

Three overlapping yellow circles with black outlines are positioned on the left side of the slide, partially cut off by the edge.

The Worst of Legacy Code : Forensic Development

By Jason Kerney & Llewellyn Falco

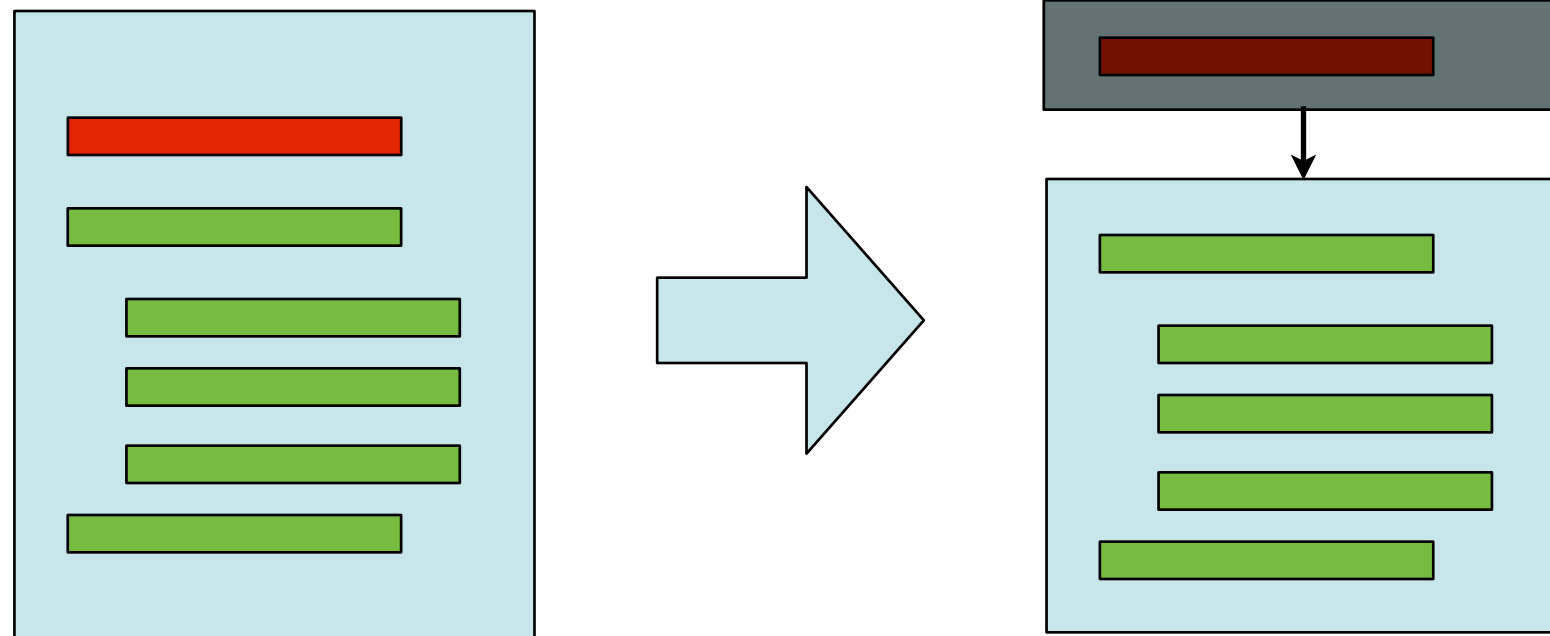
Bug #54

If a home , auto and personal loan are taken out by tom, 3 versions of tom appear in the database.

Fixing Legacy Code

- ▶ run it
 - ▶ Computer
 - ▶ reproduce
 - ▶ debugger
 - ▶ logger
 - ▶ Head
 - ▶ Printout
 - ▶ Code Review
 - ▶ Refactor

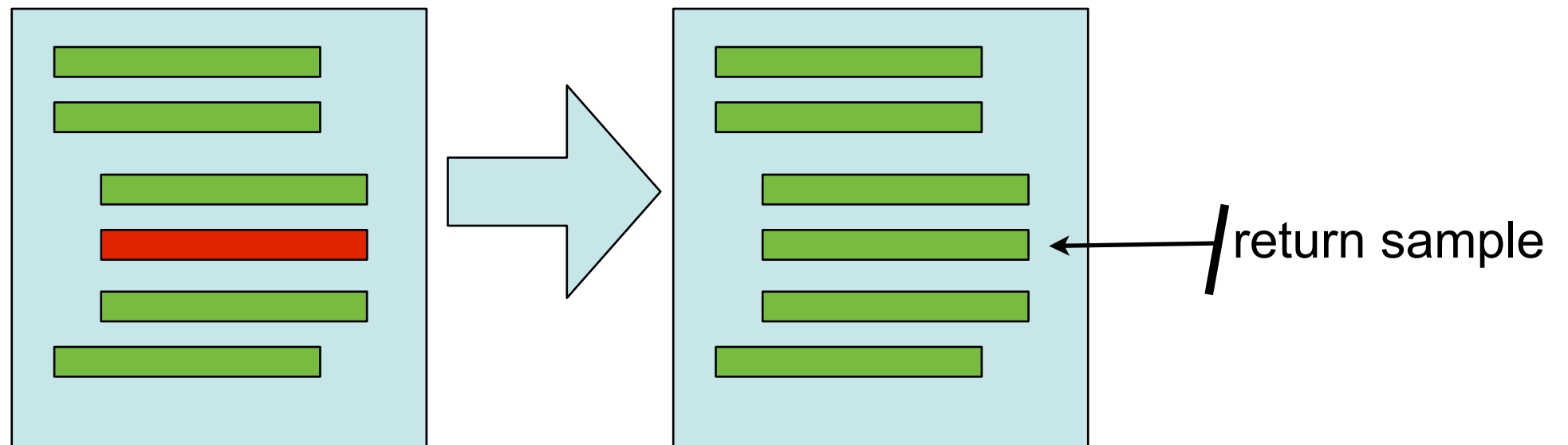
The Peel



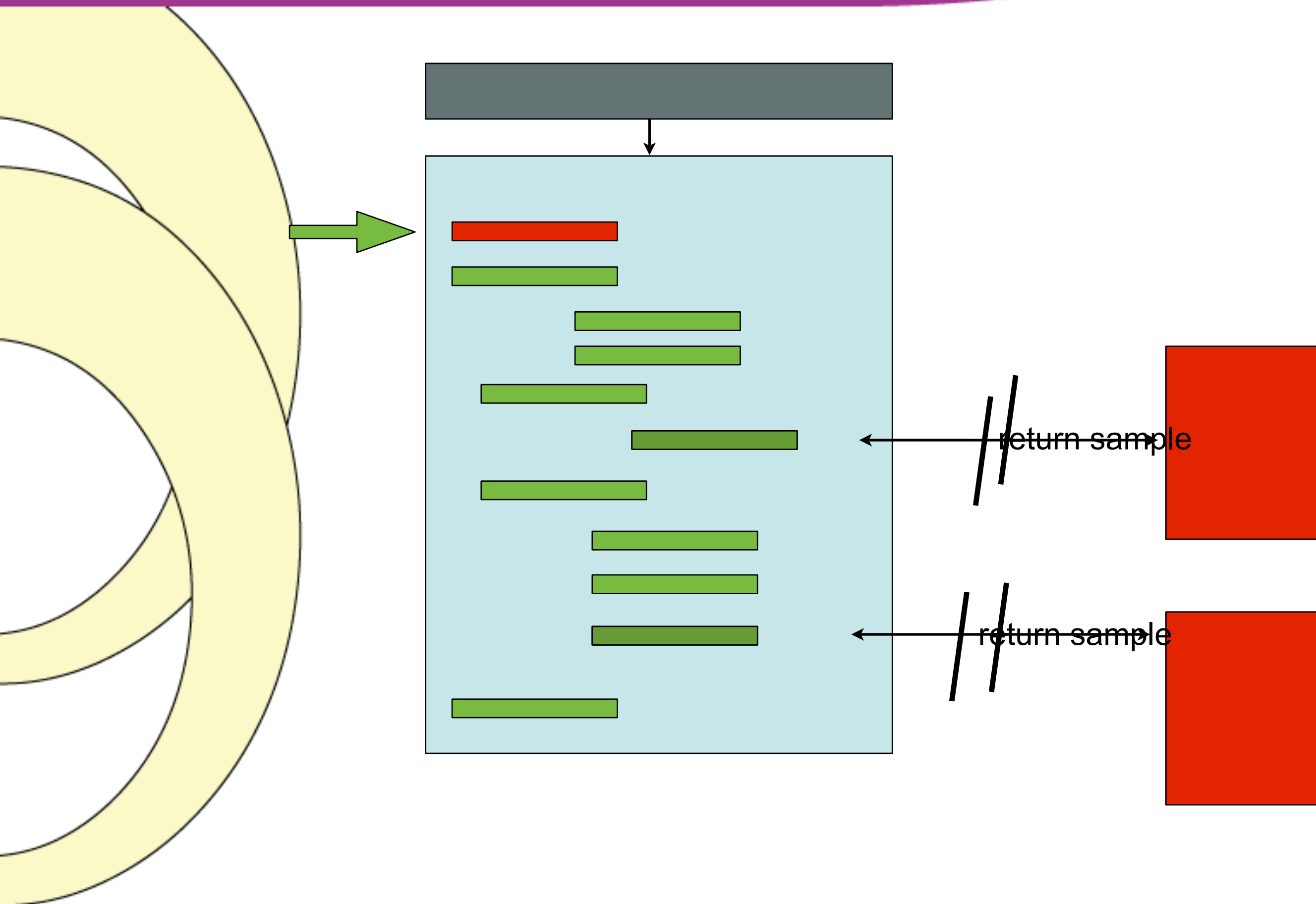
```
public double calculateTotalMortgage(String name, Connection con)
{
    Person p = Person.loadPersonByName(name, con);
    double total = 0.00;
    if (p.getFinancialInformation().getHomeEquityLoan() != null)
    {
        total = p.getFinancialInformation().getHomeEquityLoan()
            + p.getFinancialInformation().getFirstMortgagePayment();
    }
    else if (p.getFinancialInformation().getFirstMortgagePayment() != null)
    {
        total = p.getFinancialInformation().getFirstMortgagePayment();
    }
    return total;
}
```

```
public double calculateTotalMortgage(String name, Connection con)
{
    Person p = Person.loadPersonByName(name, con);
    Double home = p.getFinancialInformation().getHomeEquityLoan();
    Double mortgage = p.getFinancialInformation().getFirstMortgagePayment();
    double total = 0.00;
    if (home != null)
    {
        total = home
            + mortgage;
    }
    else if (mortgage != null)
    {
        total = mortgage;
    }
    return total;
}
```

The Slice



```
public void escalateProblems(Loan[] loans, Connection conn)
{
    for (Loan loan : loans)
    {
        if (loan.isOverDue() && (loan.getAmount() > 5000))
        {
            loan.saveStatus("Critical", conn);
        }
        else if (loan.isOverDue() && (loan.getAmount() > 50))
        {
            loan.saveStatus("Escalated", conn);
        }
    }
}
```

Pop Quiz Java:

Question 1

When called with “ntsc” as the TvType,
What does the code do?

- A) Creates 30 Frames #30 - 0
- B) Run it to find out

Pop Quiz:

Question 2

To get this code to run,
how should you handle

`web.getAttributes().get("TvFormat")`

- A) Peel
- B) Slice

Pop Quiz:

Question 3

To get this code to run,
how should you handle

```
maker.createFrame('"' + frame);
```

- A) Peel
- B) Slice

Resources Java

Code Coverage : EclEmma

Mock Utility : EasyMock



DEVELOPMENTOR

DEVELOPING PEOPLE WHO DEVELOP SOFTWARE

Intro To TDD

(Test Driven Development)

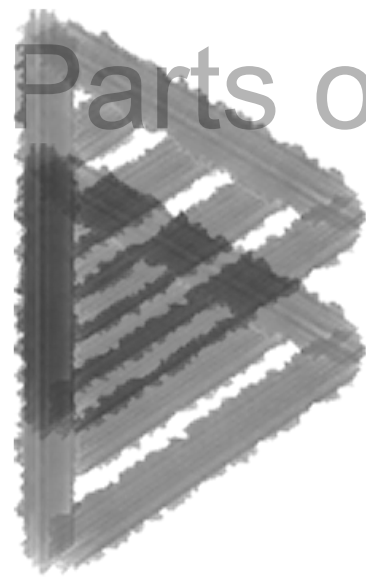
(2 day class)

Final Thought



Final Thought

Parts of a Test



Run

Verify

Contact



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