Access Modifiers

Display 7.9  Access Modifiers

```
package somePackage;

public class A {
    public int v1;
    protected int v2;
    int v3;//package
    //access
    private int v4;
}

public class B extends A {
    // Access to v1, v2, v3 is possible.
    // Cannot access v4.
}

public class C extends A {
    // Cannot access v1.
    // Access to v2, v3 is possible.
    cannot access v4.
}

public class D {
    // Access to v1, v2 is possible.
    // Cannot access v3, v4.
}

public class E {
    // Access to v1.
    cannot access v2.
    cannot access v3.
    cannot access v4.
}
```

In this diagram, “access” means access directly, that is, access by name.

A line from one class to another means the lower class is a derived class of the higher class.

If the instance variables are replaced by methods, the same access rules apply.