# Scaleable Computing

## More on practical assignments

CS7NS1/CS4400
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https://github.com/sftcd/cs7ns1/
Note: PRs for repo are welcome!

# Contents

- Course numbers
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# Course Numbers (20180927)

- TCD student DB (SITS): 149 students
  - CS7NS1: 95 Students
  - CS4400: 54 Students
- No longer doing module, replied to my 20180925 mail: 11
- Rosetta Hub:
  - Registrations uploaded: 175
  - Accounts created: 137
  - Registrations never touched: 37
  - AWS Budget >= $100: 87
  - Budget consumed: 1@$19.97, 5@$3-$5, 8@$1-£3, rest <$1
  - Problems notified to me (and then to RH/AWS): ~13

# Submitty Numbers (20180926)

- Submitty:
  - “Live” students: 161
- Assignment#2: 126 all 15/15
- Practical#3: 24
  - 21 1000/1000 – one zero, two in-between (which is fine)
    - Zero marks? Check formatting! Check marks it gives you! (few seconds delay)
  - Average: 677.67 / 1000 (68%)
  - Standard Deviation: 460.07
  - First 1000/1000 was <2 hours after assignment set – good job!

# Assignment#2

- This is really just a “Hello World” assignment
- It requires you to have setup your RH a/c and be able to spin up an instance in EC2
  - If you cannot or won’t do that you **will** have problems later
- **Remember**: this module is 100% coursework there is **only** the supplemental exam!

# AWS Credits

- Disclaimer: I don’t know how rosettahub and AWS are integrated
  - There do seem to be wrinkles
- You should be fine with $5 budget for this week
- We will want to sort your $100 out before by next week though
- Later today, I’ll be getting back in touch with RH and AWS to get try get this sorted out
  - If you find a self-service way to fix it – let me know!

# Practical#3

- Please don’t tell others the shortcut – you’re not helping them, you’d be harming them
  - Figuring out the shortcut yourself is a large part of the point of the assignment
- You’ll benefit in later assignments if you figure this out yourself
  - You’ll very likely suffer in later assignments if someone just tells you how to get 1000/1000
- There are zero “late” days allowed for submission
  - Because we need to move on to practical#4
- If you recover less thatn 1000 passwords then submit those!
  - Even if it’s just a few – it shows you’re trying
  - If many folks are trying but not getting 1000/1000 I may send a hint
    - That is not currently the case

# Practical#4

- Compared to practical#3: this'll be more of the same but with varying password kinds and varying hash algorithms
  - No single shortcut
- Still benchmarking the numbers to use, will have a 1 or 2 week deadline depending on benchmarking
- This practical could just about be done manually, but it'll be close to the limit of what's sensible manually
  - IOW – you'll want to write scripts/code
- You will likely want to use a GPU instance

# Linux/Scripts/Coding

- Some students seem to neverhave had the fun of playing with Linux/bash etc.,
  - How many?
- I’m happy to run through some material on that today if useful
  - https://down.dsg.cs.tcd.ie/cs2014/examples/shell/README.html
  - If so, suggest we take a 5/10 min break to let those who don’t want/need that depart at the end of this session then do that

# RH/AWS GPU instances

- Practical#4 description will include a HOWTO get started with GPUs
- **DO NOT LEAVE INSTANCES RUNNING!**
  - Your budget will be quickly consumed

# Practical#5: still a work-in-progress

- Teams of 4, randomly selected, from both cohorts, from the set of students who have submitted something to submitty by the date I run the team selection code
- Students who have not completed any submitty assignment successfully won’t be assigned to any team initially
- If you’ve never submitted any practical assignment, you’ll need to get in touch with me and explain why before you’ll be assigned to a team
  - => delay, confusion, less time to complete assignment
  - You’ll then end up in a team who apparently don’t do assignments very promptly which may not get you an optimal outcome
- This is a team assignment – work as a team, use the resources available together, figure out what skills you each have
  - Suggest once team assigned, you arrange to meet and make a plan

# Actions **NEEDED**

- Complete assignment#2 on submitty
  - Requires you to have RH account setup
  - Even though deadline past, submissions are allowed up to 4 days late (you get <15 marks, but not interestingly less)
- Get your AWS budget sorted
  - You will likely need the $100 for practicals 4 and 5
- Do practical#3 on time
  - Submit what you have, whenever you get something
    - You can submit up to 100 times for practical#3

# Questions? Things to add?

- <your text here>