CS 5154: Software Testing

Test Automation Demo

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CS5154 is organized into six themes

1. How to automate the execution of tests?
2. How to design and write high-quality tests?
3. How to measure the quality of tests?
4. How to automate the generation of tests?
5. How to reduce the costs of running existing tests?
6. How to deal with bugs that tests reveal?
Continuous Integration

1. Commit Changes
2. Fetch Changes
3. Build
4. Test
5. Pass/Fail
6. Release/Deploy

Developers

CI Server
What is your experience with CI?
Demo: CI in action

toy-app
Project ID: 582

- 7 Commits
- 1 Branch
- 0 Tags
- 328 KB Files
- 1.2 MB Storage

toy app for test automation demo

Green build ☑️
Let’s break down our CI run

• cs5154work
• Git
• Junit
• Maven
• GitLab
Using cs5154work

ssh ${id}@cs5154work.coecis.cornell.edu
  • Replace ${id} with your Cornell Netid

Pro Tip:

ssh-copy-id ${id}@cs5154work.coecis.cornell.edu
Following along

wget https://www.cs.cornell.edu/courses/cs5154/2021fa/resources/test-automation.zip

unzip test-automation.zip
cd test-automation
# see README.txt