

Announcements

17/May/2019

Example exams

We just shared the 2018 midterm, exam, and resit exams, as examples. See Content -> Example exams. Some notes:

- We do not repeat questions from one year to another. Make sure you learn the techniques you need to solve the exercises rather than memorising the answers.
- We share the original exams as given to students. Questions that were later cancelled are marked the answer txt file. You should not study these questions.
- Do not use older versions (or versions not shared by us) of the exam, as they might contain questions that were cancelled (and are not clearly indicated).

Grading schema (exam)

- Final grade = $\frac{C - \frac{W}{3}}{4}$
- C = number of correct answers
- W = number of wrong answers
- Last year = -0.5 each wrong question.
 - In practice, 0.4 + 2 or 3 free mistakes.

3.2.4 Guess correction and cut-off scores for closed-ended questions

When calculating the grade for MCQs, you are advised to adjust the grade to compensate for guessing. This is called 'guessing correction'. Statistically speaking, students who are unfamiliar with the course content can score a percentage of correct answers that is inversely related to the number of answer options.

When compared to previous year's formula

Correct	Wrong	old formula	new formula
1	39	-9.5	-3.0
2	38	-9	-2.7
3	37	-8.5	-2.3
4	36	-8	-2.0
5	35	-7.5	-1.7
6	34	-7	-1.3
7	33	-6.5	-1.0
8	32	-6	-0.7
9	31	-5.5	-0.3
10	30	-5	0.0
11	29	-4.5	0.3
12	28	-4	0.7
13	27	-3.5	1.0
14	26	-3	1.3
15	25	-2.5	1.7
16	24	-2	2.0
17	23	-1.5	2.3
18	22	-1	2.7
19	21	-0.5	3.0
20	20	0	3.3

21	19	0.5	3.7
22	18	1	4.0
23	17	1.5	4.3
24	16	2	4.7
25	15	2.5	5.0
26	14	3	5.3
27	13	3.5	5.7
28	12	4	6.0
29	11	4.5	6.3
30	10	5	6.7
31	9	5.5	7.0
32	8	6	7.3
33	7	6.5	7.7
34	6	7	8.0
35	5	7.5	8.3
36	4	8	8.7
37	3	8.5	9.0
38	2	9	9.3
39	1	9.5	9.7
40	0	10	10.0

You have the option to not answer

- Final grade = $\frac{C - \frac{W}{3}}{4}$, where W = number of wrong questions
- If you do not answer the question, you are not “punished” by the guessing correction.
- Statistically speaking:
 - If you do not have any knowledge, it’s better to leave it empty.
 - If you have partial knowledge, guessing is better.
 - But remember that this is on the long run...

Grading schema (peer review)

- Roughly 10% of groups did not deliver the peer review.
- OLD Labwork grade: $(P1 + P2 + P3) / 3$
- NEW Labwork grade: $\min[(P1 + P2 + P3) / 3] + DR/3 - WR/2$, where
 - DR = number of (good quality) self and peer reviews you deliver.
 - WR = number of self reviews with low quality or not delivered.
 - Max grade: 10.
- In other words:
 - 1 extra point in the labwork if you deliver the review (good news!)
 - 1.5 points less if you don't deliver them.
- Part 0 will not count. So, you can start fresh.

Question #33

Which of the following statements about code coverage is incorrect?

- A. 100% MC/DC coverage implies 100% decision coverage.
- B. 100% statement coverage implies 100% line coverage.
- C. 100% branch coverage implies 100% statement coverage.
- D. 100% condition coverage implies 100% branch coverage.

Question #33

Which of the following statements about code coverage is incorrect?

- A. 100% MC/DC coverage implies 100% decision coverage.
- B. 100% statement coverage implies 100% line coverage.
- C. 100% branch coverage implies 100% statement coverage.
- D. 100% condition coverage implies 100% branch coverage.**

100% condition coverage does not imply in 100% branch coverage.

- *For more detailed explanation, See Section 12.4 from Software Testing and Analysis: Process, Principles and Techniques, by Pezzè and Young.*
- *We updated our slides to better explain this point.*

Midterm content

- All the topics we discussed so far, including today's lecture.
- How to study?
 - ISQTB, chapters that we mention on the slides and on the website.
 - Our slides.
- Focus on:
 - The different testing techniques we taught (specification-based, boundary testing, structural testing, model- and state-based testing)
 - The principles of testing (e.g., pesticide paradox) and how they affect your decisions as a tester
 - Pragmatic software testing (advantages and disadvantages of mocks, TDD, design for testability)

Labwork deadline

- We postponed the deadline to **next Monday**
 - Do not forget to deliver a zip with the report + source code.
 - Work on your self grading + peer grading.
- Part II comes out today!
 - More testing!
 - Mocks
 - Security analysis (JPacman does have a security issue!)

Good luck in the midterm!