Integration Testing – Units Combined as a Group

Cătălin Tudose

PHD IN COMPUTER SCIENCE, JAVA AND WEB TECHNOLOGIES EXPERT
https://www.linkedin.com/in/catalin-tudose-847667a1

Overview

Define and motivate integration testing

Types of integration testing

Approaches of integration testing

Add new features to the flights management application

- Reveal integration problems
- Build integration tests

The Arquillian testing framework

- Move the integration tests to Arquillian

Units - combined and tested as a group

Check the interaction between integrated units

Exposes defects in the interfaces

Integration Testing Types

Black Box Testing

White Box Testing

Grey Box Testing

Integration Testing Approaches

Big Bang
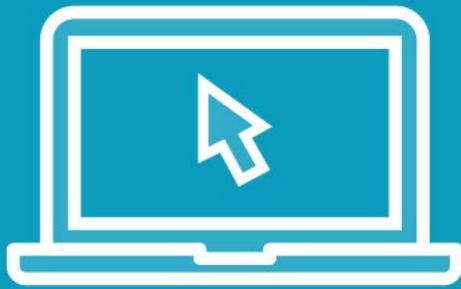
Bottom Up

Top Down

Hybrid

Demo

Unit tested application

Expose defects into the interfaces

Move to integration testing

Demo

Introducing Arquillian

- Test runners
- Containers
- Test enrichers
- ShrinkWrap

Demo

Move integration tests to Arquillian

Make sure the tested functionality is the same

Code coverage

Summary

Integration testing motivation

Types and approaches

Extended the flights management application

- Revealed integration problems
- Built integration tests

The Arquillian testing framework

- Integration testing with Arquillian