

Summarising Data

Name: Programming

Course Code: DD1337

Examination Components:

- HEM1 5.5 HP
- LAB1 1.5 HP

Number of Students: 226

Performance Rate: 92%

Teacher Activities:

- Lecture (2hr)
- Laboration (2hr)
- Övningar (2hr)

Teachers: Alexander Baltatzis

Examiners: Richard Glassey

Summary of Course Evaluation

There was a disappointingly low engagement rate with the LEQ survey (22/226 or 9.73%). As such, the evaluation will treat this as anecdotal and combine it with the impressions from the teaching team (teachers and teaching assistants). As in previous years the course goes well. Despite a change in the lead teacher (due to sabbatical) the course ran smoothly. Students were divided into their small groups based on self-evaluation of level. One advantage of this change was that oversight issues about where TAs managed additional student tasks (typically on GitHub.com rather than KTH GitHub) came to light as a missed opportunity for students out with that group to try other tasks.

In terms of student open comments there is much consistency with previous years. Students remark that they appreciate the group division and ability to find a group that suits their level of performance. They also appreciate the weekly flow of tasks and lack of final summative assessment. The efforts of TAs are as ever noted as being appreciated, however there were some incidents of slow delivery of feedback from weekly tasks. Some students questioned the value of the lectures and this was perhaps reflected in the lecture attendance being much lower than previous years. However, it should be noted that there is the option of live, streamed and recorded lectures, so every effort to make the content available in a format that works best for students should be taken into consideration with regards to the impressions of the live lecture attendance. Several students aligned on the same observation that there were some unexpected deviations between the online reading material and the current week's task -

unfortunately this is so as previous changes and improvements to the balance of tasks has shifted some topics around and the reading material has not been changed in the same way. Overall there were comments that the course was both interesting and managed to not become overly stressful.

Perhaps as a change of the times, there was a new comment in the feedback that has not been seen before. When recommending future students what to do to prepare and take the course, one student recommended both Chat GPT and watching alternative videos on Youtube.

Analysis

Changes from previous course analysis

The biggest change in the course came about due to the sabbatical of the course responsible. In anticipation of this, major changes to the delivery and content of the course were held steady to facilitate a smooth transition. The new course responsible did make changes to the flow of topics in the lecture series, however the assessments remained the same as previous years.

Summary of teacher's views

DD1337 has matured into a solid and stable course that welcomes all levels of beginners in computer science. As such, radical change does not seem to be motivated internally due to course or content, but rather change is more now motivated by external changes with advances such as generative AI creating waves of disruption. However, the teachers, teaching assistants and students are all invested in continuing the success of the course and adapting it to better serve future students.

Proposal for potential changes

1. Generative AI presents new opportunities and threats. Introductory programming is a topic that must adapt to both. In particular there will be a shift in narrative during the lectures to include demonstration of generative AI as a tool, both the positive and negative for learners.
2. The Question-based learning material has served its purpose well, however there is an opportunity to move forward into pure question-based learning. As noted, students had detected some drift between the QBL material and the present task, so this presents a chance to correct this alignment.
3. Already summer work has begun to investigate the use of generative AI in personalizing the tasks that we offer students. For many years the tasks have been iteratively

improved and are well regards, however efforts will be made at a small scale, single group level, to try out what happens when tasks are generated with input from students.

4. TAs choosing to manage group tasks elsewhere will be required to share alternative tasks with all students in case of interest or summer activity.
5. A new strategy is needed for the low engagement with LEQ.