**Course 2 - Backend and Database Development**

**Day 5: 13 Dec 2024**

**annotation :** annotation is known as meta-data. Data about data. Like decorator in angular. Java provided lot of pre defined annotation. Those annotation we can use on class level or method level or property level.

All annotation start with pre-fix @ followed by name of the annotation.

@Override : this annotation we can use on method level. If sub class method override super class method then we doesn’t get any error else we get the error.

Non access specifiers keyword.

abstract:

* abstract is a keyword we can use with method and class.
* abstract method : the method without body or without curly braces or in complete method is known as abstract method.
* abstract returnName methodName(parameteterList);
* abstract void speed();
* abstract class : we can use abstract keyword with class.
* if method is abstract that class we need to declare as abstract class.
* abstract class can contains normal as well as abstract method. means it can contains zero or 1 or many abstract methods.
* Whichever class extends abstract class that class must be provide the body for all abstract method mandatory.
* It is not mandatory all method must be abstract in abstract class.
* abstract class we can’t create the object. But it can contains constructor.

final : final keyword we can use with variable, method and class.

* final variable : if we want to declare constant value then we need to use final keyword with variable.
* final int A=10;
* final method : if method is final we can’t override that method.
* final class : if we can’t inherits or we can’t sub class final class.

static

* static keyword we can use with variable and method but not with class.
* static variable: if variable is static we can access that variable with help of class name as well as object.
* static method : if method is static we can access that method with help of class name as well as object.
* every class contains only one static memory. Static memory shared for objects.

Employee

int id; instance variable

String name; instance variable

float salary; instance variable

static int mgrId; // static variable

interface