

Creating Seams in Code



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Overview



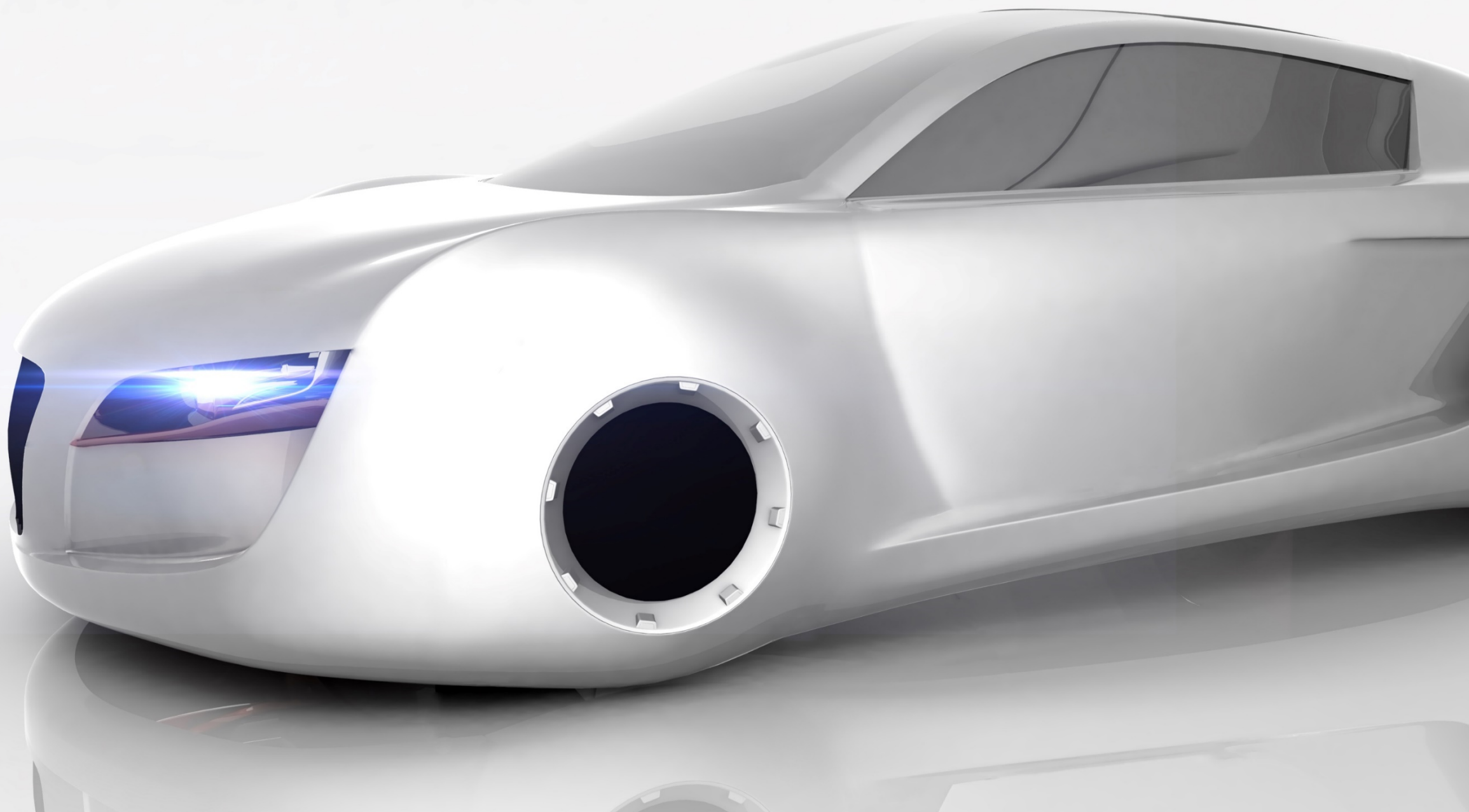
Seams

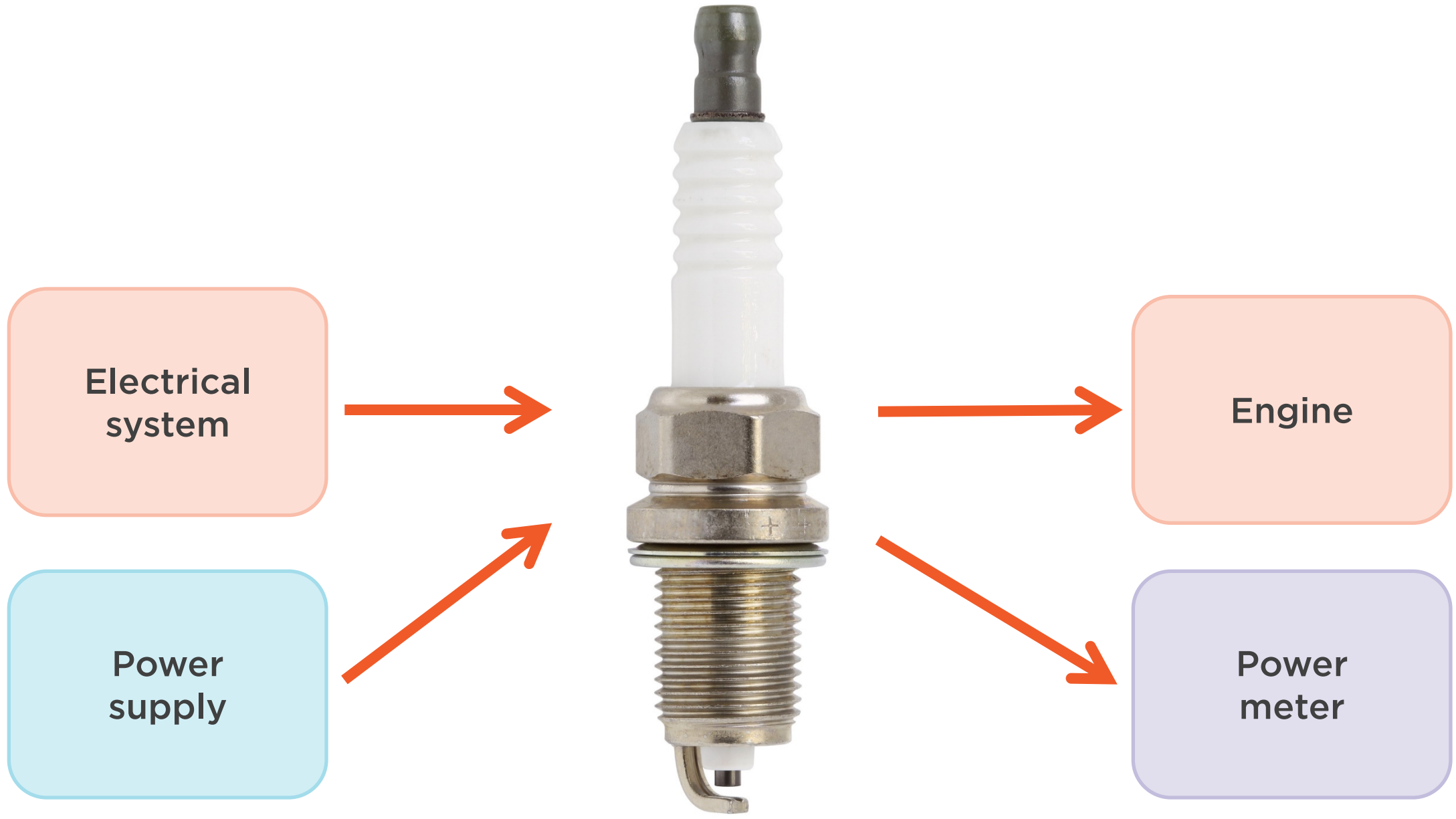
Problems

Symptoms

Solution







**Electrical
system**

seam

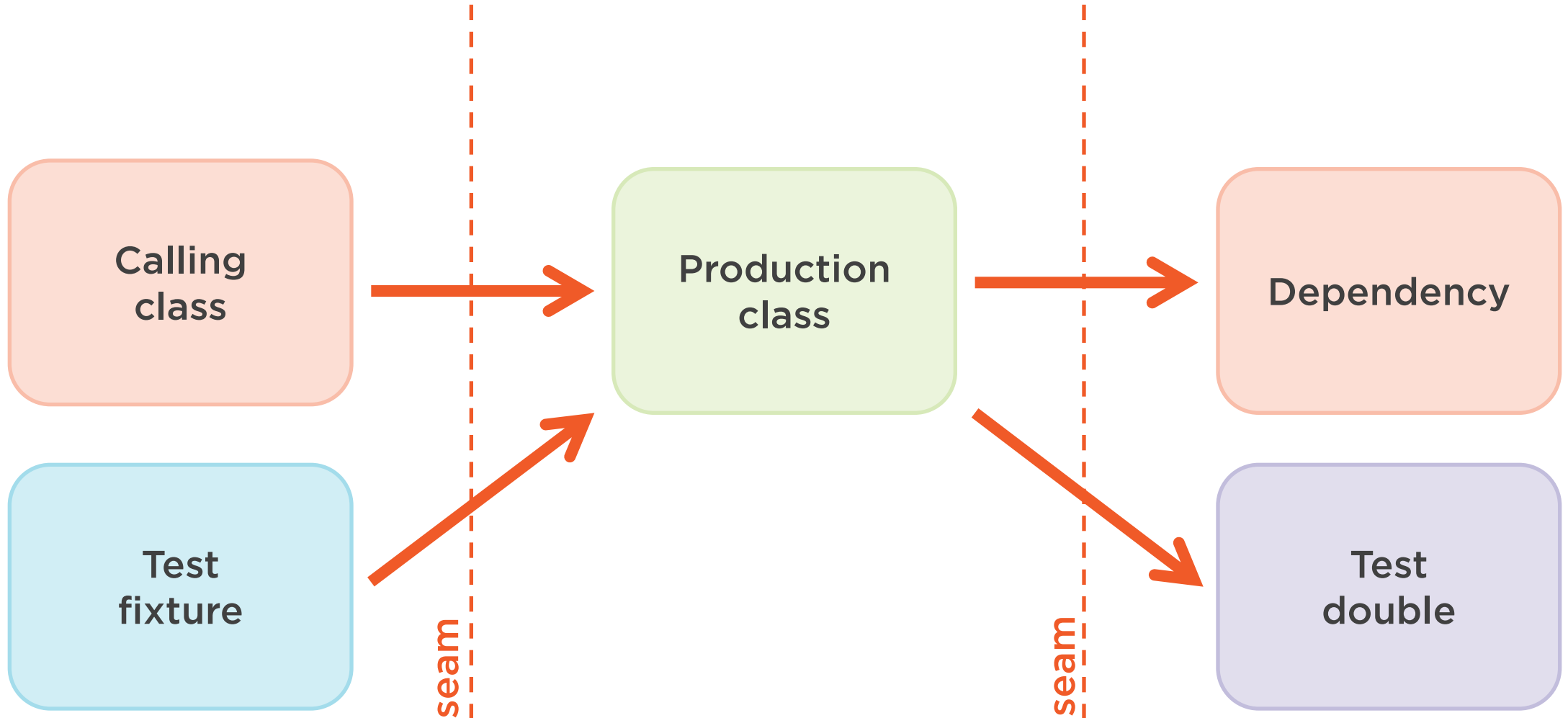


seam

Engine

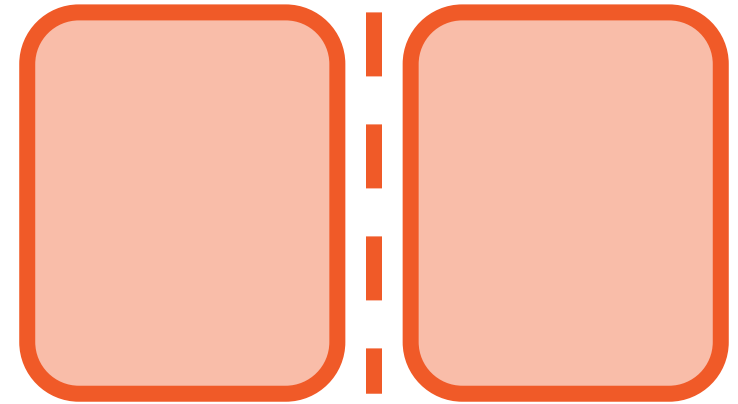


Seams



Problems

- Cannot pull apart code
- Cannot connect test harness
- Cannot replace dependencies
- Cannot test in isolation

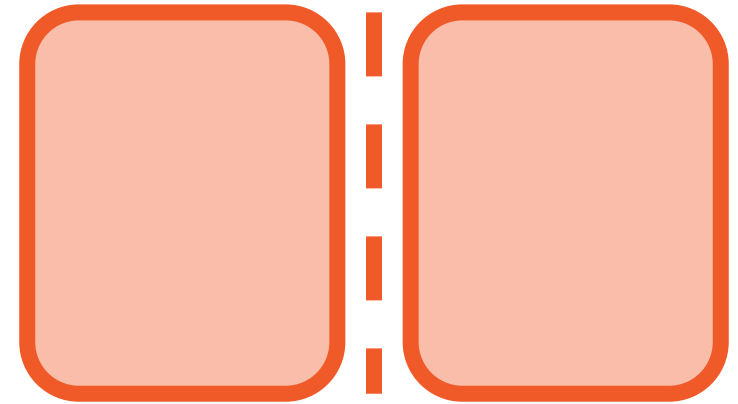


Symptoms

Keyword “new” in code

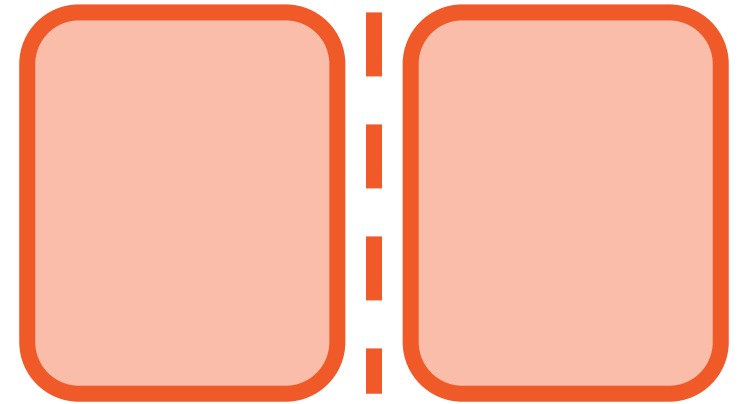
Static method calls

Direct coupling



Solution

- Create seams in code
- Decouple dependencies
- Program to interfaces
- Inject dependencies
- Test in isolation



Invoice

Invoice #: 12345

Date: 02/03/2001

Customer: John Doe

Parts: \$100.00

Service: \$200.00

Discount: -\$50.00

Total: \$250.00

Terms: Net 30 days

Printed: 02/03/2001

Thank you for your business!

Print



Show Hard Code



Explain Why It's Hard to Test



Show IDatabase Interface



Show Database Class



Show IPrinter Interface



Show Printer Class



Show IDateTimeWrapper Interface



Show DateTimeWrapper Class



Show Easy Example



Show Unit Tests (Header)



Show Unit Tests (Set Up)



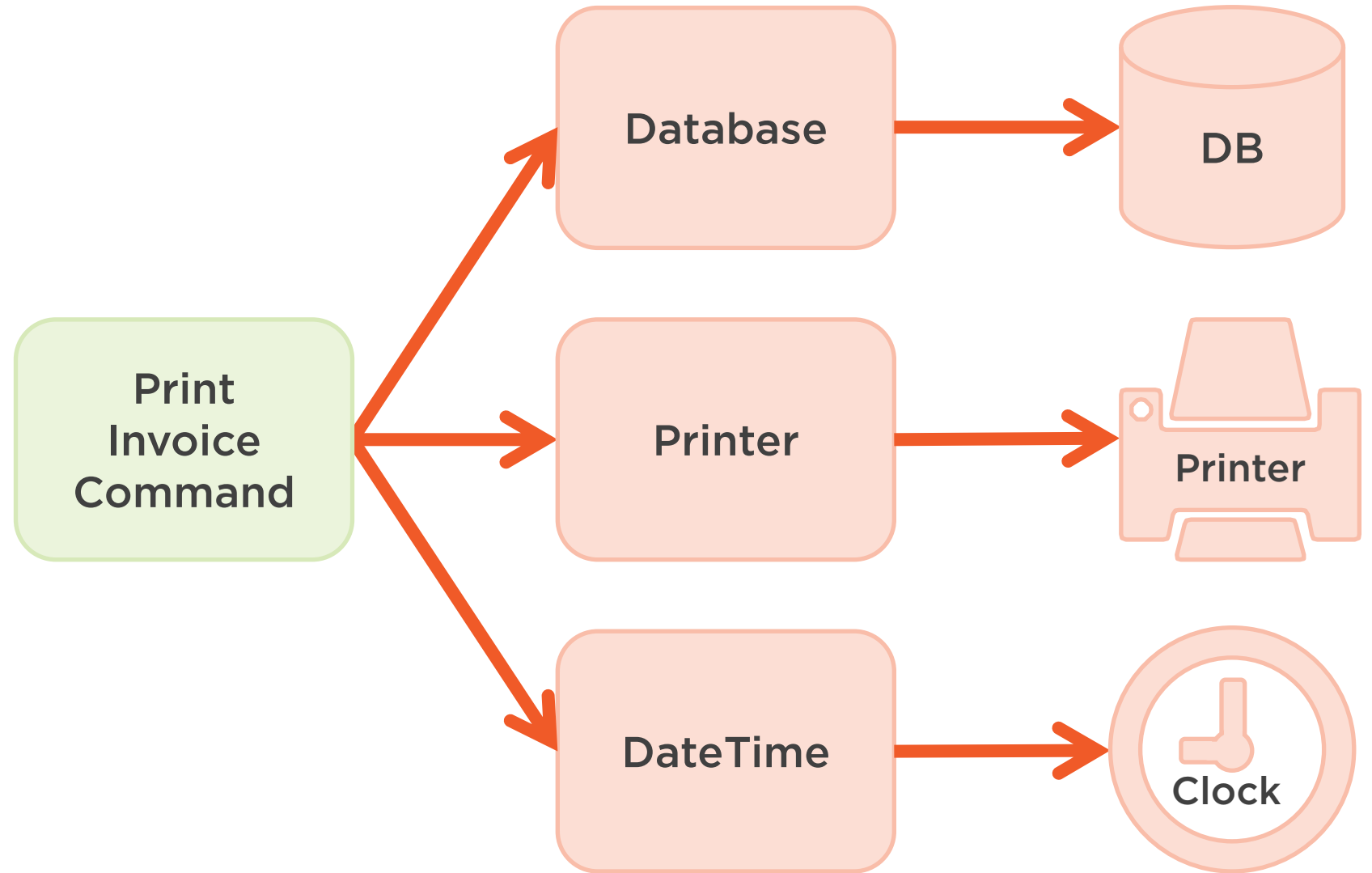
Show Unit Tests (Tests)



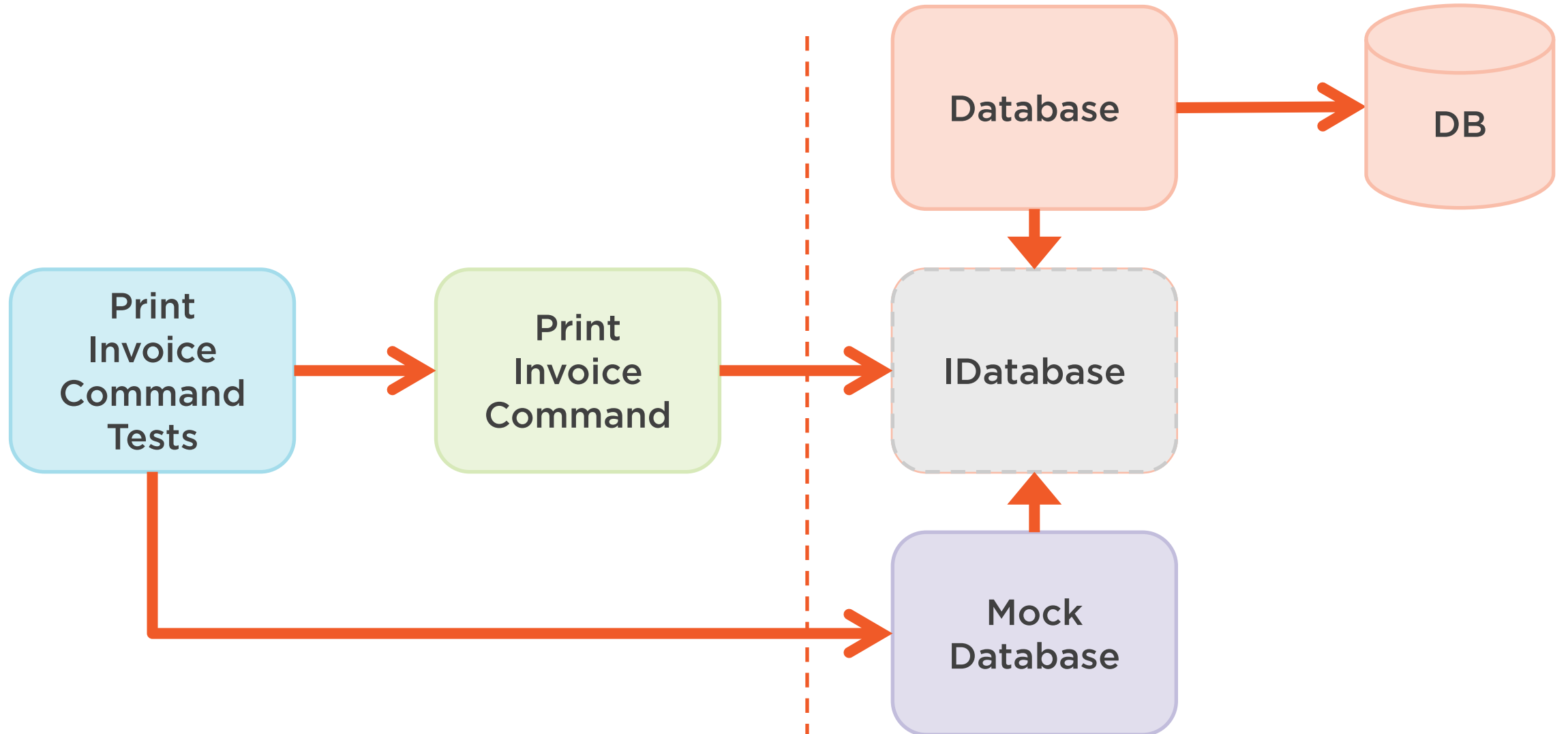
Show Refactored Unit Tests



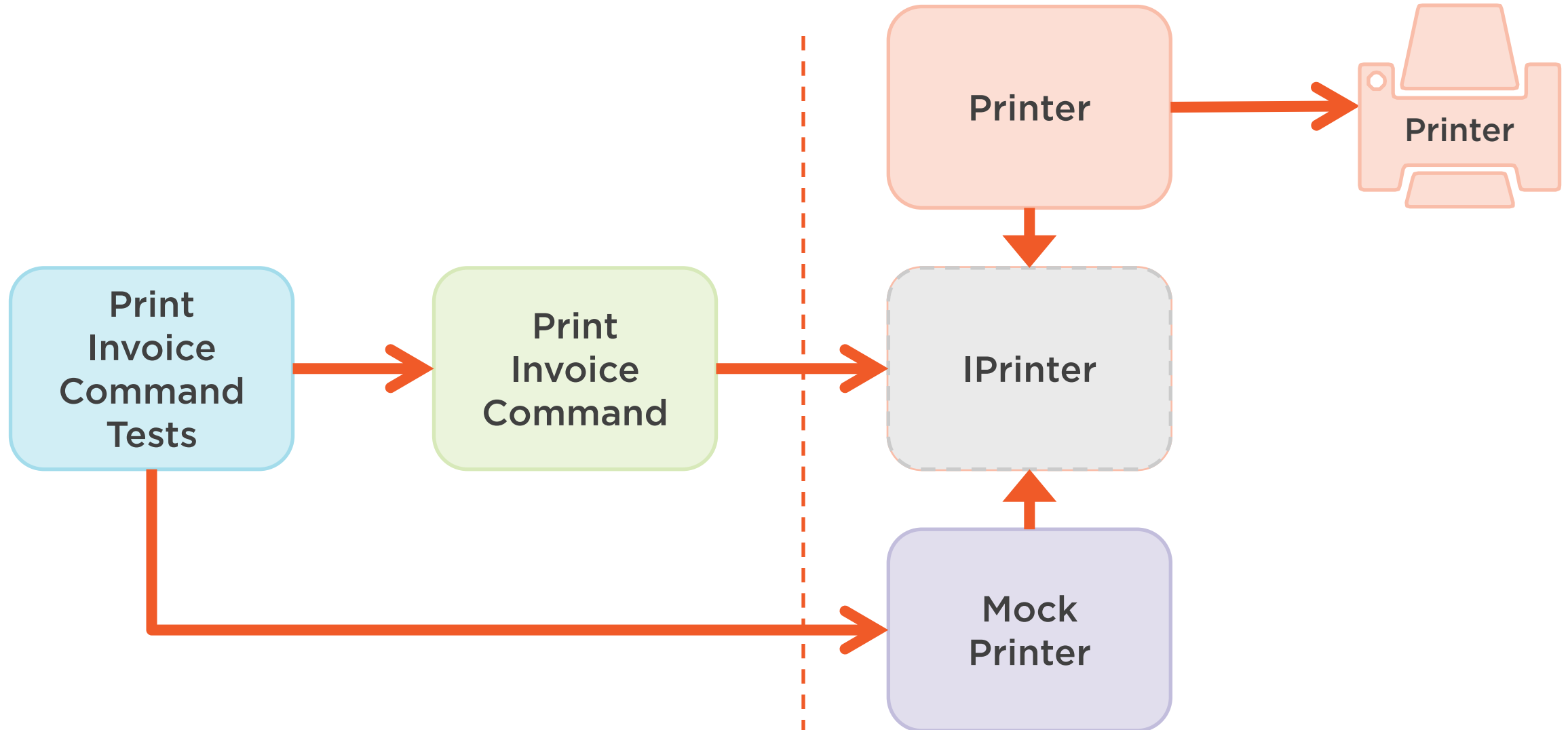
Demo Summary



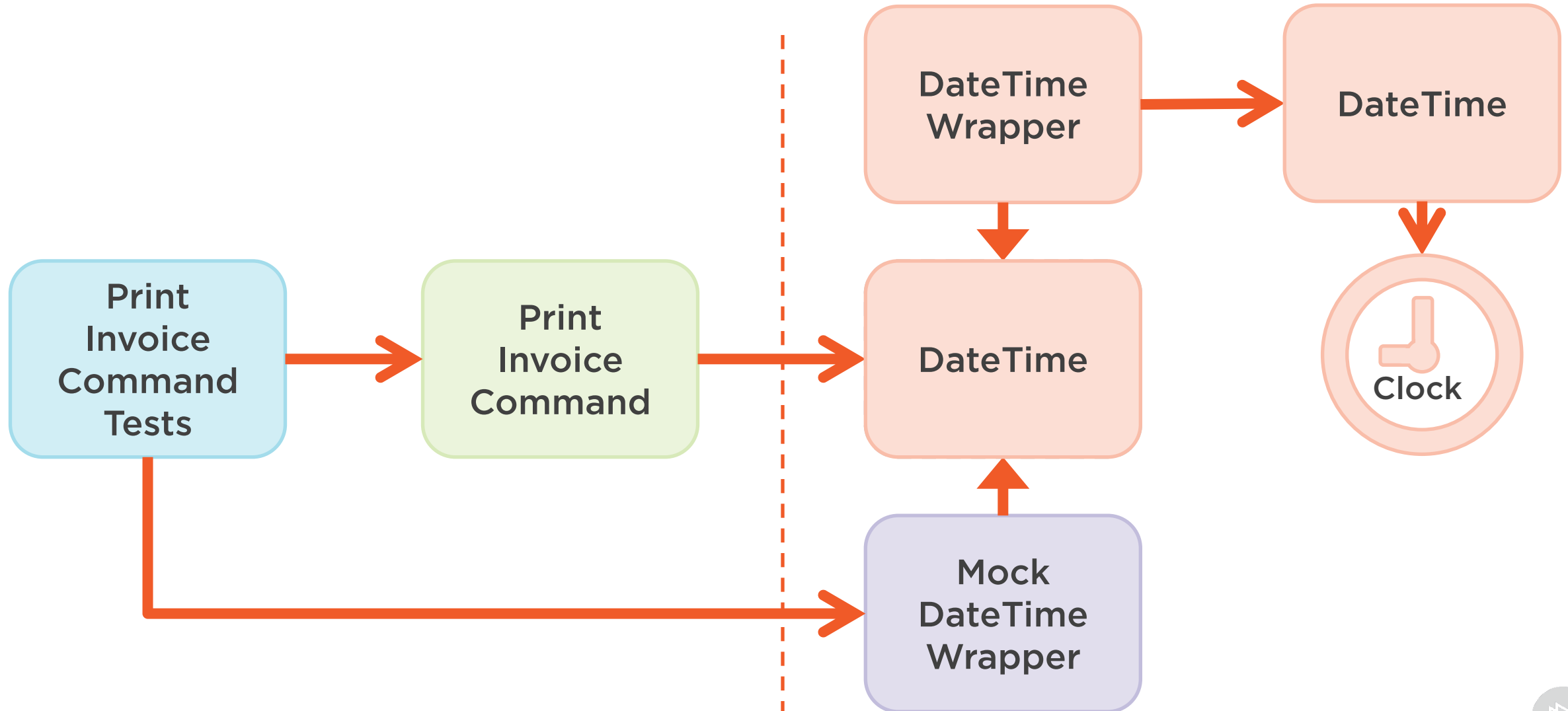
Demo Summary



Demo Summary



Demo Summary



Summary



Create seams in code

Decouple dependencies

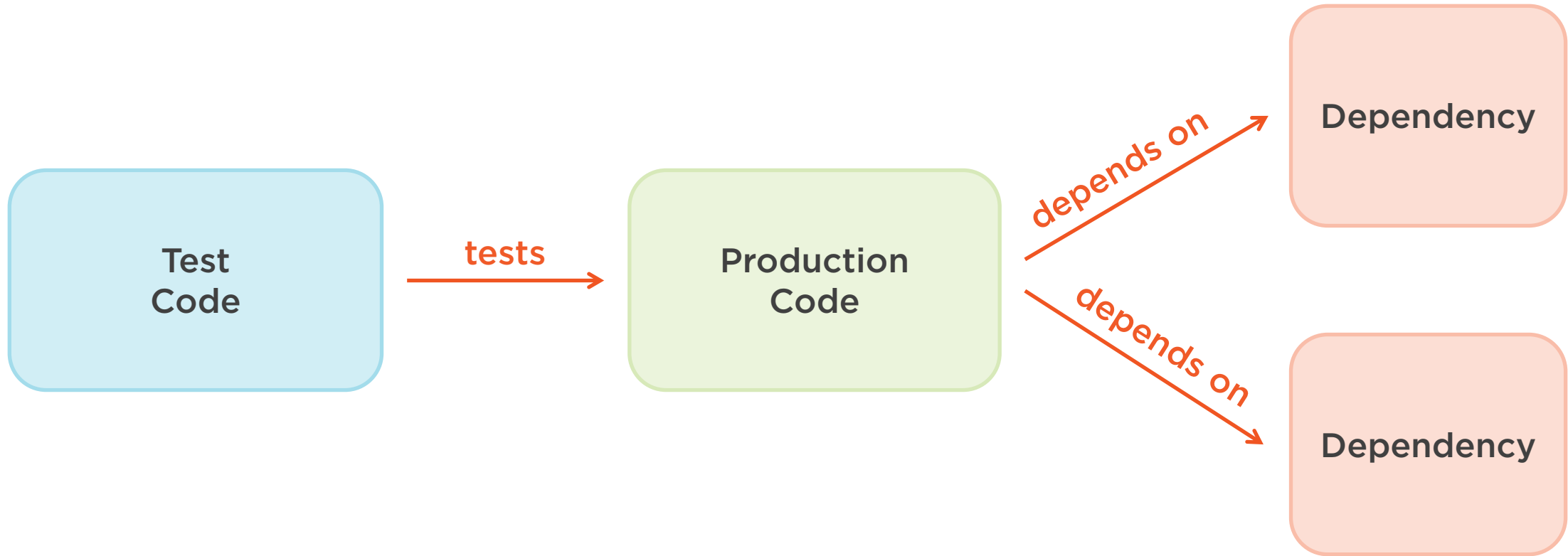
Program to interfaces

Inject dependencies

Test in isolation



Create Seams in Code



Create Seams in Code

