- Steps 1 and 2 do not require the system to do anything.
- In step 3 Annie, in her role as Receptionist, enters the bike number into the system. We represent this step in a sequence diagram (Figure 6.9) using the findBike() operation we identified from the class responsibilities.

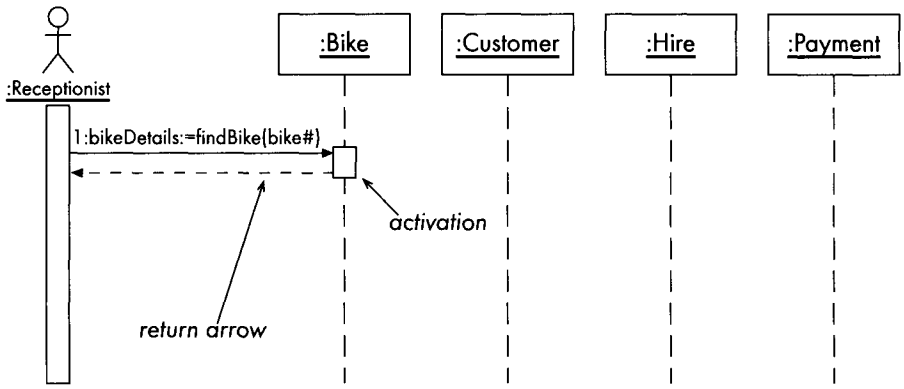

Figure 6.9 Fragment of sequence diagram

- The Receptionist sends the message findBike(bike#) to the relevant bike object, the one whose bike number matches the one she has input.
- For this to work, the target object, :Bike, must understand the message. This means that it must correspond to an operation on the Bike class.
- Sometimes we want to show the value that is returned in response to a message. Returned values are usually shown on the message line. The returned value is assigned to a variable. In this case the value returned by findBike() is assigned to bikeDetails (see step 4).
- The message has a number. On sequence diagrams the numbers are optional as the order is implicit in the sequence in which messages are drawn.
- Return of control can be indicated in UML by a dashed arrow. Return arrows are optional. Notice that the return arrow does not have a number, it is not a new message but models the return of control to the sending object.
- Object *activation* is shown by a thin rectangle on the object's lifeline. An object becomes active as soon as it receives a message. This means that the object is computing; processing is taking