Building Trust in Software Collaboration

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“How can you outsource so much? I could never trust a vendor that way.”
“When I see you working together, it’s like you’re all on the same team.”
Good development practice builds trust.
Ironically, because I don’t really have to trust you that much.
Objective measures, automatic notifications, and transparency
No code without tests

<table>
<thead>
<tr>
<th>NAME</th>
<th>TOTAL LINES</th>
<th>LINES OF CODE</th>
<th>TOTAL COVERAGE</th>
<th>CODE COVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>hydra-plugin_test_host/app/controllers/application_controller.rb</td>
<td>11</td>
<td>4</td>
<td>100.00%</td>
<td>100.00%</td>
</tr>
<tr>
<td>hydra-plugin_test_host/app/helpers/application_helper.rb</td>
<td>4</td>
<td>3</td>
<td>100.00%</td>
<td>100.00%</td>
</tr>
<tr>
<td>hydra-plugin_test_host/vendor/plugins/hydra-head/app/controllers/application_controller.rb</td>
<td>51</td>
<td>26</td>
<td>100.00%</td>
<td>100.00%</td>
</tr>
<tr>
<td>hydra-plugin_test_host/vendor/plugins/hydra-head/app/controllers/assets_controller.rb</td>
<td>114</td>
<td>80</td>
<td>67.54%</td>
<td>58.75%</td>
</tr>
<tr>
<td>hydra-plugin_test_host/vendor/plugins/hydra-head/app/controllers/catalog_controller.rb</td>
<td>261</td>
<td>88</td>
<td>91.19%</td>
<td>75.00%</td>
</tr>
<tr>
<td>hydra-plugin_test_host/vendor/plugins/hydra-head/app/controllers/contributors_controller.rb</td>
<td>54</td>
<td>38</td>
<td>77.78%</td>
<td>76.32%</td>
</tr>
<tr>
<td>hydra-plugin_test_host/vendor/plugins/hydra-head/app/controllers/file_assets_controller.rb</td>
<td>143</td>
<td>82</td>
<td>90.91%</td>
<td>85.37%</td>
</tr>
<tr>
<td>hydra-plugin_test_host/vendor/plugins/hydra-head/app/controllers/get_controller.rb</td>
<td>39</td>
<td>33</td>
<td>97.44%</td>
<td>96.97%</td>
</tr>
</tbody>
</table>
@response, @document = get_solr_response_for_doc_id(pid)
if reader?
  @downloadable = true
  break
end
end

if @downloadable
  if @file_asset.datastreams_in_memory.include?("DS1")
    send_datastream @file_asset.datastreams_in_memory["DS1"]
  end
else
  flash[:notice] = "You do not have sufficient access privileges to download the document, which has been marked private."
  redirect_to(:action => 'index', :q => nil, :f => nil)
end
end
Tests run automatically

<table>
<thead>
<tr>
<th>Job</th>
<th>Last Success</th>
<th>Last Failure</th>
<th>Last Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>active_fedora</td>
<td>4 days 16 hr (#56)</td>
<td>21 days (#45)</td>
<td>4 min 22 sec</td>
</tr>
<tr>
<td>hydra-head-rails2-plugin</td>
<td>1 day 8 hr (#114)</td>
<td>1 day 13 hr (#113)</td>
<td>5 min 17 sec</td>
</tr>
<tr>
<td>hyhull</td>
<td>21 hr (#89)</td>
<td>N/A</td>
<td>6 min 2 sec</td>
</tr>
<tr>
<td>jettywrapper</td>
<td>10 hr (#5)</td>
<td>N/A</td>
<td>11 sec</td>
</tr>
<tr>
<td>lockit</td>
<td>10 hr (#5)</td>
<td>N/A</td>
<td>6.9 sec</td>
</tr>
<tr>
<td>loggable</td>
<td>28 days (#3)</td>
<td>1 mo 8 days (#1)</td>
<td>5.8 sec</td>
</tr>
<tr>
<td>namaste</td>
<td>17 hr (#11)</td>
<td>17 hr (#9)</td>
<td>8.2 sec</td>
</tr>
<tr>
<td>om</td>
<td>10 days (#32)</td>
<td>23 days (#11)</td>
<td>41 sec</td>
</tr>
<tr>
<td>solrizer</td>
<td>16 days (#25)</td>
<td>1 mo 12 days (#8)</td>
<td>13 sec</td>
</tr>
<tr>
<td>solrizer-fedora</td>
<td>16 days (#12)</td>
<td>N/A</td>
<td>41 sec</td>
</tr>
</tbody>
</table>
Everyone knows when something changes

Commit: 936049f5144f6f3d76c0f926fb5bb85f96f894f9
  https://github.com/sul-dlss/hydra-hydrus/commit/936049f5144f6f3d76c0f926fb5bb85f96f894f9
Author: Matt Zumwalt <matt.zumwalt@yourmediashelf.com>
Date: 2011-04-30 (Sat, 30 Apr 2011)

Changed paths:
- A README
- A Rakefile
- A app/controllers/application_controller.rb
- A app/helpers/application_helper.rb
- A config/boot.rb
- A config/database.yml
- A config/environment.rb
- A config/environments/development.rb
Moving doc rake task out of the solrizer namespace.

jkeck (author)
May 02, 2011

Showing 1 changed file with 20 additions and 20 deletions.

lib/tasks/solrizer.rake

lib/tasks/solrizer.rake

@@ -1,9 +1,28 @@
1 desc "Task to execute builds on a Hudson Continuous Integration Server."
2 task :hudson do
3 -  Rake::Task["solrizer:doc"].invoke
3 +  Rake::Task["doc"].invoke
4 +  Rake::Task["solrizer:rspec"].invoke
5 end
6
7 +# Use yard to build docs
8 +begin
Everyone knows when something breaks

```text
jcneloni [89369b87@gateway/web/freenode/lp.137.54.155.135] entered the room. (11:38:17 AM)
11:47:19 AM hydra_hudson_bot: Project om build #7: STILL FAILING in 44 sec: http://hudson.projecthydra.org/job/om/7/
11:47:20 AM hydra_hudson_bot: Matt Zumwalt: starting nokogiri sanity check spec for hudson
anarchivist left the room (quit: Remote host closed the connection). (12:00:17 PM)
anarchivist [-anarchivi@unaffiliated/anarchivist] entered the room. (12:03:15 PM)
jcneloni left the room (quit: Quit: Page closed). (12:07:24 PM)
You have disconnected (12:09:43 PM)
You have connected (12:23:54 PM)
12:29:16 PM hydra_hudson_bot: Matt Zumwalt: debugging hudson
12:32:43 PM hydra_hudson_bot: Matt Zumwalt: trying to pin down hudson nokogiri misbehavior
12:46:45 PM hydra_hudson_bot: Matt Zumwalt: debugging hudson
12:51:18 PM hydra_hudson_bot: Yippie, build fixed!
12:51:19 PM hydra_hudson_bot: Matt Zumwalt: debugging hudson
```
Docs are consistent, public, and automatic

Hydra-Head

Hydra-Head is a Rails Engines plugin containing the core code for a Hydra application. The full hydra stack includes the following:

- **Blacklight** (a Rails Engines plugin) for the User Interface - **SOLr** (a java application, also ported to other languages) for the Search Engine - **ActiveFedora** (a ruby gem) to let the rails application talk to fedora - **OM** (a ruby gem) to streamline the metadata configuration - **Solrizer** (a ruby gem) to write Fedora content to the Solr index - **SolrizerFedora** (a ruby gem) for something. - HydraHead (a Rails Engines plugin) to glue it all together

For a more thorough overview of the Hydra framework, see HYDRA_OVERVIEW.textile

This is (currently) a Ruby on Rails 2 Engines Plugin. It will soon become a Rails 3 Plugin, which will be distributed as a gem.
Objective measures

Files: 2
Modules: 2 (2 undocumented)
Classes: 1 (1 undocumented)
Constants: 2 (2 undocumented)
Methods: 8 (3 undocumented)

38.46% documented
Shared code is public
(some) local code is public
Planned shared work is public
Collaborative storyboarding and design

Hypatia

Location
Yale University Library
Manuscripts and Archive
MS 1748: James Tobin papers
Accesison 2004-M-088:
Additional Material
Computer diskettes (3 1/2"

Some descriptive metadata for the "Computer diskettes" container might go here.

Single purpose: this is the absolute path to this item from its home location. User can navigate back up the path by clicking links.

2004-M-088.0004.dd

Description
Creator: Tobin, James
Date(s) of creation: 1992-1993
Document type: Disk Image

Files

<table>
<thead>
<tr>
<th>File</th>
<th>Size</th>
<th>Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-M-088.0001.txt</td>
<td>123 KB</td>
<td>download</td>
</tr>
<tr>
<td>2004-M-088.0001.xml</td>
<td>345 KB</td>
<td>download</td>
</tr>
</tbody>
</table>

Technical info
Original filename: 2004-M-088.0004.dd
Source media: 3.5" floppy disk
File size: 1.41 MB

ID: qwerfly23456yudp7890

When you are logged in, your name or login ID displays with the logout link.

Only the fields with content are displayed - no empty labels. Sections with no fields are also not displayed.

Thumbnail is not the center of the screen, since it won’t always be present.

Sections can be made collapsible if some items have a lot of information; but collapsed/accordion should not be the default mode for discovery environment.
Web standards

• Increased and ongoing compliance with accessibility standards

• Testing XHTML validation (soon)

• Testing javascript (soon)
Talk to each other!