

Static and Method Overloading

static

- One per class, not per object
- static variables
 - all instances of the class share the same static variable
 - example: serial/VIN number for Car
- static methods
 - invoked through class name, not object name
 - cannot reference instance variables
 - example: Math methods, isleap, ConvertTemperature

Method Overloading

- Method signature – name of method and type and order of parameters
- Two methods must have different signatures, but may have the same name
 - `println(String s)`
 - `println(int i)`
- A class may have multiple constructors with different parameter lists

Examples

- Student
 - Constructor 1 takes first name, last name
 - Constructor 2 takes first name, last name, grade
- StudentDB
 - addStudent(Student s)
 - addStudent(String fname, String lname)

Aggregation

- “Has-a” relationship
- An object can have references to other objects
 - Example:
 - ContactInfo – Name, Address, Phone
 - Employee “has-a” ContactInfo