

CS56—Midterm Exam 1—Question 1

E01, Q01, W16, Phill Conrad, UC Santa Barbara 02/10/2016

HAND THIS IN WITH YOUR EXAM.

YOU MAY USE THIS FOR SCRATCH WORK, BUT ALL ANSWERS SHOULD BE ON YOUR EXAM PAPER.

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INSTRUCTIONS FOR QUESTION 1

Write the code for the `IndexEntry` class, per the instructions below.

Books such as textbooks have an index in the back to help you find topics easily. Consider, for example, a fragment of the index of our CS56 textbook shown in the box at right. Each of these entries shows only one string (a topic) and then an integer which is the page on which that topic appears. For simplicity, assume for now that a topic appears on one and only one page (that is not true in practice, but for now, assume that it is.)

You will write a Java class to represent one entry in this index. For full credit, your class should have all of the following. Go over this as a "checklist" when you are finished to make sure you have everything needed.

Note that for **this** exam, you do NOT need to include Javadoc comments. (I may ask you about those on midterm 2).

```
...
BoxLayout manager 411
brain barbell 33
break statement 105
BufferedReader 454
BufferedWriter 453
buffers 453
byte 51
bytecode 2
...
```

- (10 pts) Correct syntax and structure of a Java class.
- (8 pts) Private instance variables for the data members (attributes).
- (8 pts) A two-argument constructor that takes arguments for the topic and the page number
Example invocation: `IndexEntry ie = new IndexEntry("BoxLayout Manager",411);`
- (8 pts) getter methods called `getTopic` and `getPage`.
- (8 pts) setter methods called `setTopic` and `setPage`.
- (8 pts) a correct `toString()` method. The method should return the topic followed by the page number, separated by a single space.

NOTE: You do NOT need to implement an `equals()` method for this exam. We'll cover that topic on midterm 2.

End of Q01 Handout—total points=50