

# Exercice 1.1

Develop a program that assists bookstore employees.

- For each book, the program should track the book's **title**, its **price**, its **year of publication**, and the **author's name**, ...
- Develop an appropriate class diagram (by hand) and implement it with a class.
- Create instances of the class to represent these three books:
  1. Daniel Defoe, *Robinson Crusoe*, \$15.50, 1719;
  2. Joseph Conrad, *Heart of Darkness*, \$12.80, 1902;
  3. Pat Conroy, *Beach Music*, \$9.50, 1996.

# Exercise 1.2

- Add a constructor to the following partial class definition and draw the class diagram

```
// represent computer images
class Image {
    int height; // pixels
    int width;  // pixels
    String source; // file name
    String quality; // informal
}
```

- Explain what the expressions mean in the problem context and write test class:

```
new Image(5, 10, "small.gif", "low")
new Image(120, 200, "med.gif", "low")
new Image(1200, 1000, "large.gif", "high")
```

# Exercise 1.3

- Translate the class diagram in figure into a class definition. Also create instances of the class

Automobile
<ul style="list-style-type: none"><li>- String model</li><li>- int price [in dollars]</li><li>- double mileage [in miles per gallon]</li><li>- boolean used</li></ul>