Institut for Matematik og Datalogi
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Introduction to Programming
8th Weekly Note (E17, Week 44)

2nd Project Qualification Assessment

The second out of three project qualification assessments will take place at the following times in the IMADA computer lab:

- Tuesday, October 31, 12:15-14:00
- Wednesday, November 1, 10:15-12:00
- Wednesday, November 1, 12:15-14:00
- Wednesday, November 1, 14:15-16:00
- Friday, November 3, 12:15-14:00

There will be at least 90 minutes of time to solve the tasks. The corresponding TA will be there to help you (don't be shy to ask) and to monitor the proceedings.

It will be possible to obtain 100 + 50 points (bonus task). Note that in total, you need 150 points in all three assessments together. Once you have gotten 150 points, e.g. by passing the second assessment including the bonus task, you do not need to participate in further assessments.

Unless you are unavailable or have other reasons, please go to t he assessment corresponding to your section in order to avoid everyone showing up at the same time. That said, in theory you can participate at any, and even at multiple, of the five times given above.

The topic will be basic Python programming. Prepare using the obligatory and supplementary exercises from the course book.

Reading for Week 44

- **Obligatory:** Sections 2.4.1, 2.4.6, 3.3, 3.7, 4.5, 4.7, 5.1, 5.2.1–5.2.2, 5.3, 5.5, 5.6, and 5.7.1–5.7.2 of "Introduction to Programming Using Java"
- *Supplementary:* Chapters 3, 10 and 11 of "Think Java"

Lecture: Monday, October 30, 12-14 (U140)

In this lecture we will learn the basics of object-oriented programming in Java. I.e., we will learn about for-each loops, classes, objects, methods, and constructors.

Lecture: Thursday, November 2, 14-16 (U140)

We continue with more advanced object-oriented features such as inheritance, abstract classes, interfaces, and anonymous classes.

Labs: see detailed schedule on course home page

- **Obligatory:** Exercises 3.2 from Chapter 3. Exercise 4.1 from Chapter 4.
- *Supplementary:* Exercises 3.1 and 3.5 (using Scanner) from Chapter 3. Exercises 4.2–4.4 from Chapter 4.
- Challenge: Implement an Android app solving Exercises 3.8–3.9.

Study groups

Subdivide into two groups. Each group creates 2-3 Java programming task on a similar level as the ones from the two project qualification assessments for Python. Use no more than 15 minutes for this part.

Then exchange tasks and try to solve as many as possible of the tasks posed by the other group. You can subdivide your group in order to make better progress, but make sure that everyone understands the final solution. This part ends 15 minutes before the end of the study group.

In the final part, the two groups presents their solutions to each other, evaluating whether they are solving the tasks correctly.