CSE410 aka CSE306
Software Quality

Dr. Carl Alphonce
alphonce@buffalo.edu
343 Davis Hall

http://www.cse.buffalo.edu/faculty/alphonce/SP17/CSE410
https://piazza.com/class/iybn33z3aro2p

Ruhan Sa
ruhansa@buffalo.edu
Grading status

Grading Completed
LEX01
LEX02
LEX03
PRE

Grading In Progress
EXP1
(almost done)

Grading On Deck
LEX04
LEX05
LEX06

Not yet submitted:
Coming Up
LEX07
EXP2
REMINDER

Your rubric grades for PRE and EXP1 are expected to be low.

We show you the rubric grade so you can determine what you need to work on.

As long as you completed these assignments with a good faith attempt, you will score full points towards your course grade.
Advice

- Study rubric used for PRE and EXP1
- Work to score 'PROFICIENT' on all items in preparation for Lab Practical Exam
Jive, part I

- sophisticated visualization of memory (Object Diagram)
- forward and backward execution
- effective visualization of multithreaded execution (Sequence Diagram)
Jive, part II

- Querying over complete execution history
Execution queries

- Choose 'Search' → 'Search...' from the menus
- Click the 'JIVE Search' tab
- Select 'Variable Changed' option, and fill in relevant text fields before clicking 'Search'. 
Execution queries

For example:
### Execution queries

- Search results

<table>
<thead>
<tr>
<th>Thread</th>
<th>Number</th>
<th>Event</th>
<th>Source</th>
<th>Context</th>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>main</td>
<td>365</td>
<td>Field Write</td>
<td>code/Account.java:25</td>
<td>code.Account:1</td>
<td>_balance</td>
<td>60</td>
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Execution queries

- Search results

Double-click on a line to jump to that point in the execution. From there you can forward and backward step through execution to see what led to this program state.
Live Demo & Exercise

- Download code from course website: click on "JAR file" button on today's date (Apr 04) on website.

- For demo, make sure the main method is:

  ```java
  public static void main(String[] args) {
      demo();
      // exercise();
  }
  ```

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  ```java
  public static void main(String[] args) {
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  }
  ```
Exercise instructions

- Debug the exercise code using Jive. Let the code run to completion.

- Answer the question: did something go wrong during execution?

- Use Jive to investigate the program execution to understand WHY there's a problem.

- Fix all the bugs.