Chapter 20
Object-Oriented Concepts and Principles

The OO Process Model

The OO Mindset

Key Concepts

Classes
- object-oriented thinking begins with the definition of a class often defined as:
  - template
  - generalized description
  - pattern
  - “a kind of” ... describing a collection of similar items
- a metaclass (also called a superclass) is a collection of classes
- once a class of items is defined, a specific instance of the class can be defined

Building a Class
What is a Class?

Encapsulation/Hiding

The object encapsulates both data and the logical procedures required to manipulate the data.

Class Hierarchy

Methods (a.k.a. Operations, Services)

An executable procedure that is encapsulated in a class and is designed to operate on one or more data attributes that are defined as part of the class. A method is invoked via a message passing.

Messages

Process Model / Process Sequence

-- Correlation? --
Questions To Ponder

- Consider Information Hiding and Encapsulation... Can you have one without the other?