Figure 7.3 Building a class to represent students.

What do we need to know about student records?

- name
- student number
- number of courses taken
- number of courses passed
- average mark

In Java,

```
class Student {
    String name;
    String stunum;
    int numCourses;
    int numPassed;
    double avgMark;
}
```

Now let's write a simple test program:

```
public class TestStudent {
    public static void main (String[] args) {
        Student stu1 = new Student();
        Student stu2;
        stu2 = new Student();
        stu1.name = "Richard";     // note we can directly access stu1's name field
        stu2.name = "Mary";
    }
}
```

It is not a good idea to let other classes have direct access to the fields of our class. Why?

- our implementation could get too involved in the "structure" of the calling classes
- we lose our "independence"—change becomes difficult