**CS/COE 1501 Assignment Information Sheet**

**You must electronically submit an information sheet with every assignment. Also be sure to submit all materials following the procedures described in the assignment description.**

Joshua Spisak

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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**Assignment #: \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Wednesday 6:00 PM – 8:30 PM

**Lecture Day and Time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Friday 2:00 PM – 2:50 PM

**Recitation Day and Time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Wednesday, October 2nd 11:59 PM

**Program Due Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Wednesday, October 2nd

**Submitted Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Version 8, Update 211

**JDK Version: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Source code (.java) file name(s):**

Files I made: Crossword.java, CrosswordB.java, DLB.java, CrosswordState.java, DLBTest.java

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Files I received/modified: DictInterface.java, DictTest.java, MyDictionary.java

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**Compiled (.class) file name(s):**

Crossword.class, CrosswordB.class, DLB.class, CrosswordState.class, DLBTest.class

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DictInterface.class, DictTest.class, MyDictionary.class

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Yes

**Does your program compile without error?: \_\_\_\_\_\_\_\_\_\_\_\_\_**

**If not, what is/are the error(s)?:**

N/A

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**Does your program run without error?: \_\_\_\_\_\_\_\_\_\_\_\_\_**

Yes?

**If not, what is/are the error(s) and which parts of your program run correctly?:**

Given faulty arguments not in the form of <(DLB|\*)> <existing dictionary> <existing crossword puzzle>

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The program could either print an error and exit or throw an exception.

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**Additional comments (including problems and extra credit):**

An additional argument can be passed in 0 to 3 (default 0) for verbosity to give extra output showing

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the search approach. 0: only # of sols. 1: shows initial crossword. 2: shows solutions. 3: shows test steps

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**BONUS:** Run DLBTest.class for a demonstration of a **delete() method**. This will insert the first 10 words

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of the dict into the DLB then delete “aba” and “abash”. It will then give you a menu that will let you

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Insert or delete words using commands: “add <word>” “delete <word>”. There are also commands to

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to list the current dictionary structure and exit: “list”, “quit”.

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I also did some **benchmarking**. For each number of open slots I ran 3 tests then averaged the number of

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Solutions and time to solve them. After 6 open slots MyDictionary took longer than 2 hours. But even up

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to 9 open slots DLB never took longer than 100 seconds. Non-empty slots in this test were crossed out.

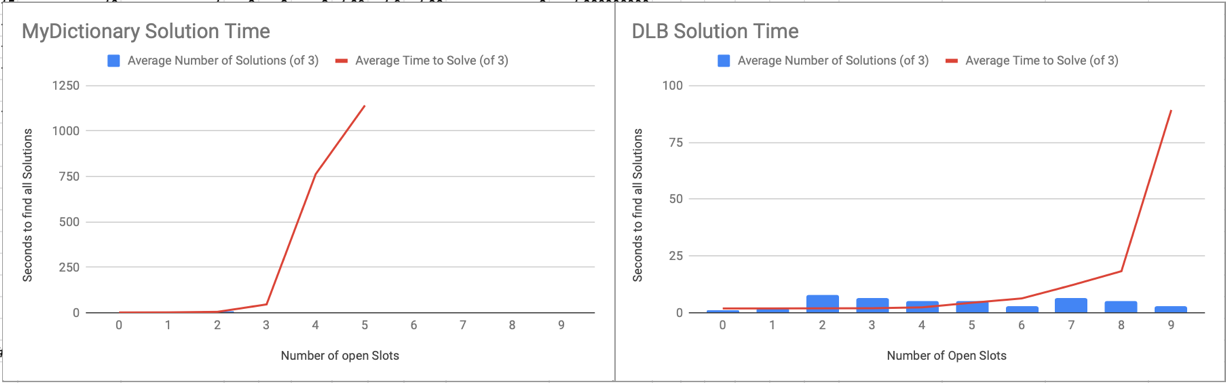
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I also ran tests with randomly generated board with preset letters but most tests found no solutions.

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Since most of those found no solutions and took ~ 2 seconds each I decided not to include them.

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