

Figure 5.8 SpecialistBike class

deducted from the deposit. The amounts recorded are *latenessDeduction* and *damageDeduction*. It is not a good idea to store this information in Bike as we will have the problem of multiple sets of data – the bike may be returned late or damaged more than once. We would also have no way of knowing which customer they related to. If we store them in Customer, we potentially have multiple sets of data. The best place therefore is in Hire. It would be wise also to store the date the bike was actually returned as we know bikes are sometimes returned late. Storing this date will signal that the hire is no longer active. This gives us the Hire class in Figure 5.9, with the estimated duration represented as the attribute *numberDays*.

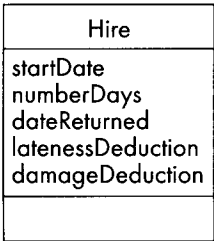


Figure 5.9 Hire class

*Customer class.* The requirements list makes no mention of attributes to be stored in the Customer class, but common sense would suggest we store at least a name, address and telephone number. Experience of other systems such as banking systems, library systems and store credit systems suggest that it will be useful for Wheels to have a unique identification number for each customer – a customer Id – see Figure 5.10.