



Object Oriented Analysis and Design using Java

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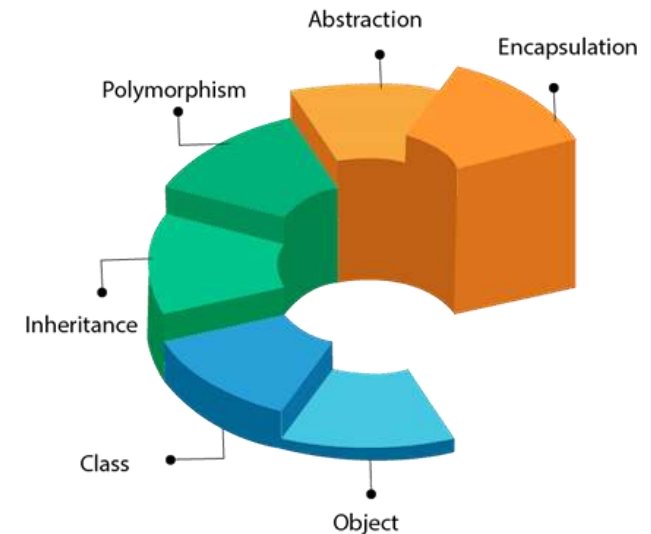
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Introduction to OO Programming

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OOPs (Object-Oriented Programming System)



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Unit-01 : Object Oriented Programming



- ~~1: Introduction to course, Introduction to object-oriented concepts, Object Based Programming: JVM~~
- ~~2: Abstraction, Encapsulation, Composition~~
- ~~3: Class Attributes, Behaviour, Objects, and Methods~~
- ~~4: Interface and Implementation: Role of Constructors and Destructors, Garbage Collector~~
- ~~5: Parameter Passing, Value Type and Reference Type~~
- ~~6: Overloading of Methods Model~~
- ~~7: Java Recursion~~
- 8: Class Attributes and Behaviour: Difference between Class Methods and Instance Methods
- 9: Inheritance: Concepts of Single Rooted Hierarchy and Interface
- 10: Abstract Class in Programming Languages, Object Class in Java

T1 : Chapter 6: Introducing Classes

There are two types of methods based on how they are invoked.

1. Instance Methods
2. Class Methods

By default, methods are said to be instance methods as they are invoked with respect to an instance/object. They get a reference (**this**) to the instance/object and variables modified are that of the particular instance.

The keyword **static** is used to create fields and methods that belong to the class, rather than to an instance of the class.

Class variables (or static fields)

- Variables that are common to all objects
- They are associated with the class, rather than with any object
- Every instance of the class shares a class variable, which is in one fixed location in memory
- Any object can change the value of a class variable, but class variables can also be manipulated without creating an instance of the class

- Static block may be used to initialize static variables
- Static block gets executed exactly once, when the class is first loaded

StaticBlockDemo.java



THANK YOU

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