



T8

Test Automation

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What's That Smell? Tidying Up Our Test Code

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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. 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.

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CODE SMELL

is an implementation that violates fundamental design principles in a way that may

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

WE HAVE A PROBLEM!

How come our second test
cannot utilize the search
method?

SPLIT METHODS

DUPLICATE CODE



When you find yourself
coding in haste,
it's very tempting

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

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 (fields)
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

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

ISSUES

1. Violates single responsibility
2. Limits reusability

INCREASE
FLEXIBILITY

QUESTIONS?

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