Vocabulary Chapter 10

Inheritance: a mechanism that enables one class to inherit, or assume, both the behavior & the attributes of another class

Unified Modeling Language (UML): a graphical language used by programmers and analysts to describe classes & Object-Oriented Processes

Class Diagram: a visual tool that provides you with an overview of a class. It consists of a rectangle divided into 3 sections: Top – name of the class, Middle – names & data types of the attributes, Bottom – methods

Parent/Base/Superclass

Child/Derived/Subclass

Composition: the relationship in which one class contains one or more members of another class that WOULD NOT continue to exist without the object that contains them

* Aggregation: a type of composition in which a class contains one or more members that WOULD continue to exist without the object that contains them

Keyword extends: keyword used to achieve inheritance in Java

Upcast: changes an object to an object of a class higher in the object’s inheritance hierarchy

Override: a field or method in a child class means to use the child’s version instead of the parent’s version

Polymorphism: the technique of using the same method name to indicate different implementation

* Subtype Polymorphism: the ability of one method name to work appropriately for different subclasses of a parent class

Override Annotation: notifies the compiler of the programmer’s intent to override a parent class method in a child class

Keyword super: refers to the parent/ superclass of the class in which you use it

Information Hiding: the concept of keeping data private

Protected Access: provides an intermediate level of security between public and private; a class’s protected members can be used by a class and its decendants, but not by outside classes

Fragile: refers to classes that are prone to errors

Virtual Method Calls: those in which the method is used to determine when the program runs, because the type of the object used might not be known until the method executes

Inlining: an automatic process that optimizes performance by replacing calls to methods with the implementations