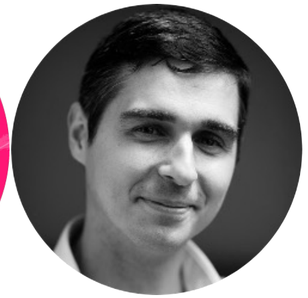
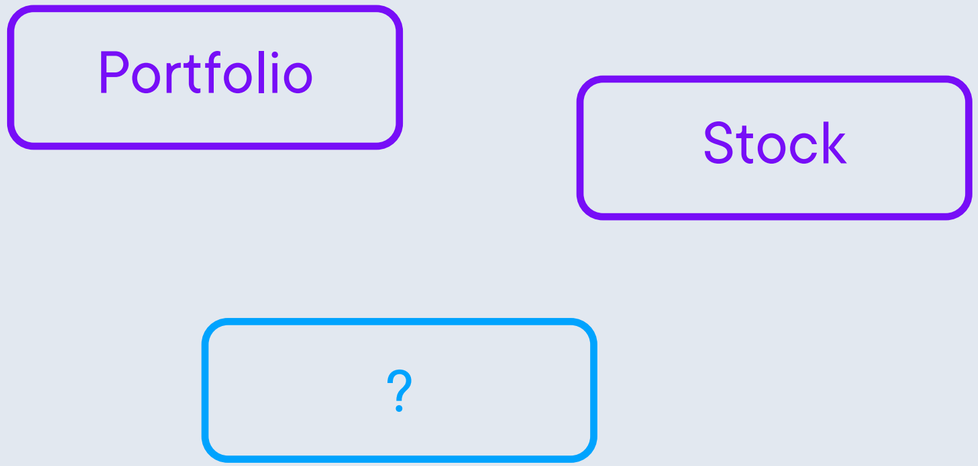
Using TDD to Drive the Design



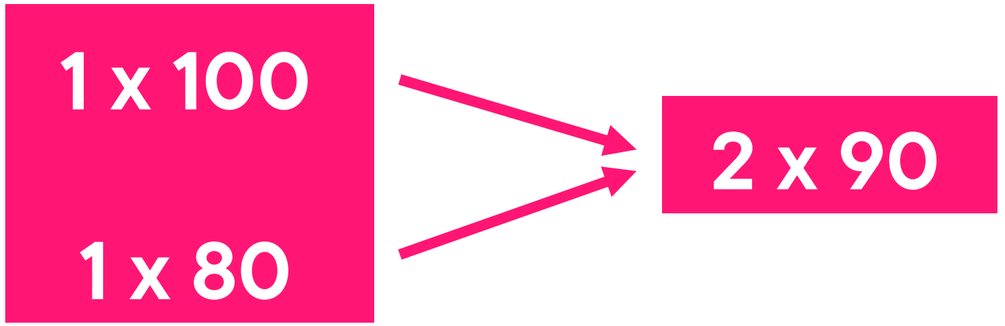
Andrejs Doronins
Software Developer in Test

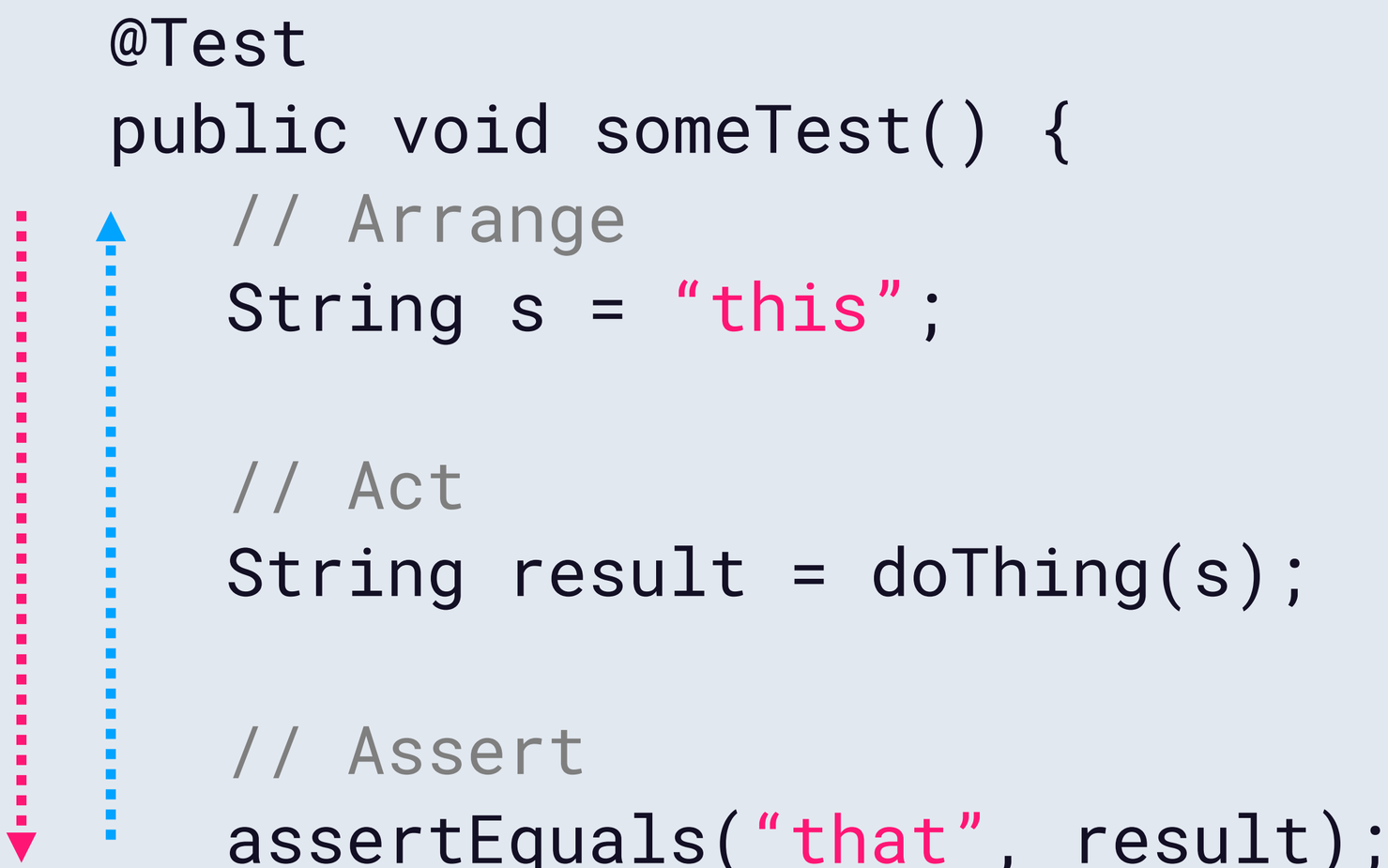
```
String truncate(a, b) {
    // ...
}
```



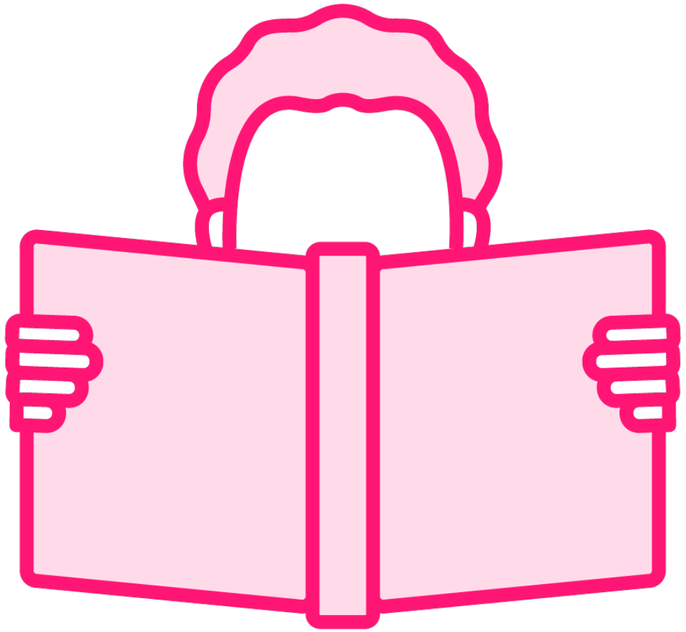
Stock Portfolio

Symbol	Shares (Qty)	Price (Px)	Value
Microsoft	10	250	2500
Apple	2	100	200
			2700




@Test
public void someTest() {
// Arrange
String s = “this”;
// Act
String result = doThing(s);
// Assert
assertEquals(“that”, result);
}

TDD Tutorials

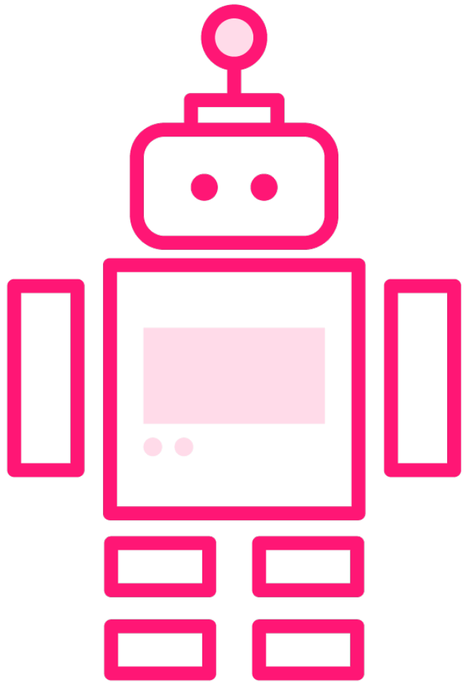


Most have smooth progression

Exception: “Test Driven Development: By Example” book

- Evolving design, things changed a lot

This TDD course



1. Think of the Portfolio example
2. Implement it using TDD
3. Record every detail (incl. mistakes)
4. Present

Stock Portfolio

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Public

Private

I'm here to learn TDD, not investing.

Poor domain understanding
=
poor design

Automated Test Best Practices

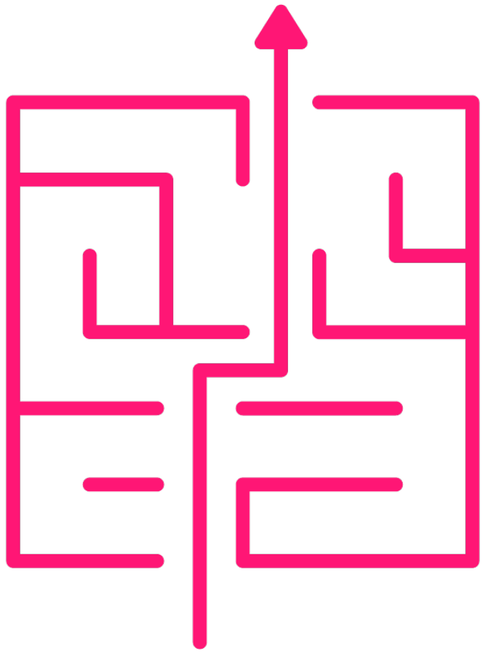
One assertion per test

No need to test trivial getters

But!

- getValue()
- getters will be returning different values

Bigger Challenge



Introduce Money API

Summary

Bottom-up approach when writing tests

Tests drove the design

Small steps weren’t small

Write imperfect code, put things on a TODO list, address later

```
String truncate(a, b) {

    // ...
}
```

Portfolio

Position

Stock

Up Next:

TDD Nuances and Best Practices