



Project Grading Rubric

Course: IT259 Unit: 2 Points: 50

Project 2

Outcomes addressed in this activity:

Unit Outcomes:

- Demonstrate how constructors are called during inheritance
- Use abstract classes
- Use inheritance

Course Outcome:

- IT259-4. Explain the concept of inheritance.

Project Instructions:

This week you'll get to practice using inheritance by writing an abstract class and two subclasses.

First, create an abstract class named `Book`. This class should have a `String` instance variable for the book's title and a `double` instance variable for the book's price. Be sure to use appropriate access modifiers for these variables. Additionally, inside this class include a constructor that receives the book's title. Also include two getter methods: one that returns the book's title and one that return's its price. Finally include an abstract method named `setPrice()`.

Once you have your `Book` class written, it's time to write two subclasses: `Fiction` and `NonFiction`. Each of these classes will need to define its own constructor that accepts a `String` for the title and then calls on the `Book` constructor. Also, each class is required to define a `setPrice()` method. Have the `Fiction` class's `setPrice()` set the price field to \$19.99 and the `NonFiction`'s `setPrice()` set the price field to \$29.99.

Create a fourth class, which creates a main method to test out your classes. Have main method create both a `Fiction` and `NonFiction` object. Be sure to call the `setPrice` method for each object. Finally, print out the price of each object to the console so that the user can see the different prices.

Although it isn't required to look this way, output from your program might look like the following:

```
My Fiction book costs: 19.99
My Non-Fiction book costs: 29.99
```

50 point project grading rubric

Project Grading Rubric

Course: IT259 Unit: 2 Points: 50

Project Requirements / criterion	Maximum points possible for satisfactory completion of task	Points earned by student
Program compiles (free of syntax errors)	0-10 points	
Main method to test out Fiction and NonFiction Subclasses	0-10 points	
Created Abstract Class named Book with two subclasses Fiction and NonFiction	0-10 points	
Constructors to accept String for Title and to setPrice()	0-10 points	
Well formatted output for the cost of a fiction and nonfiction book	0-5 points	
Program is documented well	0-5 points	
Column Total		