Vocabulary Chapter 03

Method: a program module that contains a series of statements that carry out a task; invoke/call methods to execute them

* Method Header/Declaration: provides information about how other methods can interact with it
* Method Body/Implementation: contains the statements that carry out the work of the method
* Return Type (Method Type): describes the type of data the method sends back to the calling method
* Return Statement: causes a method to end and the program’s logic returns to the calling method; value is sent from called method to calling method

A calling method: makes a method call & the method call invokes a called method

Interface: the only part of a method that the method’s client sees or interacts with

Parameters: data items received by a method

* Actual: arguments in the method call
* Formal: variables in method declaration that accept values from the actual

Arguments: data items sent to methods in a method call; info passed to parameters in methods

Static: variable or method can be used without creating any objects

* Non-static: can’t use without an object
* Instance **Variable:** variable defined in a class for which each instantiated object of the class has a separate copy; a non-static field
* Instance **Method:** methods used with object instantiations

\*Signature: combination of the method name and the number, types, and order of arguments

\*Fully Qualified Identifier: full method name that incudes- class name.method name; not needed within its own class

Local variable: known only within the boundaries/scope of the method

Data Fields: the data components of a class that help distinguish them from other variables; declared within a class but outside a method

Class Client/User: an application or class that instantiates objects of another prewritten class

Access Modifier/Specifier: public, private

* Private Access: (to a field) no other classes can access the field’s values, and only methods of the same class are allowed to use the variables.

Implementation Hiding: the encapsulation of method details;

* Information hiding: the object-oriented programming principle used when creating private access for data fields; a class’s private data can be changed or manipulated only by a class’s own methods and not by methods belonging to other classes

Mutator (Set) Method: set or change field values

Accessor (Get) Method: retrieve values

Primary Key: a unique identifier for data within a database

* Unique identifier: should have no duplicates within an application

Reference To An Object: name for a memory address where the object is held

* Every object name is a reference (Computer Memory Location)

Constructor: special type of method that creates and initializes objects

Default Constructor: created automatically by the Java compiler for any class you create, when you don’t write your own constructor; requires no arguments

Abstract Data Types (ADT): a type whose implementation is hidden & accessed through its public methods

Programmer-defined data type: a type that’s not built into the language