# CMSC 131 Lab, Notes Week 14, Wed

## Notes for TAs

* 1. Every week after Wednesday’s lab please send us an email letting us know how things went in lab. Please include a brief summary of what questions you think they still have, what went well, what didn't, etc.
  2. Please do not provide these lab notes to the students.

## Project #8

Address any questions about the project.

## In-Class Exercise

Along with the students define the following classes:

* 1. **Book** **class**
     1. **Instance variables** → title, author, cost, content
        1. title and author will use the String class
        2. Content will use StringBuffer
     2. **Constructor** based on instance variables
     3. **Default constructor** → uses “this”
     4. **getContent** → returns a deep copy
     5. **addContent** → adds a string to the content instance variable
     6. **getCost →** returns cost
     7. **equals method** → Must take an Object parameter and use getClass()
     8. **toString method**
  2. **OnlineBook** **class**
     1. **Instance variable** → url
     2. **Constructor** based on instance variables and that calls the base class constructor
     3. **equals method** → Must take an Object parameter and uses getClass()
     4. **getCost(double dist) →** returns the cost of the book minus dist. Overloads the **getCost** method in the base class
     5. This class implements an interface named **WebResource**. The **WebResource** interface defines a method called **getURL()**
  3. **Driver**

Write a driver that defines an ArrayList of Book objects. For each object that represents just a Book (base class), the driver will print the title, and the author. If the book is an OnlineBook then the title and the url should be printed.

## Office Hours

* 1. Hold in-lab office hours if you have any time left. Any students without any questions can leave.
  2. Address any questions students may have. Don’t stay sitting at the front desk; go around asking students whether they have any questions.