## **Refactoring Course** "Bad Smells in Code"

Code Smell	Description
Duplicate Code	Name tells allyou have duplicate code that you want to remove.
Long Method	If it is too long, break it up into smaller pieces.
Large Class	Big bloated class doing many different thingconsider breaking it
	up.
Long Parameter List	Many parameters being passed aroundUse Replace Param with Method.
Divergent Change	Each change requires changes to many methodsmight need a new object.
Shotgun Surgery	A change requires many changes to many classesMove Method or Field.
Feature Envy	Method in one class is always interested in another classMove Method.
Data Clumps	Sets of data is always used togetherput them together in same object.
Primitive Obsession	Too many primitive data typesuse more real objects like Address
Switch Statements	Many case statementsreplace with objects or move methods.
Parallel Inheritance	Two class hierarchies are tightly coupledremove delegation.
Lazy Class	Class is not really doing much workmove methods and fields.
Speculative	Trying to generalize where you are not ready to generalize.
Generality	
Temporary Field	Have a field that is only sometimes setuse a subclass for that case.
Message Chains	Chaining many messages for a resultuse hide delegation to remove.
Middle Man	A middle class does little work between classesremove the class.
Inappropriate	Two classes are tightly coupled and working too closelyseparate
Intimacy	changes.
Incomplete Lib	Not enough function in libraryuse add foreign method to add to
Classes	classes.
Data Class	Dumb data holder classes so either add methods working on data or
	move fields to where the data is being used.
Refused Bequest	Inheriting too much behavior you don't needpush down where it
	belongs.
Comments	Methods with many commentssimilar to large methodsextract
	method.