EECS2011 (Section X) Winter 2023
Guide to Written Test 1
When: 10:05 – 10:35, Monday, February 6
Where: William Small Centre (WSC) 106/108

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Last Updated: January 29, 2023

- You **must** take the written test **in-person**: any remote attempt will be marked zero automatically.
- All questions will be answered on the Section X 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).

  You are expected to have verified that you are able to complete the EECS and PPY logins prior to the test. Just find a time gap in WSC and visit there to try your logins.
- 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 10% of your course grade.
- Unlike the assignments (and the later programming tests), there will be **no** starter project for you to download and import.

1 Rules

- Upon your arrival, please wait **outside** WSC 106/108 (D4/15 on the Keele Campus Map).
  - 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 ($\approx$ 10:00).
- You may **only** bring to your seat:
  - **A valid photo ID** (e.g., YU card, driver license, health card, passport)
    Without a valid photo ID upon checks, you will be denied to continue with the test.
  - 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 X eClass site (using your PPY account).

  - First complete the quiz on ***academic integrity*** ($\approx$ 1 minute).
  - The written test will be ***opened*** for submission at **10:05 AM**.
  - 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 **10:35 AM**.

– In principle, there will be **no** questions allowed during the test.

  - TAs will **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 correct answer you choose will receive a credit of $\frac{100\%}{2} = 50\%$, whereas for each incorrect answer you choose will receive a penalty of $\frac{-100\%}{3} = -33.3\%$.

    Say you chose one correct answer and one incorrect 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

– You need **not** study Assignment 1 for the test.

– All materials covered in these lectures:

  - Background: Recursion Basics
  - Background: Call by Value
  - Recursion (Part 1) [Link]
  - Asymptotic Analysis [Link]
  - Arrays vs. Linked Lists [Link]

    For this lecture, only started on Monday, January 30, you only need to study what's covered in that class.

4 Study Tips for the Test

- The test is meant to **test your understanding** 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).

5 Example Test

- An example test will be made available on the Section X eClass site (under the `Written Tests` section) **by the end of Tuesday, January 31**. You can attempt this test for as many times as you wish.

  This example test will be **closed** for submissions a few hours before the actual test starts.
- It is important to note that:
  - These practice questions are meant for familiarizing yourself with the **format** and **workflow** of the test and covering **only** some of the topics required by the actual test: you are expected to study **all** materials as listed in Section 4.
  - The level of difficulty of the actual test may be **higher**.