Defensive Coding in Java

WHY DEFENSIVE CODING MATTERS

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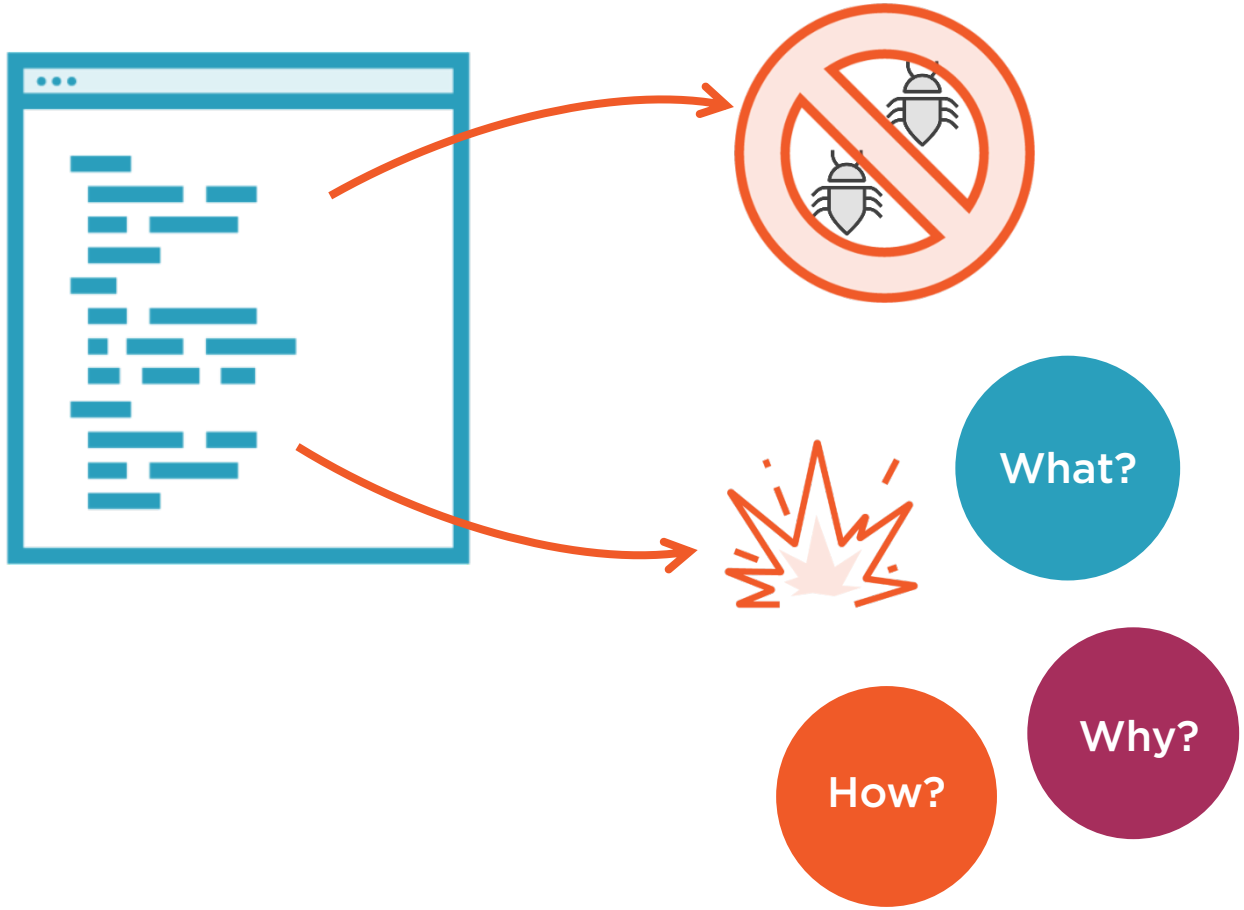
TEST AUTOMATION ENGINEER

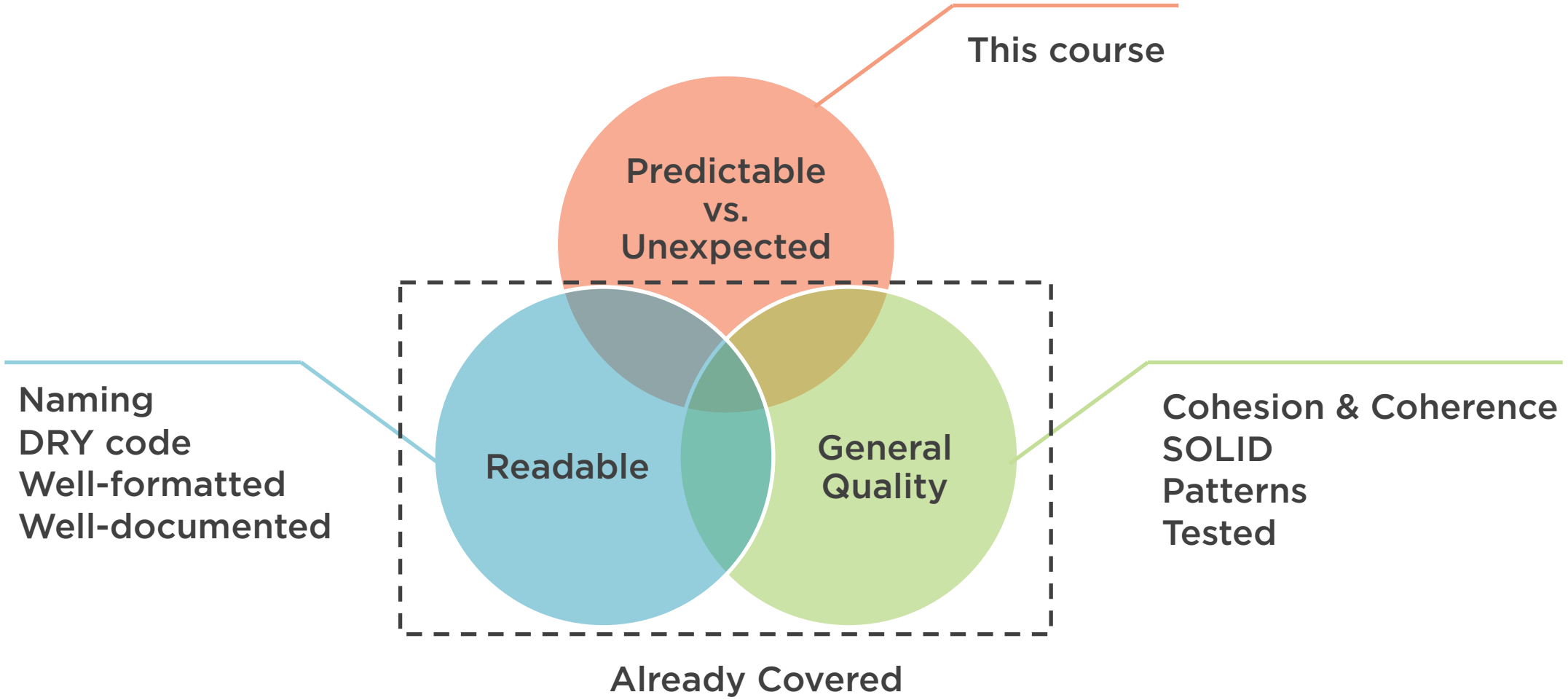

What?
How?
Why?

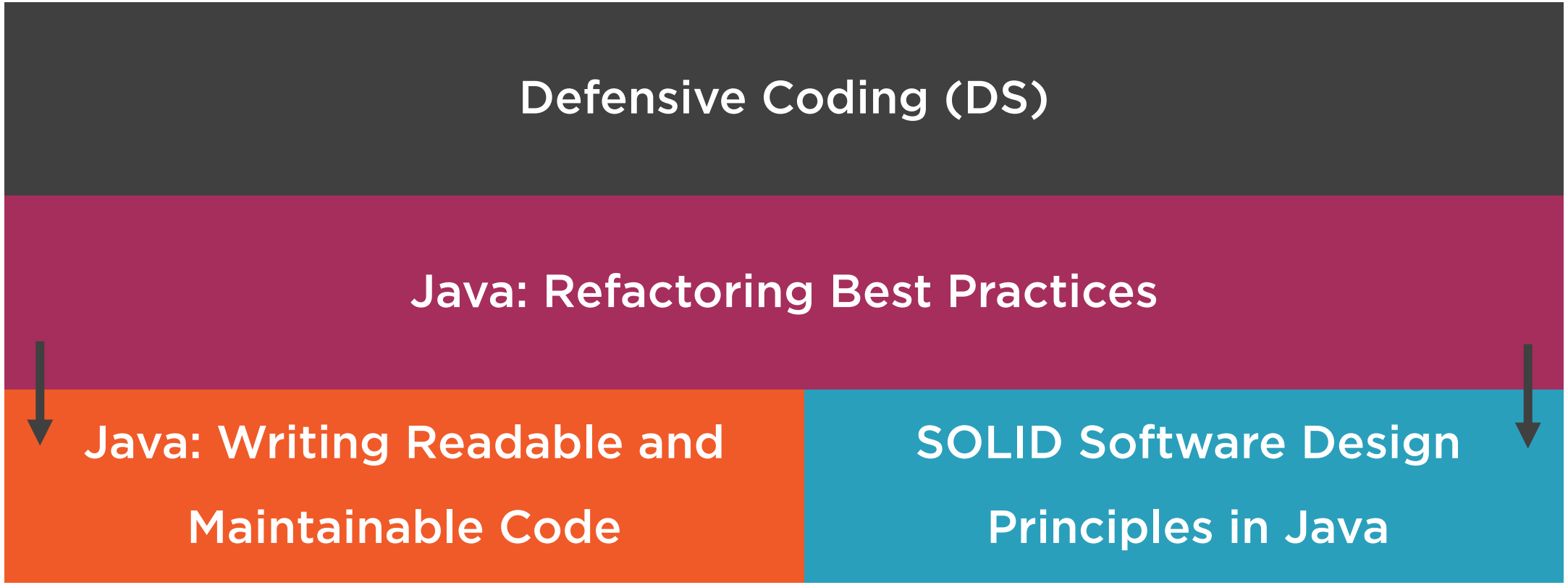
Defensive Coding

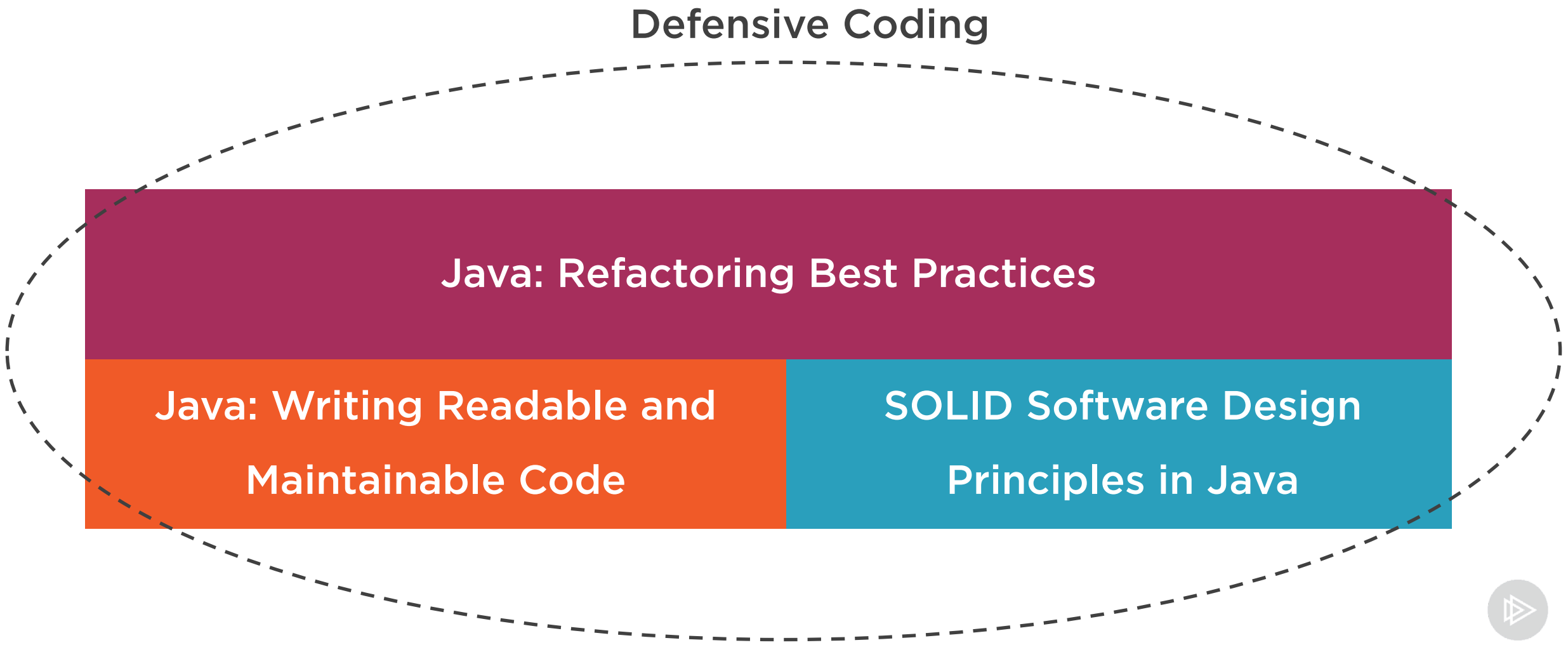
Defensive Coding (Programming)

Defensive programming is an approach to improve software and source code, in terms of:

- General quality – reducing the number of software bugs and problems.
- Making the source code comprehensible – the source code should be readable and understandable so it is approved in a code audit.
- Making the software behave in a predictable manner despite unexpected inputs or user actions.


This course
Predictable
vs.
Unexpected
Naming
DRY code
Well-formatted
Well-documented
Readable
General
Quality
Cohesion & Coherence
SOLID
Patterns
Tested
Already Covered


Defensive Coding (DS)
Java: Refactoring Best Practices
Java: Writing Readable and Maintainable Code
SOLID Software Design Principles in Java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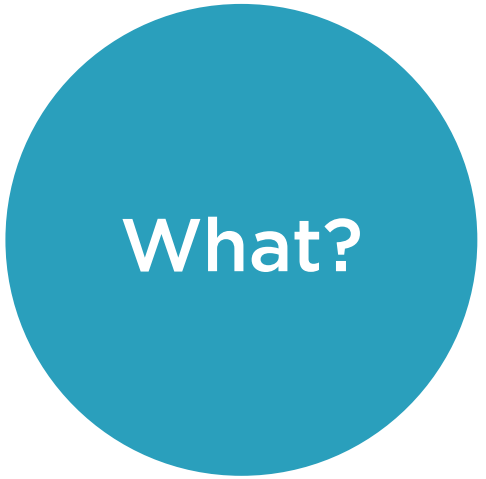
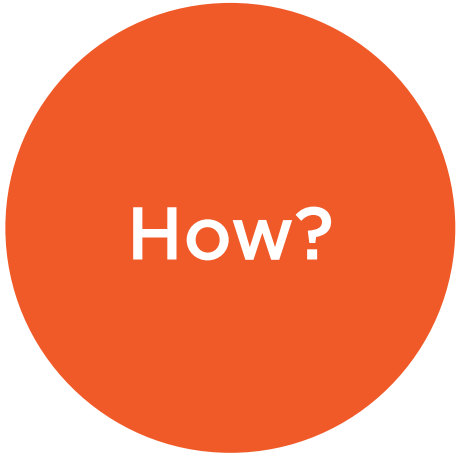
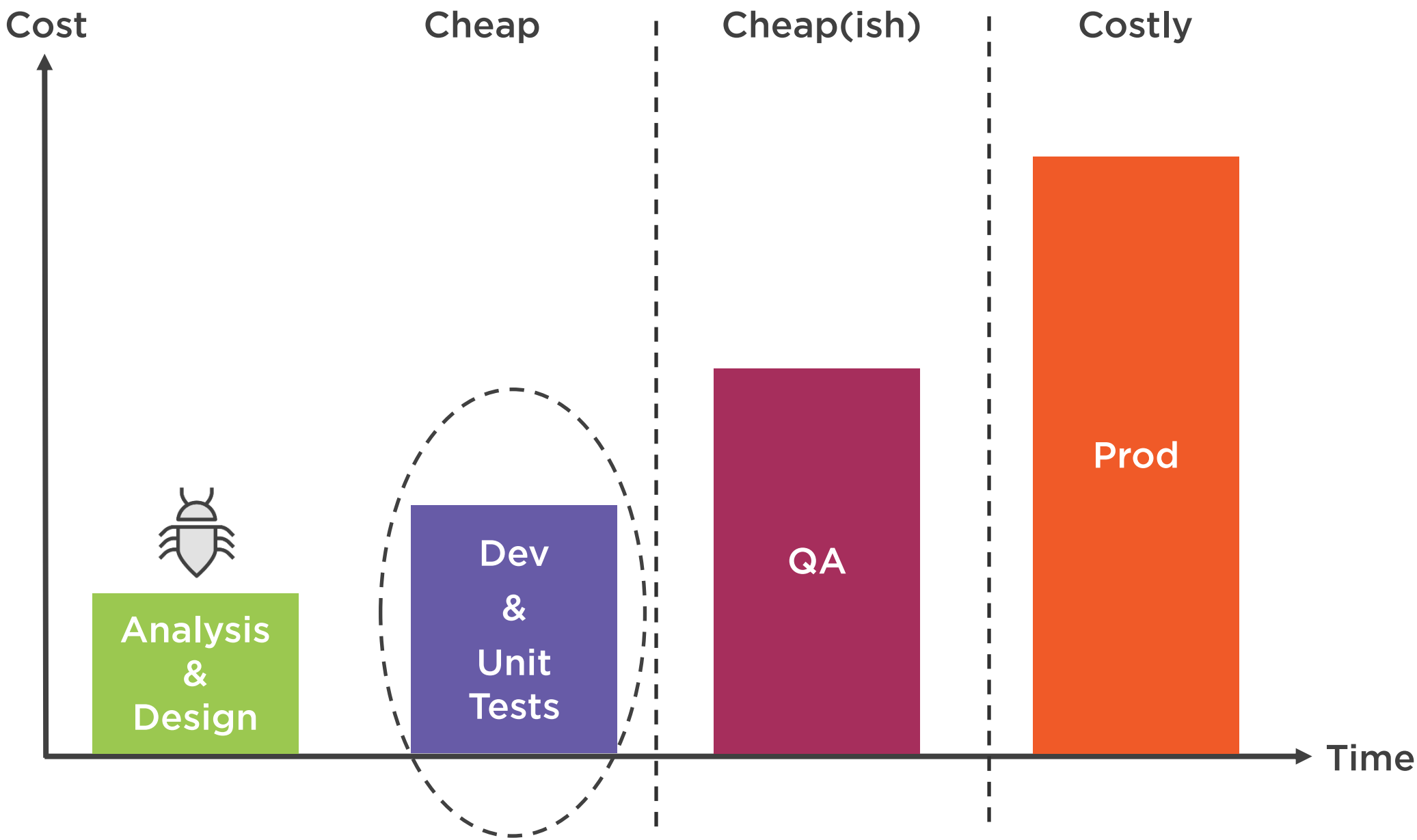


Defensive Coding



“The whole point of defensive programming is guarding against errors you don’t expect. ”

Steve McConnell, Code Complete


Cost
Cheap
Cheap(ish)
Costly
Analysis & Design
Dev & Unit Tests
QA
Prod
Time

The sooner we find a bug,
the better

Defensive coding is all about:
1) Reacting early
2) Preventing

React

Prevent

Prerequisites

Java and OOP

Any IDE

Course Overview

Validating Method Input

Using Frameworks for Validation

Improving Method Return Values

Using Other Defensive Coding Practices