool/phpunit/cli/init.php
php admin/tool/phpunit/cli/util.php --buildcomponentconfigs

phpdbg -qrr vendor/bin/phpunit --coverage-text --configuration mod/forum
OR
/opt/moodle-plugin-ci/bin/moodle-plugin-ci phpunit --coverage-text mod/forum
```
- moodle-plugin-ci phpunit --coverage-text --coverage-clover
after_success:
- moodle-plugin-ci coveralls-upload
<table>
<thead>
<tr>
<th>mod/glossary</th>
<th>29.47%</th>
</tr>
</thead>
<tbody>
<tr>
<td>mod/imscp</td>
<td>36.94%</td>
</tr>
<tr>
<td>mod/lesson</td>
<td>35.32%</td>
</tr>
<tr>
<td>mod/forum</td>
<td>44.43%</td>
</tr>
<tr>
<td>mod/feedback</td>
<td>36.88%</td>
</tr>
<tr>
<td>mod/quiz</td>
<td>33.53%</td>
</tr>
<tr>
<td>mod/url</td>
<td>20.26%</td>
</tr>
<tr>
<td>mod/page</td>
<td>21.59%</td>
</tr>
<tr>
<td>mod/choice</td>
<td>40.33%</td>
</tr>
<tr>
<td>mod/book</td>
<td>22.08%</td>
</tr>
<tr>
<td>mod/chat</td>
<td>21.32%</td>
</tr>
<tr>
<td>mod/wiki</td>
<td>28.12%</td>
</tr>
<tr>
<td>mod/folder</td>
<td>23.12%</td>
</tr>
<tr>
<td>mod/scorm</td>
<td>18.13%</td>
</tr>
<tr>
<td>mod/label</td>
<td>24.01%</td>
</tr>
<tr>
<td>mod/resource</td>
<td>24.09%</td>
</tr>
</tbody>
</table>

<p>| question/behaviour/adaptive | 86.93% |
| question/type/description   | 84.21% |
| question/format/examview    | 84.09% |
| media/player/youtube        | 83.10% |
| question/behaviour/interactive | 82.44% |
| availability/condition/profile | 79.31% |
| question/behaviour/deferredcbm | 78.78% |
| question/format/blackboard_six | 78.64% |
| question/type/calculatedsimple | 75.82% |
| question/behaviour/immediatefeedback | 73.44% |
| filter/glossary             | 72.62% |
| question/type/numerical     | 70.85% |
| media/player/html5audio     | 70.73% |</p>
<table>
<thead>
<tr>
<th>FILE</th>
<th>LINES</th>
<th>RELEVANT</th>
<th>COVERED</th>
<th>MISSED</th>
<th>HITS/LINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>...um/classes/analytics/indicator/cognitive_depth.php</td>
<td>75</td>
<td>11</td>
<td>0</td>
<td>11</td>
<td>0.0</td>
</tr>
<tr>
<td>...rum/classes/analytics/indicator/social_breadth.php</td>
<td>56</td>
<td>7</td>
<td>0</td>
<td>7</td>
<td>0.0</td>
</tr>
<tr>
<td>mod/forum/classes/event/assessable_uploaded.php</td>
<td>140</td>
<td>31</td>
<td>24</td>
<td>7</td>
<td>69.0</td>
</tr>
<tr>
<td>...asses/event/course_module_instance_list_viewed.php</td>
<td>39</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0.0</td>
</tr>
<tr>
<td>mod/forum/classes/event/course_module_viewed.php</td>
<td>72</td>
<td>9</td>
<td>8</td>
<td>1</td>
<td>2.0</td>
</tr>
<tr>
<td>mod/forum/classes/event/course_searched.php</td>
<td>117</td>
<td>19</td>
<td>18</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>mod/forum/classes/event/discussion_created.php</td>
<td>123</td>
<td>21</td>
<td>17</td>
<td>4</td>
<td>3.0</td>
</tr>
<tr>
<td>mod/forum/classes/event/discussion_deleted.php</td>
<td>121</td>
<td>21</td>
<td>17</td>
<td>4</td>
<td>3.0</td>
</tr>
<tr>
<td>mod/forum/classes/event/discussion_moved.php</td>
<td>126</td>
<td>24</td>
<td>19</td>
<td>5</td>
<td>2.0</td>
</tr>
<tr>
<td>...orum/classes/analytics/indicator/activity_base.php</td>
<td>93</td>
<td>26</td>
<td>0</td>
<td>26</td>
<td>0.0</td>
</tr>
</tbody>
</table>
if (!$cm) {
    if (!$cm = get_coursemodule_from_instance('forum', $forum->id, $forum->course)) {
        print_error('invalidcoursemodule');
    }
}

$context = context_module::instance($cm->id);

if (empty($sort)) {
    $sort = forum_get_default_sort_order();
}

$olddiscussionlink = false;

// Sort out some defaults.
if ($perpage <= 0) {
    $perpage = 0;
    $page = -1;
}
EWALLAH / MOODLE-AVAILABILITY_COURSECOMPLETED

Last Build on Branch Master

Committed: 5 Nov 2019 - 9:01
Commit Message: php-webdriver patch removal

Coverage remained the same at 85.294%

Build #129
Build Type: push, travis-ci
Committed By: ewallah

Run Details:
203 of 238 relevant lines covered (85.29%)
13.18 hits per line