

CONSTRUCTORS

LECTURE 7

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CONSTRUCTORS

REVISITED

- **Used for initializing new objects.**
- **Initializes an object immediately upon creation**
- **Has the same name as the class in which it resides**
- **Has optional parameter list**
- **Once defined, the constructor is automatically called immediately after the object is created, before the new operator completes.**
- **Has no return type, not even void.**

THE 'NEW' OPERATOR

.....REVISITED.....

class_name variable_name = new class_name();

Dog dog1= new Dog();

- **Parentheses after the class name calls the constructor**
- **If no constructor is defined for a class, java creates a default constructor**
- **.....Example follows.....**

```
class Dog
{
    String breed;
    String size;
    int age;
    String color;
}
public class Execute
{
    public static void
    main(String [ ] args)
    {
        Dog dog1 = new Dog();
    }
}
```

```
class Dog
{
    String breed;
    String size;
    int age;
    String color;
}
Dog()
{
    Breed =0;
    Size=null;
    Age=0;
    String=null;
}

public class Execute
{
    public static void main(String[]args)
    {
        Dog dog1 = new Dog();
    }
}
```

GARBAGE COLLECTION

- In Java, objects are dynamically operated by the **new** operator
- Deallocation is done automatically using **Garbage Collection.**
- Garbage collection occurs rarely during program execution
 - `System.gc();`
- When no reference to an object exists,
 - Java assumes that the object is no longer needed

- The memory occupied by object can be reclaimed
- No explicit need to destroy objects

Next.....access control