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Versnellingsplan Onderwijsinnovatie met ICT

Slim begeleiden bij grote groepen studenten

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Computer Science & Engineering Teaching Team, EEMCS Delft University of Technology

April 8th, 2022



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- Stefan started in 2017, after 6 years of being a student there himself.
- In 2011: 119 students started.
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- Now we have 500 starting every year, which is a fun challenge :D

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- The model of a single lecturer running the course no longer works.
- We now have a team of 2 to 4 lecturers, with 5 to 35(!) student/teaching assistants.

Two challenges to focus on today

- How do you organise practical sessions for such groups?
- How do you handle questions outside of the contact hours for such groups?

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- Students also have questions outside of the labs...
- And we tell them to ask them on a course forum,
- But very few students answer these questions!
- Yet on one of the most famous platforms for CS, this happens all the time!
- stackoverflow.com



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 - Priviliges that are unlocked as you gather more reputation.
 - Review queues to help with moderation, leaderboards, tag-based searching, "did you mean to ask: X", linked questions, and a whole bunch more!

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 - Embedding this platform in *all* bachelor courses, stimulating cross-cohort Q&A.
 - Ensuring knowledge is not lost over the years, where students have to rebuild it every iteration!
 - Building a community of CS students.
- The funding?
 - A SURF grant from the "Stimuleringsregeling open en online onderwijs" (theme: "Interaction and feedback")



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- After a year: 1710 users, of which 93 are staff.

The introduction

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- As well as a video on how the platform works, walking you through the process of asking and answering a question.
- Overall students and staff seem to have adopted to the platform fairly quickly (note that our first years had not adopted to any others yet anyway :)).

What does it look like?



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Students answering!

🔤 No premises in an	argument
Asked 9 months ago Active 9 months ago	Viewed 130 times
what happen to an argument w	hen is has no premises? When is this valid?
4. People asked Add people	Tags cret300 argument-validation Edit
Share Edit Follow Close Dalete	acked Sep 4 '20 at 17'41

Students answering!



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Students sharing!

Assembly compilation bash script

This is not a question but I felt like sharing this as it might make some people's life easier :)

If you've dug around the lab manual you might know that in order to compile an assembly file you need to use gcc -no-pic -o named/yourprogram named/yoursource.s. Now if you are like me then that looks like too much typing which is why I wrote a small bash script compile.sh with the following contents:

#1/bin/bash

gcc -no-pie -o \$1 \$1.5

Before running this you must run cheod +x compile.sh in order to make the script executable.

Finally instead of having to run gcc -no-pie -a nameofyourprogram nameofyoursource.s everytime you now only need to run .../compile nameofyourprogram which will also run your program once its done.

Not sure if this will be removed since it's not a question but here goes nothing

p==1400

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Looks good **______** thanks for sharing! How about we turn this into the Question: "Is there an easier way to compile my assembly?" And you answer it yourself with the script you came up with? :D – <u>Stefan Hugtenburg</u> Sep 1 '20 at 9:14

Post By: One of our top first year contributors

Image By: Stefan Hugtenburg

Students sharing!



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Some stats

In the academic year 2020-2021:

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 - 867 (30.5%) from staff
 - 1962 (69.5%) from students
- 10% still unanswered (most of them closed for being duplicate, off-topic, or answered in comments instead of an answer).
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- 7% marked as "20-21" (indicated the answer is not relevant beyond this year)
- Median time to answer is less than 2 hours since the start (though it is around 3 hours now).



Effects vary from year to year

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Distribution of answer origin



- Our third year had mostly new courses this year (and all electives as well!), so here staff answered more than students.
- Note that we have not (yet) accounted for TAs here.

What happened since then?

- We see some reuse of knowledge gathered last year (though a detailed analysis still needs to be done).
- We've introduced it also in our master programme and are now at about 2800 students in the system.
- Now looking at adoption for next year, when the SURF funding will have ended.

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