#7

TYPES OF MODIFIERS

ZOOMING

Modifiers Types

- It is a keywords.

- It is used to set access levels for classes, variables, methods and constructors.

- 4 types of access modifier:

    1. Default

    2. Public

    3. Private

    4. protected

Access Modifier (default)

- No need keyword.

- Visible to the package, the default. No modifiers are needed.

- The data members, class or methods which are not declared using any access modifiers.

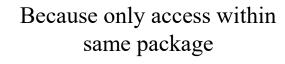- It accessible only within the same package.

Access Modifier (default)

```
D:/p1/Dog.java
package p1;

class Dog
{
   void display()
   {
     System.out.println("Hello World!");
   }
}
```

```
D:/DogNew.java
import p1.*;
class DogNew
{
   public static void main(String args[])
   {
     Dog d=new Dog();
     d.display();
   }
}
```

Compile time error

Because only access within
same package

ZOOMING

Access Modifier (public)

- Keyword: public

- Accessible from everywhere in the program.

- There is no restrictions on the scope of a public data members.

- Class, method, or data members which are declared as public.

Access Modifier (public)

```java
D:/p1/Dog.java
package p1;

public class Dog
{
   public void display()
   {
      System.out.println("Hello World!");
   }
}
```

```java
D:/DogNew.java
import p1.*;
class DogNew
{
   public static void main(String args[])
   {
      Dog d=new Dog();
      d.display();
   }
}
```

```
Hello World
```

Access Modifier (private)

- Keyword: private

- Accessible only within the class.

- Any other class of same package will not be able to access.

- Only visible within the enclosing class.

Access Modifier (private)

```java
D:/Dog.java
class A
{
    private void display()
    {
        System.out.println("Hello World!");
    }
}
class B
{
    public static void main(String args[])
    {
        A a=new A();
        a.display();
    }
}
```

error: display() has private access in A obj.display();

Access Modifier **(protected)**

- Keyword: protected

- Accessible within same package or sub classes in different package.

- only visible within the enclosing class and any subclasses

ZOOMING

Access Modifier (protected)

```
D:/p1/Dog.java
package p1;

public class A
{
   protected void display()
   {
     System.out.println("Hello World!");
   }
}
```

```
D:/DogNew.java
import p1.*;
class B extends A
{
   public static void main(String args[])
   {
     A d=new A();
     d.display();
   }
}
```

```
Hello World
```

ZOOMING

youtube: Zooming | https://github.com/Soba-Arjun/