

# StackOverflow in education

## A cross-cohort gamified Q&A platform

S. Hugtenburg,\*\* F. Mulder\*\*

\*S.Hugtenburg@tudelft.nl, F.Mulder@tudelft.nl, \*\*Computer Science & Engineering Teaching Team, TU Delft

### Introduction

With exponential growth in student numbers, the close-knit community of students and staff at the Computer Science department at TU Delft is threatened to become undone. Students ask more questions, but are not inclined to answer others. We have proposed the use of a gamified knowledge-sharing platform to (1) encourage and enhance knowledge sharing among peers, (2) make students feel welcome and at home in the programme, and (3) decrease the burden on staff. Using the StackOverflow platform we are building a knowledge base that spans multiple cohorts and years. By encouraging and motivating students to answer questions from their peers, we aim to improve the learning experience and sense of belonging of our students.

Over a period of two years we are first running a pilot of this platform in our bach-

elor courses with over 1000 students taking part, before extending it to include the computer science master courses and moving the student count to over 2000 students. Through regular evaluation of both student satisfaction and quality of interaction, we can monitor and adjust the role this interaction takes in our educational ecosystem. Assuming success of this pilot, we will investigate the possibility of faculty-wide or even institution-wide adoption of this platform.

### So far?

Having obtained funds through the SURF open and online education grants, we have been piloting the platform since September 1st 2020. So far this pilot has focused on first-year students, but as of next Monday we will also include second-year students in this pilot. Students can ask (and answer!) questions about any of the courses they are cur-

rently taking as well about computer science in general (the field and the programme).

We currently have 641 activated user accounts out of which 211 actively participated and 322 passively participated since the start. This is a much higher engagement rate than we have seen on Brightspace fora in the past and although an in-depth analysis is on the calendar for later this year, we are very pleased with the initial results.

As the image shows, the number of questions, answers and median answer time are also very promising! Especially when you consider that over the majority of these answers are from students and not staff (or TAs)!

### What's next?

In Q2 we will expand the pilot to include second-year students, and we will monitor cross-cohort interactions. Will these second-year students indeed help out our first-year

students, or will they both operate independently within the system?

### Special thanks

- Thanks to Susanne van Aardenne for her invaluable help in both writing the proposal and presenting it at SURF.
- Thanks to our amazing teaching assistants who have been helping us moderate the platform since its adoption.

