

SENG 301 - Software Analysis and Design

Lab 15- Refactoring
May Mahmoud



Refactoring

- The process of restructuring existing computer code without changing its external behavior
- Kind of reorganization/not rewriting code
- Example
 - Rename
 - Splitting long functions into smaller ones
 - Removing duplicated functions

Refactoring

- Run unit test before and then refactor and run unit test again to make sure code didn't break
- Some refactoring techniques
 - Pull Up – in OOP, move to a superclass
 - Push Down – in OOP, move to a subclass
 - Encapsulate Field – force code to access the field with getter and setter methods
 - Generalize Type – create more general types to allow for more code sharing
- Many software editors and IDEs have automated refactoring support

START LAB 15