Title: CI for the Web 2.0 Guy (or Gal)

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Abstract: A hands-on tutorial showing how to quickly set up a Continuous Integration (CI) environment that includes automated testing for Rails (Test::Unit or Rspec), Javascript (JSUnit), and Web UI (Selenium).

Key Benefits:
- No hand waving or omitted steps – hands on, starting from just downloads
- Learn how Continuous Integration is used in a live environment
- Learn about cutting edge testing tools
- Learn all the steps needed to do it for your own project
- Will provide CDs with required tools, so the attendees can follow along on their laptops, or try it later without having to download.

Content Outline:
- Overview of tools used and download sites
- Installing Rails
- Creating a dummy rails app for testing
- Installing and running CruiseControl
- Writing a dummy Test::Unit test (maybe Rspec)
- Hooking up Test::Unit (maybe Rspec) under CruiseControl, seeing it run
- Installing JsUnit
- Writing a dummy JsUnit test
- Hooking up JsUnit under CruiseControl, seeing it run
- Writing a dummy Selenium test
- Installing Selenium
- Hooking up Selenium under CruiseControl, seeing it run
- Review of what we did
- Problems you will run into with a "real" more complex installation
  - Multiple Projects – different configurations – need to abstract common setup
  - Remote "Farm" machines
    - Keeping everything running and in sync can be a chore
    - Tests can behave differently when run remotely over HTTP – may pass locally but fail on CI
  - Timeouts and other spurious failures – when you have a LOT of tests, things start breaking in new ways.
  - Multi-browser Issues – Things break under different browsers, sometimes intermittently, for mysterious reasons
  - Sandbox environments – It's good to have a "sandbox" CI environment that is identical to the "production" CI environment, to debug the mysterious problems without disruption the production CI environment.
  - Fatigue: It takes a great deal of commitment, dedication, and investment from the entire team AND management to Keep It Green – but it's worth it!
- Questions

Timeline:
- The plan is to get through all of the above topics and leave 15-30 minutes or so at the end for questions. If I defer all questions until the end, and do several timed dry-runs to eliminate any unexpected hurdles, I think I can make it short enough. If not, I will cut topics or pre-perform some tasks, while still keeping in the spirit of "no hand-waving or omitted steps".
- To mitigate the impact of "no questions until the end", there will be detailed, instructional slides that the attendees can follow later on their own, and CDs with the required tools so they want to follow along during the tutorial.

Other Information:
- This tutorial is based on a working implementation of these tools that we have at Pivotal Labs. We have many projects running under this environment (CruiseControl + Test::Unit/Rspec + JsUnit + Selenium), and we Keep Them Green :)