

- Class: a blueprint for an object
 - Defines:
 - Properties (non-static fields)
 - Non-static fields = instance-scoped variables / instance variables
 - Behaviors (non-static methods)
 - Non-static methods = instance methods
 - Can also contain
 - Static fields
 - Static methods

- Instance: An object
 - “An instance of the Dog class” = a Dog object
 - “There’s 5 instances of Dog” = there’s 5 Dog objects
 - Each instance or object is stored in the heap along with its properties / instance variables / non-static fields
- Field: A variable at the class-level
 - Defined directly in the class, NOT inside a method
 - Static fields and non-static fields
 - Can be primitives or reference variables (just like any other variable anywhere else)
- Method: A block of code that can be executed by invoking it
 - Invoke: calling the method to execute it (ex. d1.bark();)
 - Can be static OR non-static
 - <access-modifier> <optional non-access modifier(s)> <return type> <name of method>(<parameters>, ..., ...) { }

- **Static:** a non-access modifier that can be used with variables or methods
 - A variable or method declared with static DOES NOT need an object to be accessed
 - Static variables (fields) or static methods can be accessed directly from the blueprint itself
 - `Employee.ceo`
 - `Employee.changeCeo("Ashwin");`
- **Non-static:** a lack of the static non-access modifier
 - A variable or method declared without the static keyword is accessed through the instances themselves
 - They cannot be accessed directly from the blueprint itself
 - `Employee e1 = new Employee();`
 - `e1.salary`
 - `e1.changeSalary(100000);`
 - `Employee e2 = new Employee();`
 - `e2.salary`
 - `e2.changeSalary(70000);`

- Instance method
 - Has direct access to an object's instance variables
 - `age = 54;`
- Static method
 - Require a reference to an object to access its variables
 - Ex. `Employee e1 = new Employee();`
 - `e1.age = 54;`