

DYALOG

Mehrdimensionales Testen

Michael Baas

Vorab

- ◆ läuft unter 18.2
- ◆ DTest mit v19
- ◆ DTest und CITA Download unter <http://github.com/Dyalog>
- ◆ Fragen zum Schluss



DTest => DBuildTest

Agenda

- Warum
- Was
- Praxis oder: "Hundeschau"

Warum

- Forschung
 - "Errare Humanum est"
Seneca, 62
 - "Anything that can go wrong will go wrong [at the worst possible moment]."
Murphy's Law or "Finagle's Law of Dynamic Negatives", 1970s; also: Sod's Law
 - "Shit happens"
Forrest Gump, 1994
 - "We all know our code doesn't fail."
Brian Becker, 2022
- und Erfahrung
- ...legen nahe, daß es sinnvoll ist, Software zu testen, bevor sie zum Kunden kommt.

Was

- Unit Tests: Funktionalität klein(st)er Bausteine (Funktionen)
 - kann/sollte Code Coverage beinhalten
 - großzügig interpretation of "unit"
- Integrationstests
- UI testing
 - W-Schnittstellen
 - Browser / HtmlRenderer: Selenium

Beispiel

```

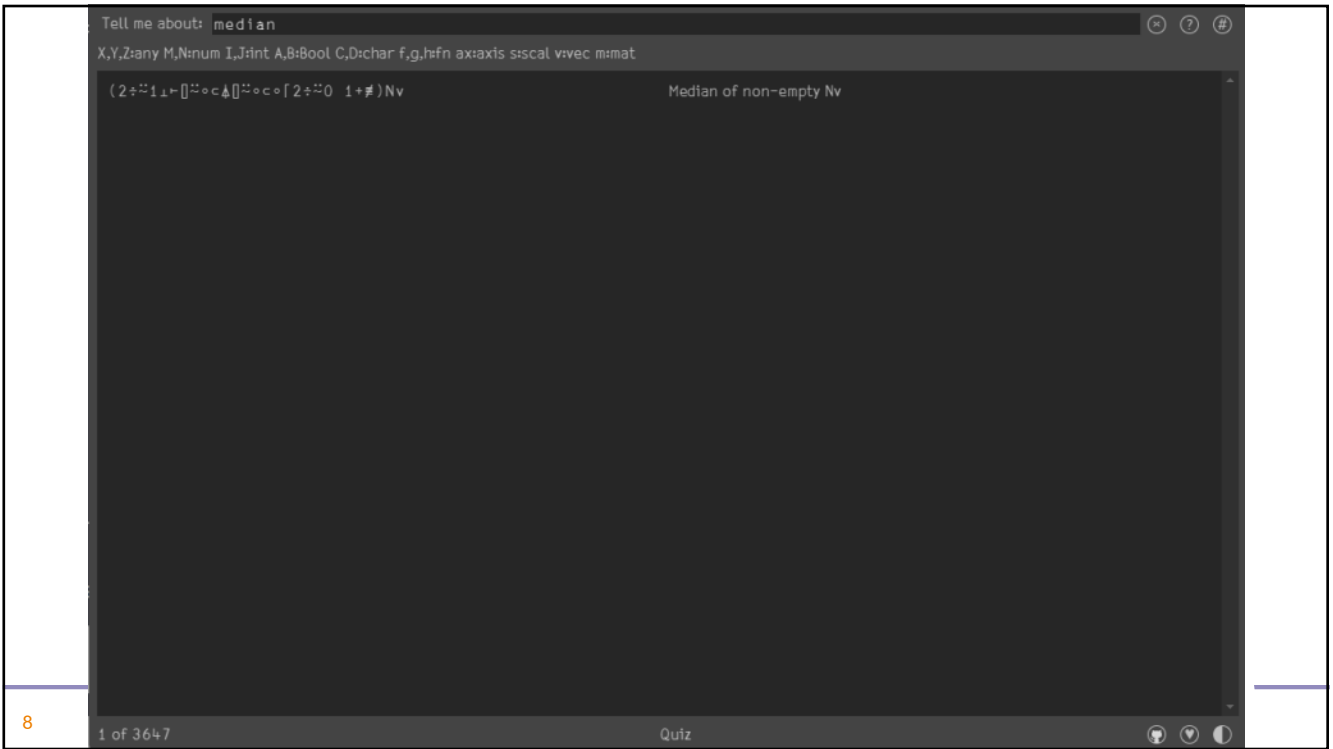
R←foo X
A useless code ...
:If ~2|X
  R←X+1
:ElseIf X>10
  R←10|X
:Else
  :Select X
  :Case 2
    ...
  :Case 3
    R←'Wow..' , ¯X
  :Else
    R←0
  :EndSelect
:EndIf

```

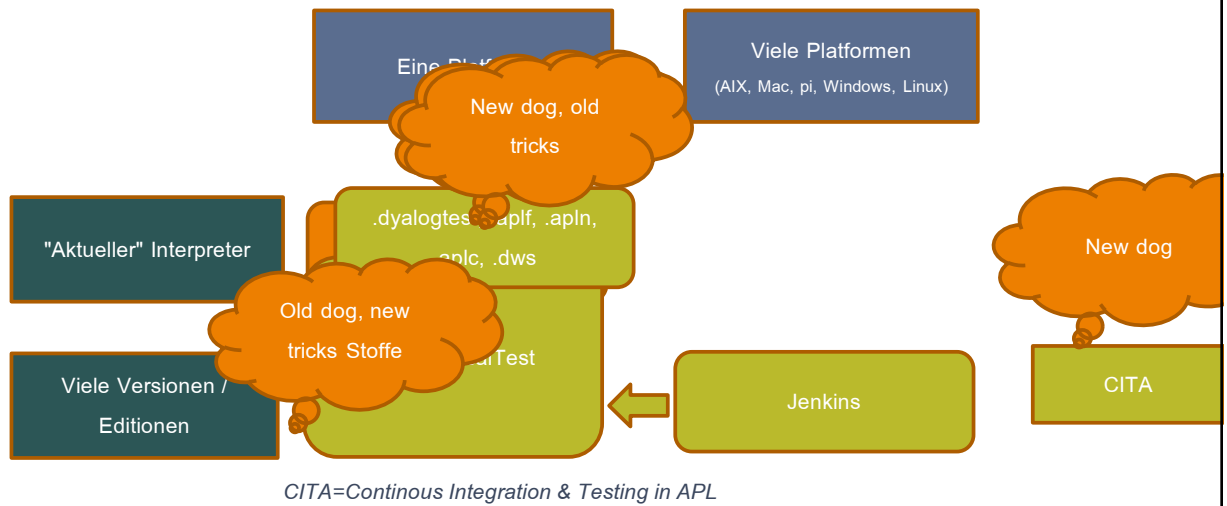
Besser testen

- 🟡 wiederholbar
- 🟡 automatisiert
- 🟡 gegen vielfältige Eingaben
- 🟡 vollständige Code-Abdeckung
- 🟡 Ergebnisse prüfen

- 🟡]demo



Mehrdimensionales Testen



Test ausführen



Run	Time	Status	Size
418	34min 36s	Success	1448.21k
417	8min 11s	Success	20k
416	1h 2min	Success	270k 47s

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Ergebnisse

Time	Test	Status
18.2c32	nr1_basic	nr1_b
aix-p9		✓
macx86		
pi		

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und zur maschinellen Verarbeitung

```

CITA.log.json
{
  /***** Results *****/
  190U64
  nr1_basic :
  nr2_all ~
  *****/

  "t_nr1_basic": {
    "JenkinsJENKINSID": "260",
    "Log": "Statusfile: /Users/jenkins/workspace/CITA_TestRepo/macx86_19.0u64/nr1_basic/CITA.test.ok.",
    "R": 0,
    "info": [
      "\Users/jenkins/workspace/CITA_TestRepo/macx86_19.0u64/nr1_basic/CITA.test.err": missing",
      "\Users/jenkins/workspace/CITA_TestRepo/macx86_19.0u64/nr1_basic/CITA.test.fail": missing",
      "\Users/jenkins/workspace/CITA_TestRepo/macx86_19.0u64/nr1_basic/CITA.test.ok": exists"
    ],
    "log": "",
    "logFile": "/Users/jenkins/workspace/CITA_TestRepo/macx86_19.0u64/nr1_basic/CITA.test.ok",
    "outfile": "CITA_CITA_log.txt",
    "rc": 0,
    "ticks": "82729984"
  }
}

```

Wann?

- ◆ **CITA – Continuously!**
 - ◆ Almost...
 - ◆ At least on every commit!
- ◆ lokales Testen vor Commit

Danke ans Team

- Adam: APLCart, UCMDs
- Andy & Jason: scripting & Jenkins knowledge
- Brian: HttpCommand, Jarvis
- Bjorn: Conga, Cryptographic Library
- Morten: initiator
- Richard: regex, startup
- Vince: support, APLCORE analysis
- ...and more...

- CITA.json5 Beispiele...

DYALOG

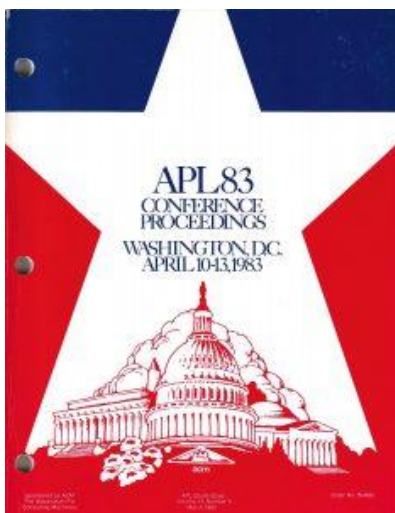
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Neues von Dyalog

Michael Baas



11.04.2023



- 40. Geburtstag!
- Geoff Streeter im Ruhestand





Deutsche
Tastaturen wieder
lieferbar! (199€)

