

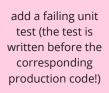


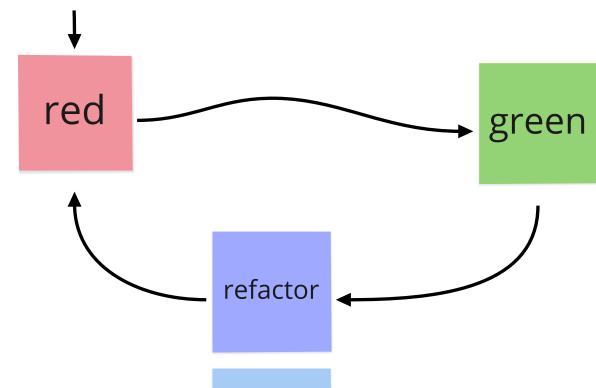
**Refactoring** Legacy Code

9.4.2024

## Fundamentals of Test-Driven Development







make minimal changes to the code in order to make all tests pass

clean up the code while preserving its behavior which is defined by the existing tests

## Refactoring



"**Refactoring** is a disciplined technique for restructuring an existing body of code, altering its internal structure without changing its external behavior." - Martin Fowler

Examples

extract method

rename symbol

inline method invert

. . .

refactoring supported by IDF

manual refactoring

Martin Fowler Kefactoring.com

a disciplined technique for restructuring an existing body of code, altering its internal structure without changing its external behavior



### Refactoring Home Page

Introduction to the technique of refactoring and online catalog of refactorings



refactoring.guru

#### Refactoring and Design **Patterns**

Refactoring is a controllable process of improving code without creating new functionality. Design Patterns are typical solutions to the commonly occurring problems in software design.

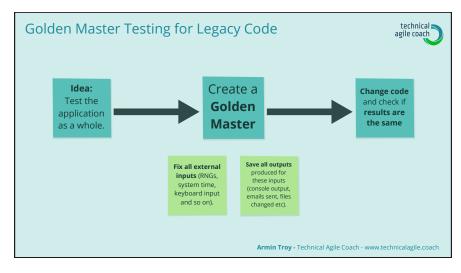
## **Approval Testing**



capture the output of a system, software, or program as a snapshot



confirm that they have not changed compared to a previously approved version



approvaltests.com

Home

Approval Tests Library - Capturing
Human Intelligence [available for Java,
C#, VB.Net, PHP, Ruby, Node.JS and
Python]

## **Ensemble Programming**



Ensemble Programming (Mob Programming)

>2 persons are programming together on one computer

# Roles Driver Others

does all the typing

gives directions to the driver / decides what to code next

Navigator

observe and think

switch roles every 5 minutes, after each TDD loop, • • •