SoCraTes 2022

11th International Conference for Software Craft and Testing

https://www.socrates-conference.de/

8 people from Nordic this year



Source: https://twitter.com/coderbyheart/status/1563065168422391812

Unconference

- Main days: Open Space
- https://www.socrates-conference.de/format
- No predefined agenda
- ~200 participants
- >100 sessions in 2 days

Full Agenda

https://scrts.de/socrates2022/



Source: https://twitter.com/coderbyheart/status/1563075745697583104

More pictures

- A view of the crowd (not complete):
 https://twitter.com/coderbyheart/status/1563061865256669189
- Agenda of day 1: https://twitter.com/coderbyheart/status/1563100104474918913
- Agenda of day 2: https://twitter.com/coderbyheart/status/1563443216351133697

Part of my Agenda

- Legacy code and Approval Testing (with Emily Bache)
- Elixir / Phoenix Intro
- Coupling & Cohesion I: Object Calisthenics
- Enabling my blind grandma to read
- Complain about Pull Requests
- How to bypass your logical brain
- How to design software
- Designing better APIs: One glass at a time
- Security fun: OWASP Juice Shop

Further links:

- Elixir / Phoenix Intro: https://github.com/cgrothaus/socrates2022introduction-to-elixir-phoenix
- OWASP Juice Shop: https://owasp.org/wwwproject-juice-shop/

Legacy code and Approval Testing

- Emily Bache
- Example: A supermarket receipt, with
 - Items
 - Prices
 - Quantities
 - Discounts
 - Total

```
@Test
       public void tenPercentDiscount() {
           SupermarketCatalog catalog = new FakeCatalog();
           Product toothbrush = new Product("toothbrush", ProductU
 5
           catalog.addProduct(toothbrush, 0.99);
           Product apples = new Product("apples", ProductUnit.KILO
 6
           catalog.addProduct(apples, 1.99);
 8
           Teller teller = new Teller(catalog);
 9
           teller.addSpecialOffer(
               SpecialOfferType.TEN PERCENT DISCOUNT, toothbrush,
10
           ShoppingCart cart = new ShoppingCart();
11
12
           cart.addItemQuantity(apples, 2.5);
13
14
           // ACT
15
           Receipt receipt = teller.checksOutArticlesFrom(cart);
16
17
           // ASSERT
18
           assertEquals(4.975, receipt.getTotalPrice(), 0.01);
           assertEquals(Collections.emptyList(), receipt.getDiscou
19
20
           assertEquals(1, receipt.getItems().size());
21
           ReceiptItem receiptItem = receipt.getItems().get(0);
22
           assertEquals(apples, receiptItem.getProduct());
23
           assertEquals(1.99, receiptItem.getPrice());
           assertEquals(2.5*1.99, receiptItem.getTotalPrice());
24
25
           assertEquals(2.5, receiptItem.getQuantity());
26
```

```
public void tenPercentDiscount() {
           SupermarketCatalog catalog = new FakeCatalog();
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           catalog.addProduct(toothbrush, 0.99);
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           Teller teller = new Teller(catalog);
           teller.addSpecialOffer(
               SpecialOfferType.TEN PERCENT DISCOUNT, toothbrush,
           ShoppingCart cart = new ShoppingCart();
           cart.addItemQuantity(apples, 2.5);
           Receipt receipt = teller.checksOutArticlesFrom(cart);
17
           String printedReceipt = new ReceiptPrinter().printRecei
18
           Approvals.verify(printedReceipt);
```

- On first run: Test fails
- Creates file SupermarketTest.tenPercentDiscount.received.txt

```
apples 4.97
1.99 * 2.500
Total: 4.97
```

- Check the text manually once for correctness
- Then rename file to

SupermarketTest.tenPercentDiscount.approved.txt

- On future runs:
 - Succeeds if output the same
 - Fails if deviating
 - On failure the text files are easily diffable
- Snapshot tests in Jest

- Contrary to typical unit tests
 - Not only a single aspect but whole scenario
 - Typical unit may be a bit bigger

- Idea
 - Use a few approval tests for the most important happy paths of related chunks
 - Use more unit tests for special cases

- Similar presentation by Emily: https://www.youtube.com/watch?v=0ZVKcFsEp-4
- Tools: https://github.com/approvals
- Emily's example: https://github.com/emilybache/Hands-On-Approval-Testing-For-Developers-Materials
- On the wording 'Golden Master', 'Snapshot', 'Characterization' and 'Approval': https://proagile.se/blog/say-approval-testing-instead-of-golden-master

asdf

https://asdf-vm.com

Multi tool version manager

File .tool-versions:

ruby 2.5.3
nodejs 10.15.0

Plugins for *many* languages and tools, e.g.

- Node
- Ruby
- Elixir
- Java
- Rust

- CMake
- Maven
- Just
- Ninja

https://github.com/asdf-vm/asdf-plugins

Recommendation

Visit an Unconference, at least once!

e.g. SoCraTes or it's partner conference

- SoCraTes Canaries
- SoCraTes UK
- CodeFreeze (January, Northern Finnland)

https://www.socratesconference.de/home#conferences