EECS2030 (Section F) Fall 2022 Guide to Written Test 3

When: 16:20 – 16:50, Tuesday, November 29

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- You must take the written test in-person: any remote attempt will be marked zero automatically.
- This written test is strictly individual: identified collaborations will be reported to Lassonde for a breach of academic honesty.
- You are given 30 minutes to complete the submission. The time limit is strict.
- This written test accounts for 6% of your course grade.
- Unlike the labs (and the later programming tests), there will be <u>no</u> starter project for you to download and import.
- All questions will be answered on the Section F eClass site.
- You will be **solely** responsible for any **loss of time or marks** due to any of the following failing:
 - You have a working EECS account to login into a WSC lab machine.
 - You have a working PPY account to login into the eClass site (subject to Duo Mobile verification).

1 Rules

- Upon your arrival, please wait **outside** WSC 106/108.
 - The test will take place only in these two rooms.
 - Once the rooms are set up for the test, you will be allowed for entry ($\approx 16:15$).
- You may **only** bring to your seat:
 - Stationary (e.g., pen, pencil, eraser)
 - Sketch paper (blank on both sides).

 You will be asked to return the sketch paper at the end of the test.
 - Water bottle
 - Mobile device (for Duo Mobile verification only)

 During the test, always put the device face-down.
- All other personal belongings should be placed in front of the lab room.

- As soon as you are seated, login into a machine (using your EECS account), and then use a web browser (e.g., Firefox) to login into the Section F eClass site (using your PPY account).
 - First complete the quiz on *academic integrity* (≈ 1 minute).
 - The written test will be *opened* for submission at **16:20 EST**.
 - This is a **closed-book** test: use of any internet resources or notes is forbidden.
 - You are **forbidden** to use any programming IDE (e.g., Eclipse) during the test.
 - The written test will be *closed* for submission at **16:50 EST**.
- In principle, there will be <u>no</u> questions allowed during the test.
 - \bullet TAs will $\underline{\mathbf{not}}$ answer questions.
 - If really necessary, the instructor will respond to your question, but you may just be advised to read the question(s) again more carefully.

2 Format

- Most ($\geq 70\%$) of the questions will be multiple-choice questions. For examples:
 - A true or false question
 - A question with a **single** correct answer
 - A question with multiple correct answers

e.g., Say you are given 5 answers for the question: 2 of them are correct (and 3 of them are incorrect). Accordingly, for each <u>correct</u> answer you choose will receive a credit of $\frac{100\%}{2} = 50\%$, whereas for each <u>incorrect</u> answer you choose will receive a penalty of $\frac{-100\%}{3} = -33.3\%$.

Say you chose one <u>correct</u> answer and one <u>incorrect</u> answer, then you would receive 50% + (-33.3%) = 16.7% of the full marks. Also, the minimum mark you can receive is 0 (e.g., when you chose one correct answer and two incorrect answers).

This mechanism is to ensure that one cannot just receive full marks by simply choosing all answers.

- There might be written questions requiring you to, e.g.,:
 - Write a fragment of Java code
 - Explain how a given fragment of Java code works at runtime
 - Explain why a given fragment of Java code works

3 Coverage for the Test

As confirmed earlier (https://eclass.yorku.ca/mod/forum/discuss.php?d=1152178):

- You need <u>not</u> study Lab3 or Lab4 for the test.
- The concepts about Github and terminal commands are **not** covered in the test.
- All materials (slides, source codes) covered in the following two lectures:
 - Call by Value, Aggregation, Composition
 - Inheritance

4 Study Tips for the Test

- The test is meant to <u>test your understanding</u> of the taught concepts (which is different from a programming test in which you are expected to write Java programs with no syntax or type errors).
- Go through the slides and annotated iPad notes to review the concepts and examples. Re-watch parts
 of the lecture/tutorial videos if necessary.
- Pay special attention to the logic explained on *tracing Java code* (e.g., use of a boolean variable to control the entrance into and exit from a loop, visualizing object creations and method calls).
- Given a piece of Java code, you are expected to judge:
 - If it does <u>not</u> compiler, then what **syntax errors** or **type errors**?
 - If it compiles:
 - Will an exception occur (e.g., IndexOutOfBoundsException, NullPointerException)?
 - If no exception will occur at <u>runtime</u>, then what **console output** will it produce? Are there any **logical errors** (i.e., the output is not as expected)?

5 Example Test

 An example test has been made available on the Section F eClass site (under the Practice Written Tests section). You can attempt this test for as many times as you wish.

This example test will be **closed** for submissions shortly before the actual test starts.

- It is important to note that:
 - These practice questions are meant for familiarizing yourself with the <u>format</u> and <u>workflow</u> of the test and covering <u>only</u> some of the topics required by the actual test: you are expected to study <u>all</u> materials as listed in Section 4.
 - The level of difficulty of the actual test may be **higher**.