SKILLS

Lecture

Inheritance

List of Concepts Involved:

- Inheritance introduction
- Extends keyword
- Types of Inheritance
- Types of methods Inherited, overridden, specialised
- Rules to override method
- Constructor execution in case of Inheritance

Topics covered Yesterday's Session:

- Constructor

Inheritance Introduction

- It is one of the pillars of Object Orientation.
- It always speaks about reusability.
- Using inheritance productivity of the code can be improved.
- If we use inheritance, lines of code can be reduced in the application.
- In java inheritance is achieved through the "extends" keyword

Extends keyword

- If we use extends keyword, then we can take the properties and behaviours from parent class to child class.

Types of Inheritance

- Single-level inheritance
- Multi-level Inheritance
- Hierarchical Inheritance
- Multiple Inheritance

Types of Methods in Inheritance

- Inherited
- Overridden
- Specialized

Rules to override method

- Whatever the Parent has by default available to the Child through inheritance, if the Child is not satisfied with Parent class method implementation then Child is allowed to redefine that Parent class method in Child class in its own way this process is called overriding.
- The Parent class method which is overridden is called the overridden method.
- The Child class method which is overriding is called the overriding method.
- In overriding method resolution is always takes care by JVM based on runtime
- object hence overriding is also considered as runtime polymorphism or dynamic polymorphism or late binding.
- The process of overriding method resolution is also known as dynamic method dispatch.
- In overriding method names and arguments must be the same.
- That is, method signatures must be the same.

Constructor Execution in case of inheritance

- In case of Constructor the Parent class constructor would be executed followed
- by Child class constructor with the help of “super()”.
- It is basically used to make a call to the parent class constructor.
- Internally jvm uses super() to promote constructor chaining in inheritance level.

Next Lecture

- Polymorphism and Abstraction

PW SKILLS

THANK YOU