

# Agile + DevOps **WEST**

A TECHWELL EVENT

## **AD2**

Agile Testing & Test Automation

10:30 AM

## **AD2 - What's That Smell? Tidying Up Our Test Code**

Presented by:

**Angie Jones**

Applitools

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# Angie Jones

Angie Jones is a Senior Developer Advocate who specializes in test automation strategies and techniques. She shares her wealth of knowledge by speaking and teaching at software conferences all over the world, as well as writing tutorials and blogs on [angiejones.tech](https://angiejones.tech). As a Master Inventor, Angie is known for her innovative and out-of-the-box thinking style which has resulted in more than 25 patented inventions in the US and China. In her spare time, Angie volunteers with Black Girls Code to teach coding workshops to young girls in an effort to attract more women and minorities to tech.

# What's That Smell?

## Tidying Up Our Test Code

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## CODE SMELL

is an implementation that violates fundamental design principles in a way that may slow down development and increase the risk of future issues.

# APPLICATION UNDER TEST

JAKE'S  
CODE  
BASE

# LONG CLASS



The purpose of the class is  
multifold.

To find anything, you must  
scroll and scroll.



# ISSUES

1. No single responsibility

2. Hard to find things

3. Difficult to maintain

# SEPARATE CONCERNS

# LONG METHOD



This guy does it all!  
But it makes it hard to know  
when to call.

# ISSUES

1. No single responsibility
2. Confusing for callers
3. Difficult to read and understand

# SPLIT METHODS

# DUPLICATE CODE



When you find yourself  
coding in haste,  
it's very tempting  
to copy and paste.

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# ISSUES

1. Any change needed has to take place in multiple spots

2. Can lead to other smells

# REMOVE DUPLICATION



# FLAKY LOCATOR STRATEGY



At this moment,  
your locators work fine.

But can they  
stand the test of time?

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# ISSUES

1. Fragility

2. Unreliability

# STABILIZE LOCATORS

# INDECENT EXPOSURE



Too many see you.

Your scope is too wide.

All who should know you

# ISSUES

1. Violates encapsulation

2. Allows tests to directly access and manipulate the DOM, which is not their responsibility

# NARROW SCOPE

# INEFFICIENT WAITS



The speed of machine  
is faster than man  
so you slow it down  
any way you can.

# ISSUES

1. Slows down runtime

2. Different environments may require different wait times



WAIT  
INTELLIGENTLY

# MULTIPLE POINTS OF FAILURE



The framework's job  
is to force state,  
not to determine  
a test's fate.

# ISSUES

1. Violates single responsibility
2. Limits reusability

INCREASE  
FLEXIBILITY

QUESTIONS?

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