

8.1.4 Terminology: object-descriptor again

Description

In general an object-descriptor has the form as shown in the right column where *SuperClass* is the name of the class from which the object-descriptor is derived.

If no *SuperClass* is specified the object-descriptor is derived from class *Object*, which is the topmost superclass for all classes.

SuperClass
 $Item_1$
 $Item_2$
 $\vdots$
 $Item_n$

SuperClass is the *direct super class* of the object-descriptor and if the object-descriptor is used to specify a class, *SuperClass* is the superclass of that class.

A possible superclass of *SuperClass* is an *indirect superclass* of the object-descriptor / class. The term *superclass* may thus refer to a direct superclass or an indirect super class.

If the object-descriptor is part of a class declaration then the class is a *subclass* of *superClass*. If the object-descriptor is part of a declaration of a singular object, we do not refer to the singular object as a subclass since there is only one object of its kind, but we refer to its as a *derived object-descriptor*. A subclass is also said to be derived from the superclass.

$Item_1, Item_2, \dots, Item_n$ er items where each item is either a declaration or a statement.

$Item_1, Item_2, \dots, Item_n$ is called the *mainpart* of the object-descriptor/class.

The superclass Account of SavingsAccount is part of the object-descriptor as indicated by this figure where the object-descriptor for SavingsAccount is enclosed in a box:

descriptor of
SavingsAccount

```
class SavingsAccount: Account
  releaseDate: var Date
  withdraw(amount: var float) -> newB: var float:
    if (today > releaseDate) :then
      balance := balance - amount
    :else
      console.print("It is not possible to withdraw")
      newB := balance
  newReleaseDate(newReleaseDate: var Date, newInterest: var float):
    releaseDate := newReleaseDate
    interest := newInterest
```

A singular object may also have a superclass as shown below in the sketch of a special account for John Smith:

```
JohnSmith_special_account: obj Account
...
```