

SIMPLY EXPLAINED

DEAD CODE

Unnecessary Complexity

www.cs.uoi.gr/~zarras/soft-devII.htm

Sources: M. Fowler Refactorings Catalog
W. Wake Refactoring Workbook

Dead Code

Dead Code

Symptoms

A variable, parameter, field, block, method, or class is **not used anywhere**

Causes

Complicated logic resulted in some **combinations of conditions** that can't actually happen; you'll see this when simplifying conditionals.

Requirements have **changed**, or new approaches were introduced, **without adequate cleanup**.

Dead Code

What to Do

For an unnecessary **class**: Ensure there are no references, and remove it.

For an unnecessary **method**: Ensure there are no references, and remove it.

For an unnecessary **field**: Ensure there are no references, and remove it.

For an unnecessary **parameter**: *Remove Parameter.*

For an unused **variable**: Remove it.

Lazy Class

Lazy Class

Symptoms

A class isn't doing much: its parents, children, or callers seem to be doing all the associated work, and there isn't enough behavior left in the class to justify its continued existence.

Causes

Typically, all the [class' responsibilities were moved](#) to other places in the course of refactoring.

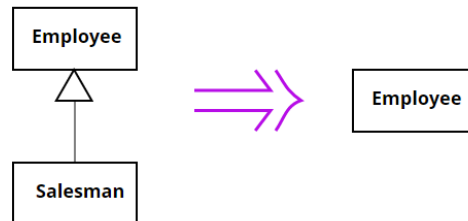
What to Do

1. If parents or children of the class seem like the right place for its behavior, fold it into one of them via [Collapse Hierarchy](#).
2. Otherwise, fold its behavior into its caller via [Inline Class](#).

Collapse Hierarchy

A superclass and subclass are not very different.

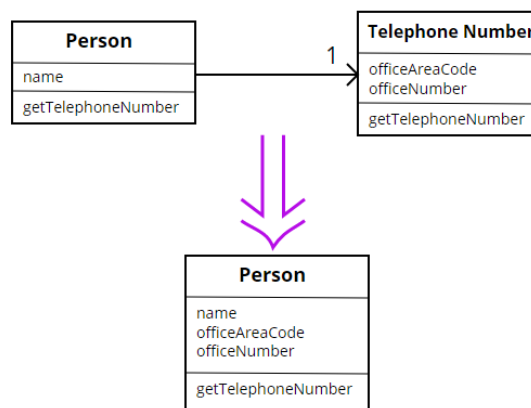
Merge them together.



Inline Class

A class isn't doing very much.

Move all its features into another class and delete it.



Inline Class

*Inline Class is the **reverse** of Extract Class.*

Use Inline Class if a class is no longer pulling its weight and shouldn't be around any more.

Often this is the **result of refactoring that moves other responsibilities out of the class so there is little left.**

Then I want to fold this class into another class, picking one that seems to use the weak class the most.