

CS 213 – Software Methodology

Spring 2017

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Lecture 12 – Feb 28

Packages/Access Levels

Access Levels/Visibility

```
package abcpackage;

public class A {
    private int apriv;
    protected int aprot;
    int apack;
    ...
}
```

```
package abcpackage;

class B {
    int bpack;
    public void m() {
        A a = new A();
        a.aprot=10;
    }
}
```

↑
ok, same package

```
package abcpackage;

class C extends B {
    public void m() {
        A a = new A();
        a.apriv = 10;
        a.apack = 15;
        B b = new B();
        bpack = 5;
    }
}
```

not ok, private
ok, same package
ok, same package, inherited

```
package defpackage;
import abcpackage.*;
public class D
extends A {
    int dpack;
    public void m() {
        aprot=5;
        apack=10;
    }
}
```

ok, inherited
different package, not visible

```
package defpackage;
import abcpackage.*;
public class F
extends A {
    public void m() {
        A a = new A();
        a.aprot=5;
        a.apack=5;
    }
}
```

apack and aprot are not visible via a

```
package defpackage;
import abcpackage.*
public class E {
    B b;
}
```

B in different package, not visible because it is declared as package level accessible only