

# Ch.2 Understanding Class Definitions

## Specialized Methods

# Accessor Methods

An accessor method retrieves information about the state of an object. The word 'get' will often appear in the name of such a method.

```
public int getPrice()  
{  
    return price;  
}
```

An accessor method will use the **return** statement to provide the information. The *header* will specify the type of data (e.g., **int**) to be returned.

# Mutator Methods

A mutator method will change the state of the object by modifying the data in one or more fields. They often use the keyword 'set' in their name.

```
public void insertMoney(int amount)
{
    balance = balance + amount;
}
```

In general, mutator methods do not return a value, so there is no *return* statement, and the header specifies a type of **void**.

# Printing from Methods

For a program to be useful, it usually has to interact with the user. At the most basic level, this involves displaying simple text information on the screen.

Although not required, it is often good coding practice to use dedicated methods for output to (and later, input from) the user.

Note: The BlueJ interface provides already provides some fancy ways to interact with the user, but normally the programmer would have to develop these themselves.

# Printing from Methods

```
System.out.println(); // blank line  
System.out.println("hello"); // prints hello  
System.out.println(3 + 4); // prints 7  
System.out.println("3" + "4"); // prints 34
```

The '+' operator performs addition on numbers (or variables containing numbers). For strings, it performs *concatenation*, which joins two or more strings together (which also works for String variables).

# Assigned Work

Read pages 26 to 35 (Section 2.6 to 2.9)

Create an OpenOffice Writer document, which you will use from this point forward to answer exercise questions from the text

Complete all exercises along the way (up to 2.42)

Catch up on previous work