

CS 5154: Software Testing

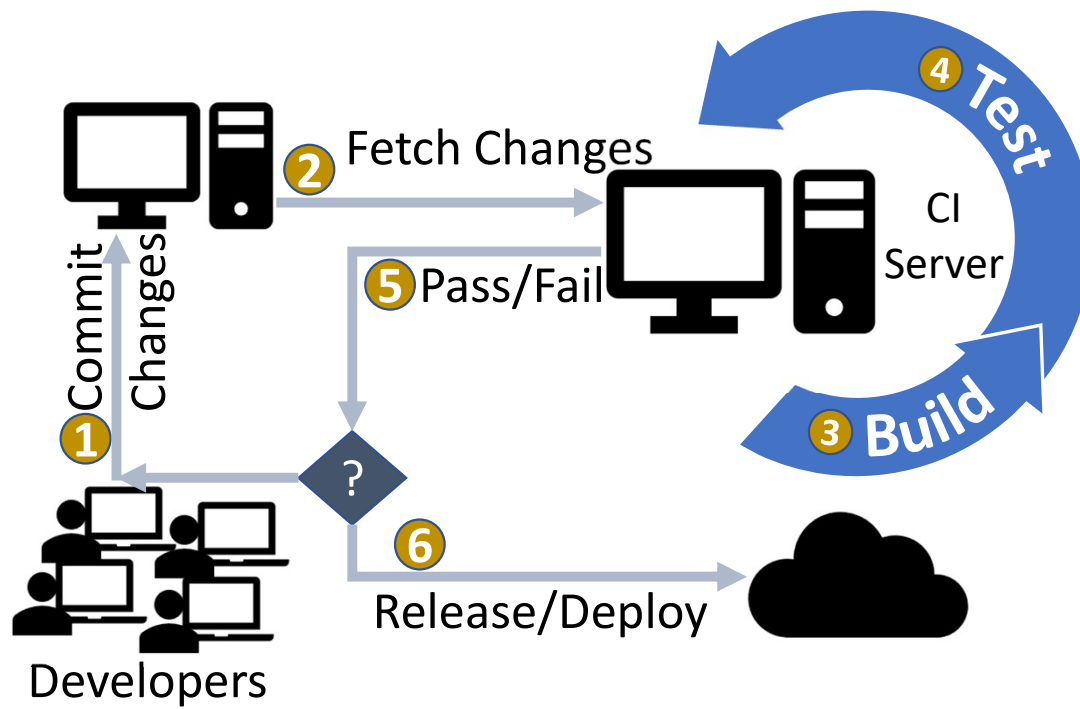
Test Automation Demo

Owolabi Legunsen

# 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








What is your experience with CI?

# Demo: CI in action




 **toy-app**   
Project ID: 582



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toy app for test automation demo


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master  toy-app /  

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 **test change**  
Owolabi Legunsen authored 1 minute ago

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 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
```

→   [cs.cornell.edu/courses/cs5154/2021fa/](https://cs.cornell.edu/courses/cs5154/2021fa/)  

Date	Topic	Notes	Assignments/Resources
8/26	Introduction	<a href="#">slides</a>	
8/31	Foundations	<a href="#">slides</a>	Reading 1 assigned
9/2	Foundations (contd), Test Automation Demo	<a href="#">slides</a> , <a href="#">code</a>	<a href="#">JUnit 4</a> , <a href="#">JUnit 4 Assert</a>