

ASE 420 - Refactoring Document

Software Rules

- **KISS rule** says, "Keep it simple and stupid."
- **Only fools rush in**, in other words, "think before you act" or "design before you implement"
- **Divide and conquer rule** says, when we deal with the SE problem, we should divide the problem into small pieces and solve the problem one by one, instead of solving the problem as a whole.
- **Make code/data for people rule** says, "Try to write code/data for people not machine"
- **Murphy's law** says, "Anything that can happen, will happen".

Code Smells

1. Lazy Class
2. Dead Code
3. Duplicate Code
4. Primitive Obsession
5. Data Clumps
6. Alternative Classes with Different Interfaces
7. Temporary Field
8. Middle Man
9. Comments
10. Feature Envy

Refactoring Patterns

1. Extract Method
2. Move Method
3. Extract Class
4. Extract Interface
5. Inline Temp

Design Document

1. Singleton
2. Mediator
3. Abstract Factory