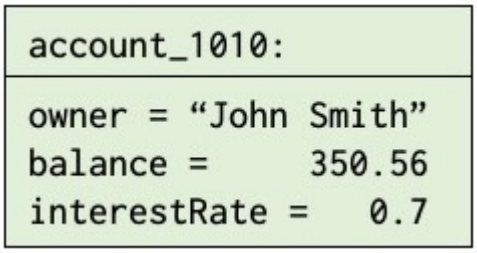
2.2 Bank with IT-support

Suppose the bank wants to handle its accounts using a computer. In order to do this, we must create a *model* within the computer of a bank system with representations of phenomena and concepts that are relevant for a banking domain. The bank accounts are examples of phenomena that we must represent in the model, and we use objects to *represent* the accounts.

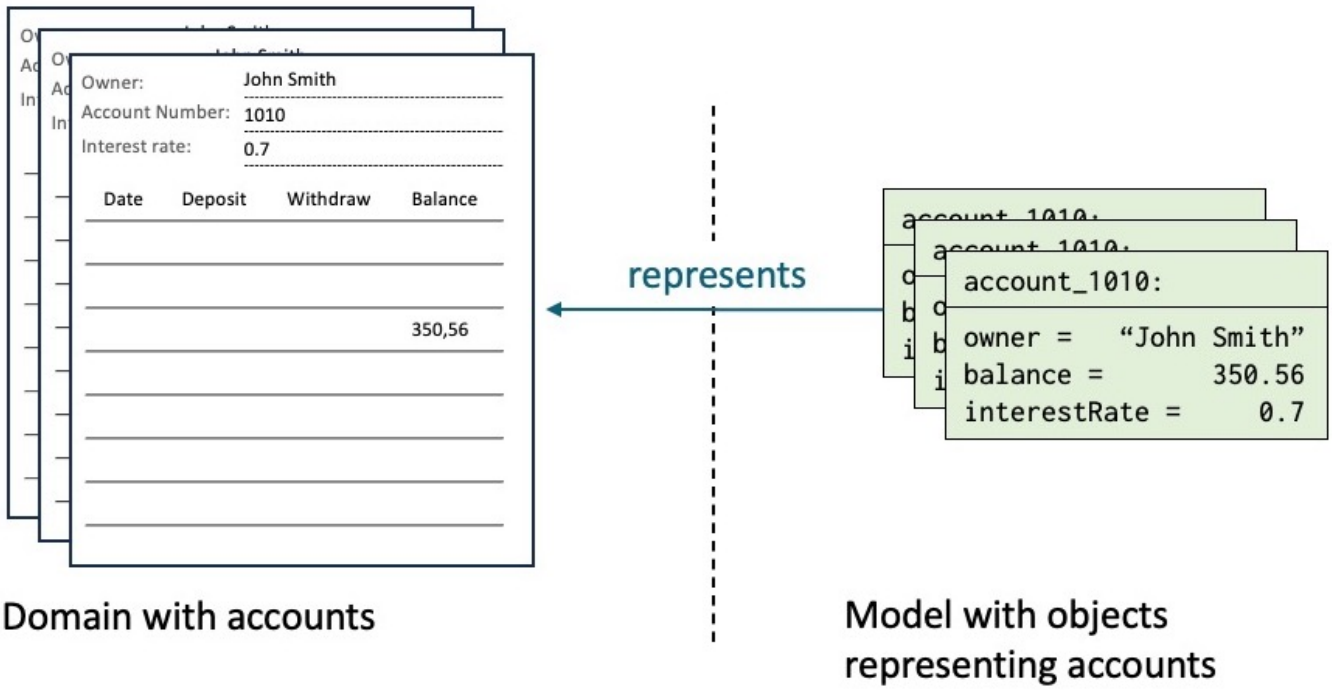
The diagram below illustrates an object that may represent the bank account of John Smith:



Object representing the bank account of John Smith

The name of the object is `account_1010` – the paper-based bank account of John Smith has number 1010. The object has three attributes representing information about this bank account. The attribute `owner` represents the name of the owner – here represented by the string `"John Smith"`; `balance` represents the current balance of the account; `interestRate` represents the current interest rate.

Note that the diagram is not the real object, but a picture of the object. The real object exists as part of the model within the computer. We return to that later.



Domain with accounts and model with account objects

The above figure shows the relation between the paper-based accounts on the left-side and the object-based accounts on the right-side. The paper-based accounts are phenomena in the bank domain, and they are modeled/represented by the objects.