



# Holistic Java Testing

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Our Values are as follows...



The background of the slide is an abstract image. It features a dark, almost black, space. In the lower right, there is a large, smooth, reddish-brown sphere. From the left side, a bright light source creates a lens flare and illuminates wisps of white and blue smoke or vapor that drift upwards and across the frame, partially obscuring the sphere.

Code Examples

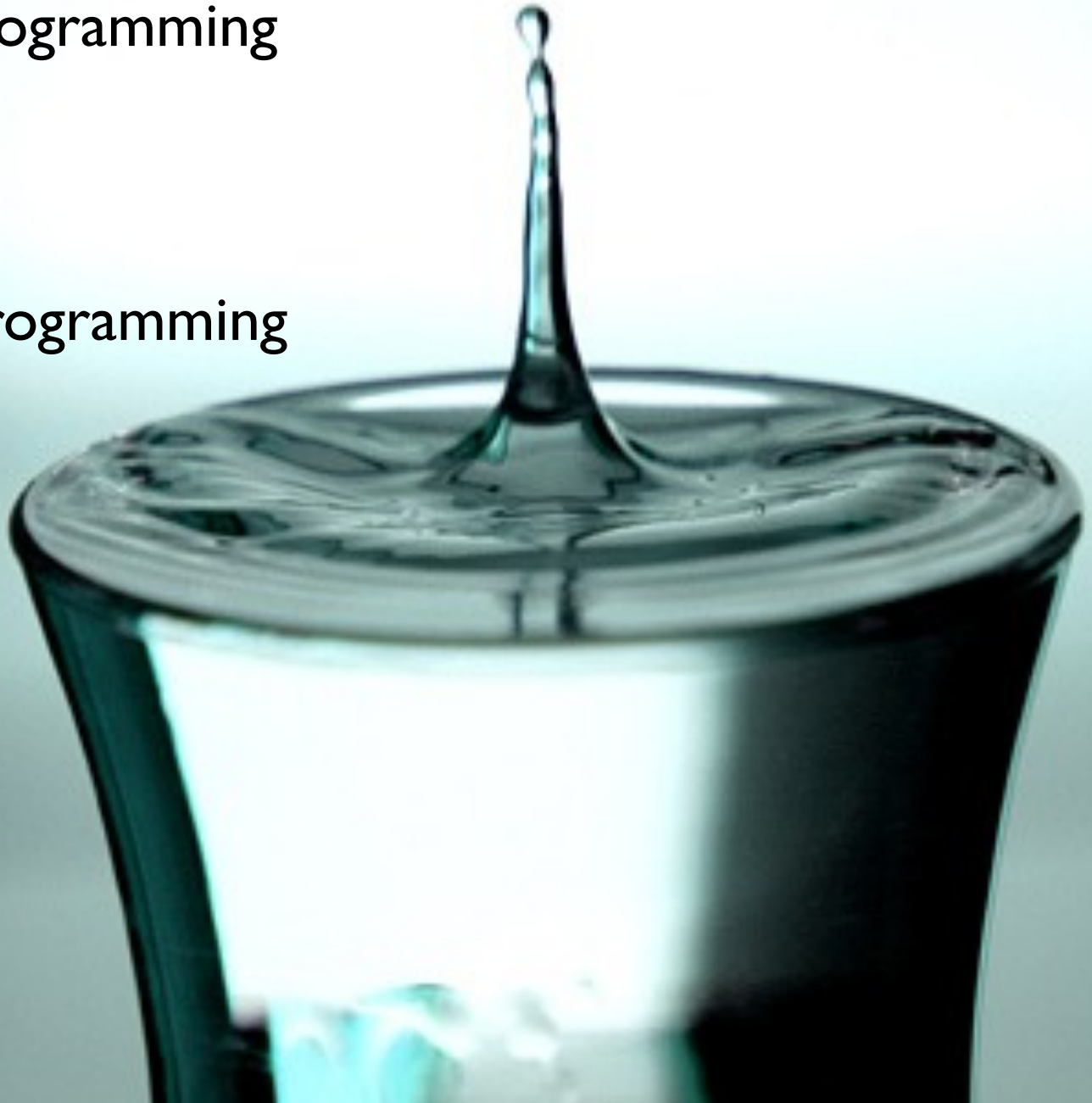
over

Slides

Attendee Programming

over

Presenter Programming



A woman with dark hair, wearing a dark turtleneck, is shown from the chest up. Her hands are cupped together in front of her, and she is looking down at them with a gentle expression. The background is dark and out of focus.

Interaction

over

Silence



Real Challenges  
over  
Trivial Examples



# Format

Talk

Present Code

Attendees Code

Repeat every 45 min

Breaks as needed

# You Will Need The Following

1. Maven
2. Java
3. Editor of Choice
4. <http://github.com/tkaufman/Holistic-Java-Testing>
5. mvn clean install



# Where is the Java Community?



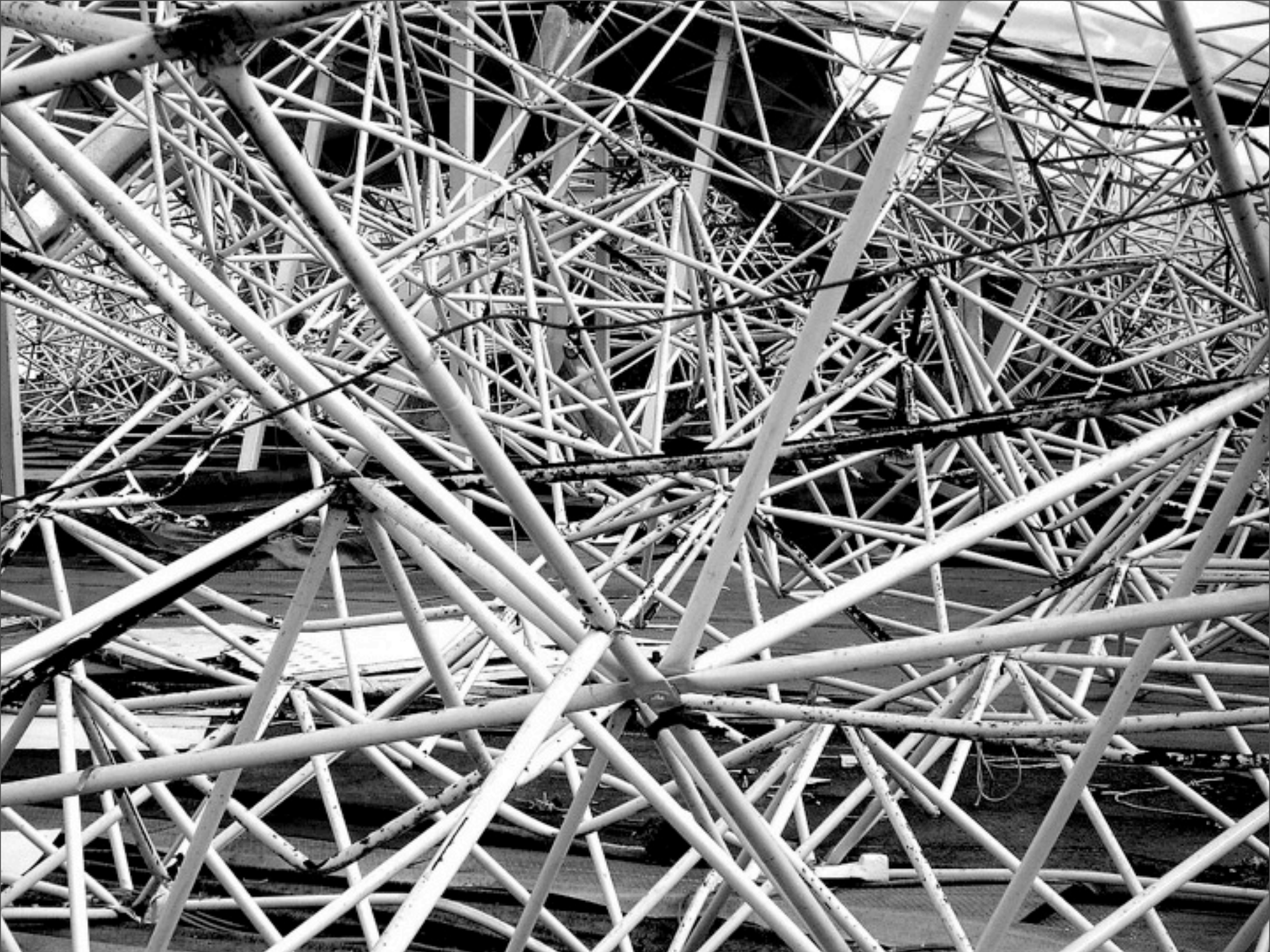
Tuesday, January 4, 2011

# We need to be here



Tuesday, January 4, 2011





Tuesday, January 4, 2011



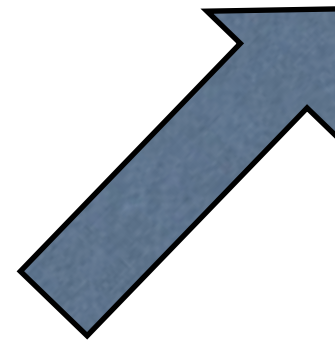
java testing tools

Search

[Adv](#)

Web ☐ [Hide options](#)

Results **1 - 10** of about **4,630,000**





# Many Tools Suck

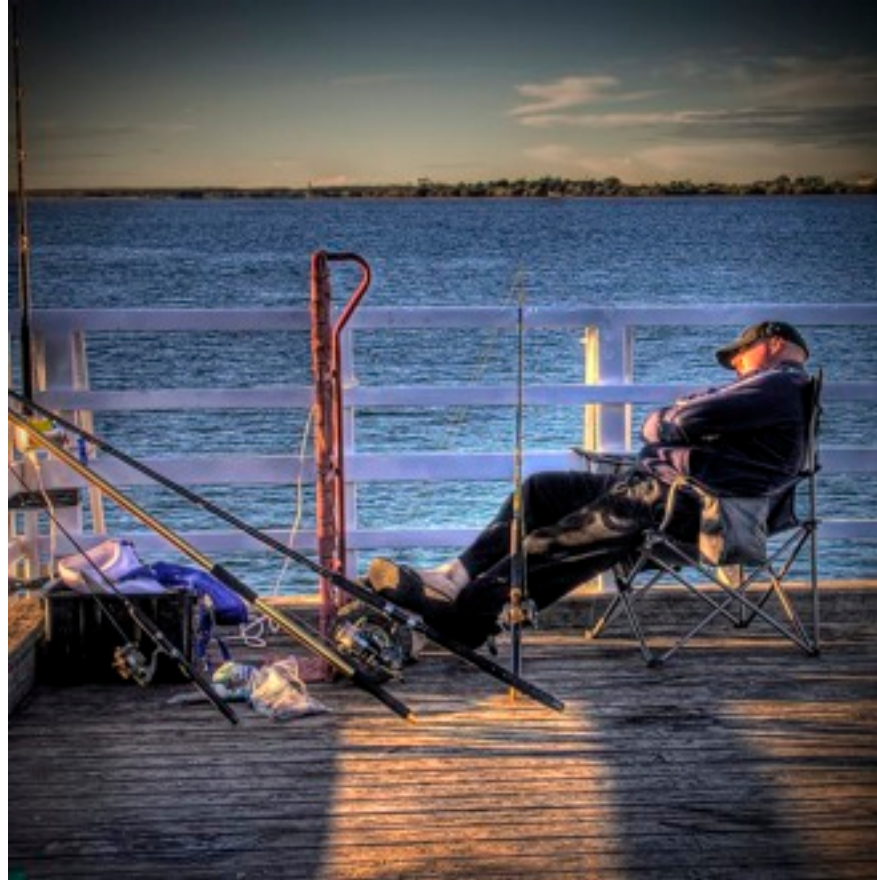
XML dataset document sample:

```
<!DOCTYPE dataset SYSTEM "dataset.dtd">
<dataset>
  <table name="TEST_TABLE">
    <column>COL0</column>
    <column>COL1</column>
    <column>COL2</column>
    <row>
      <value>row 0 col 0</value>
      <value>row 0 col 1</value>
      <value>row 0 col 2</value>
    </row>
    <row>
      <null/>
      <value>row 1 col 1</value>
      <null/>
    </row>
  </table>
  <table name="SECOND_TABLE">
    <column>COLUMN0</column>
    <column>COLUMN1</column>
    <row>
      <value>row 0 col 0</value>
      <value>row 0 col 1</value>
    </row>
  </table>
  <table name="EMPTY_TABLE">
    <column>COLUMN0</column>
    <column>COLUMN1</column>
  </table>
</dataset>
```



This Scares off Well Intended  
Developers

# Resulting In



# This Must Change





and it starts with Practice

# Mandates for Tests

Fast

Readable

Easy

Stable

Comprehensive

# The Test Fu Agenda

1. Readable Assertions with Hamcrest
2. Integration Testing against the Database
3. Mocking/Fake/Stub/Test Spy with Mockito
4. Behavior Driven Development with JBehave
5. Test Driving JSPs with Magnus
6. Web Story Testing with JBehave Web
7. Test Driven Javascript



A problem has been detected and windows has been shut down to prevent damage to your computer.

The problem seems to be caused by the following file: int15.sys

PAGE\_FAULT\_IN\_NONPAGED\_AREA

If this is the first time you've seen this Stop error screen, restart your computer. If this screen appears again, follow these steps:

Check to make sure any new hardware or software is properly installed. If this is a new installation, ask your hardware or software manufacturer for any windows updates you might need.

If problems continue, disable or remove any newly installed hardware or software. Disable BIOS memory options such as caching or shadowing. If you need to use Safe Mode to remove or disable components, restart your computer, press F8 to select Advanced Startup Options, and then select Safe Mode.

Technical information:

\*\*\* STOP: 0x00000050 (0xFEDF0000,0x00000000,0xB4939C7D,0x00000000)

\*\*\* int15.sys - Address B4939C7D base at B492B000, DateStamp

Beginning dump of physical memory

Physical memory dump complete.

Contact your system administrator or technical support group for assistance.



# Conclusions

**pillar**

# Thanks for the Pics

- Rock and Sand - CyboRoZ on flickr
- Smoke - Vanessa Pike-Russell on flickr
- Smoke and Sphere - h.koppdelaney on flickr
- Waterdrop - darkpatator on flickr
- Zen with Woman - zenonline on flickr
- Floating Kid - Benilshaque Luthor
- Slob - TheRapscaillon on flickr
- Sunset Yoga - Andrew Kalat on flickr
- Complexity - nerovivo on flickr
- Hurdles - CFRunning on flickr
- Lazy - Christolakis on flickr
- Kung Fu - ajft on flickr
- BSOD - billjacobus I on flickr
- Finger - a2gemma on flickr



**Thank You**