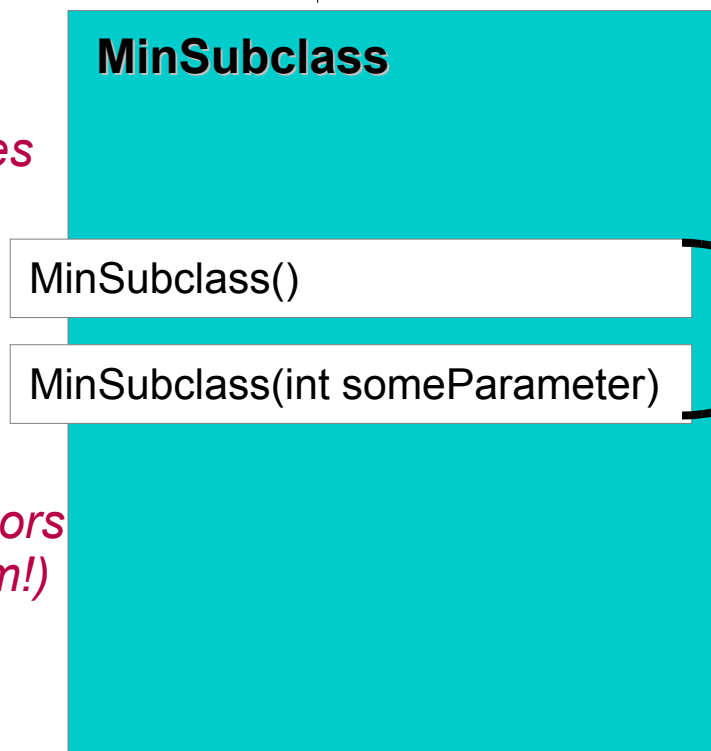


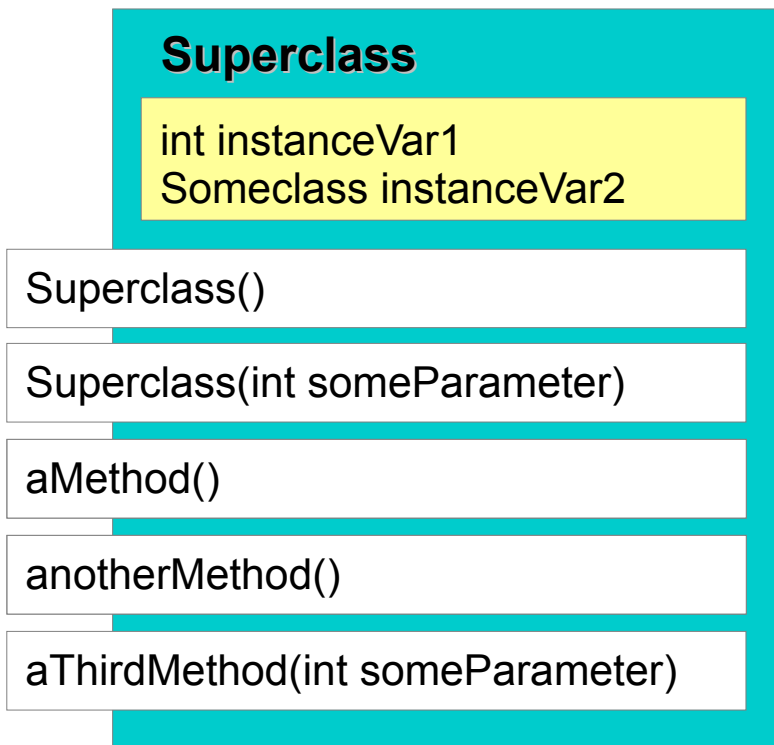
A subclass definition specifies new state & methods, and inherits everything else.

Must always specify constructors (can't inherit them!)

This minimal subclass only specifies constructors; inherits everything else.

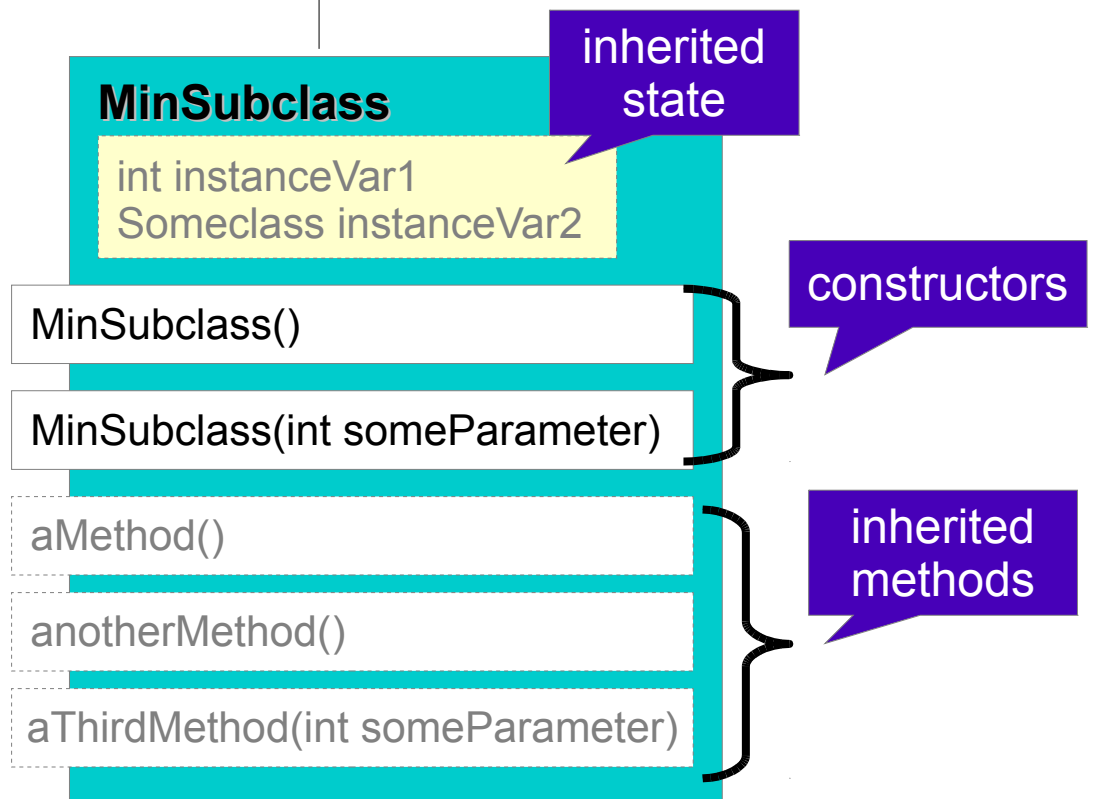


constructors



Here we see the inherited state and methods...

... as well as the new constructors.



Superclass

```
int instanceVar1  
Someclass instanceVar2
```

```
Superclass()
```

```
Superclass(int someParameter)
```

```
aMethod()
```

```
anotherMethod()
```

```
aThirdMethod(int someParameter)
```

The new subclass has additional state and methods.

MinSubclass

```
int instanceVar1  
Someclass instanceVar2
```

inherited state

constructors

```
MinSubclass()
```

```
MinSubclass(int someParameter)
```

```
aMethod()
```

```
anotherMethod()
```

```
aThirdMethod(int someParameter)
```

inherited methods

RicherSubclass

```
int instanceVar1  
Someclass instanceVar2  
int newInstanceVar
```

new state

```
RicherSubclass()
```

```
RicherSubclass(int someParam)
```

```
aMethod()
```

```
anotherMethod()
```

```
aThirdMethod(int somePa
```

new methods

```
aFourthMethod()
```

```
yetAnotherMethod(int aParameter)
```

Superclass

```
int instanceVar1  
Someclass instanceVar2
```

```
Superclass()
```

```
Superclass(int someParameter)
```

```
aMethod()
```

```
anotherMethod()
```

```
aThirdMethod(int someParameter)
```

MinSubclass

constructors

```
MinSubclass()
```

```
MinSubclass(int someParameter)
```

RicherSubclass

new state

```
int newInstanceVar
```

constructors

```
RicherSubclass()
```

```
RicherSubclass(int somePa
```

new methods

```
aFourthMethod()
```

```
yetAnotherMethod(int aParameter)
```

We usually don't show the inherited state & methods, just the new ones.