Scaleable Computing More on practical assignments

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https://github.com/sftcd/cs7ns1/

Note: PRs for repo are welcome!

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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 (20180927)

- 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>