

Agile Testing with a Side of TDD

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TESTING

I FIND YOUR LACK OF TESTS DISTURBING.

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Who Am I?

- Jenna Pederson
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Agenda

- What is agile testing?
- What is TDD?
- Why is it effective?
- The TDD workflow
- Wrap up & questions

Traditional Testing

verify and validate

Test Until
Time
Runs Out
and time always
runs out



Agile Testing

build quality in up front

Embrace Change

“The only constant in software is change”

Feedback Early & Often

- End of iteration demos
- Pair programming
- TDD, ATDD
- Retrospectives
- CI build results
- Discoveries during exploratory testing
- Collaboration with users and customers
- Information radiators
- Usability testing

“Everybody Tests”

everybody is
responsible for
quality



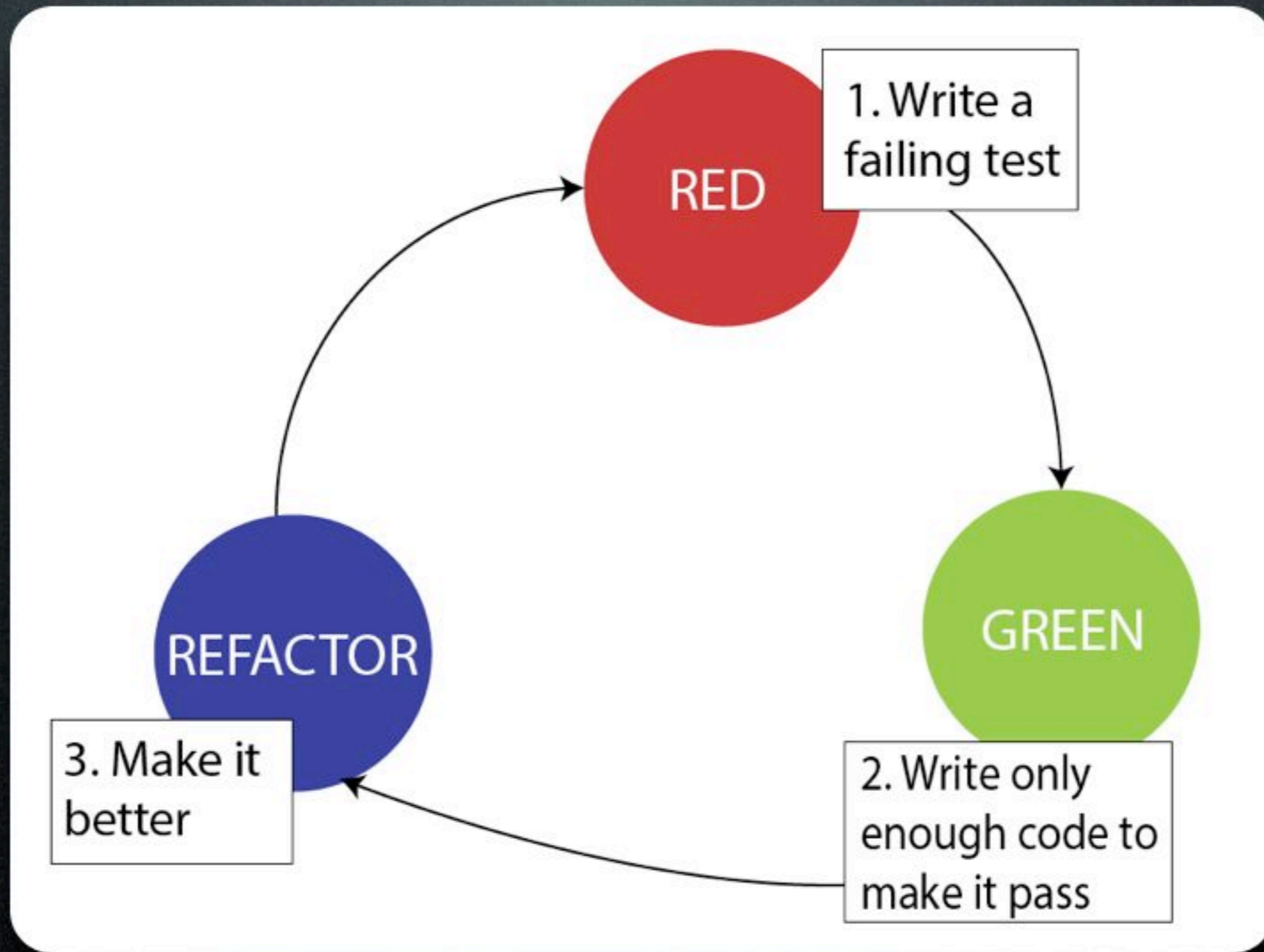
What is TDD?

Make it work, make it better

Three Laws of TDD

Uncle Bob Martin

1. You may not write production code until you have written a failing unit test.
2. You may not write more of a unit test than is sufficient to fail, and not compiling is failing.
3. You may not write more production code than is sufficient to pass the currently failing test.



The Flow

TDD is a
skill



Why is TDD effective?

Why should I (let my dev team) do this?

Proactive

vs. Reactive

Features
Become
Cheaper



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Promotes Good Design & Clean Code

```
100
101 //-----
102 /**
103  * Tests the {@link FileUtils#getFile(String...)} method.
104  */
105 public void testGetFile() {
106     File expected_A = new File("src");
107     File expected_B = new File(expected_A, "main");
108     File expected_C = new File(expected_B, "java");
109     assertEquals("A", expected_A, FileUtils.getFile("src"));
110     assertEquals("B", expected_B, FileUtils.getFile("src", "main"));
111     assertEquals("C", expected_C, FileUtils.getFile("src", "main", "java"));
112     try {
113         FileUtils.getFile((String[])null);
114         fail("Expected NullPointerException");
115     } catch (NullPointerException e) {
116         // expected
117     }
118 }
119
120 /**
121  * Tests the {@link FileUtils#getFile(File, String...)} method.
122  */
123 public void testGetFile_Parent() {
124     File parent = new File("parent");
125     File expected_A = new File(parent, "src");
126     File expected_B = new File(expected_A, "main");
127     File expected_C = new File(expected_B, "java");
128     assertEquals("A", expected_A, FileUtils.getFile(parent, "src"));
```

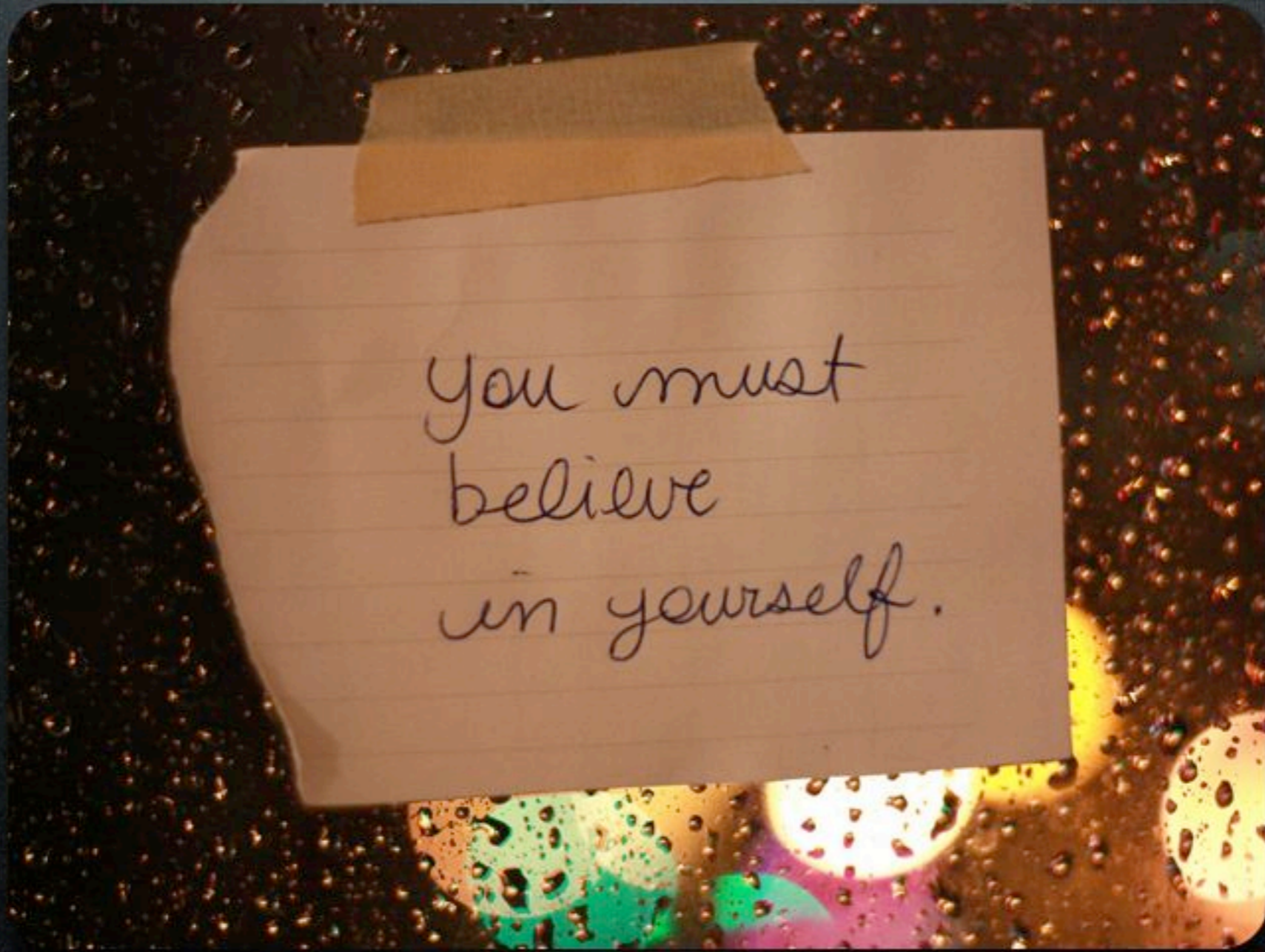


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Confidence

The TDD Workflow

Examples

Thank You!

Twitter: @jennapederson

Blog: www.612softwarefoundry.com/blog

Code & Resources

<https://github.com/jennapederson/agile-testing-with-a-side-of-tdd>