Day 6: project focus and job interviews

After the schedule of site visits, students will move on from their learning stage into applying their skills for their projects. Python students work on projects while embedded students continue to build skills for the final challenge next week. The morning also involved practice job interviews with visiting sponsor mentors, described on the next page.

In the evening the NCSS programming competition was held which was lots of fun for all and put their logic to the test.

PYTHON GROUP
Each Python group will create a working social network as their project. To begin with, groups studied existing social sites, planned the structure of their own sites and divided up the different tasks they will work on during the development.

EMBEDDED GROUP
The embedded group learnt to make their robots dance today, programming music of their choice into their code and learning to use the light sensor to control the robot's response. The robot dance party was definitely a highlight of their day!

Programming showdown

Dinner in the Women's College was followed by the annual NCSS programming competition, which partners small groups of students with an industry mentor or tutor to compete against each other in answering a series of challenging problems about everything from logic puzzles to code standards.

Students assembled in the IT building and were arranged in groups ranging from Awesome to Zany (and a few interesting words in between), before getting started on the two hour challenge. We were amazed to see how rapidly teams got through the questions!

Team Quick lived up to their reputation, snatching up a speedy (and complete!) victory, followed by Prodigious and Brilliant with 12 points each. Congratulations to all teams and kudos to everyone who made the night so epic!

FROM THE EDITORS
Re: Photos and articles
Hi again! Thanks everyone for your comments regarding the newsletter, it's great to hear that you are enjoying reading it - and we're having fun making it too! We are looking for student-taken photos and student-written articles so please feel free to send us anything at all: ncssmedia@gmail.com
Thanks for your contributions!
STUDENT SPOTLIGHT

Name: Niel van der Westhuizen
Age: 16
School: Fraser Coast Anglican College (QLD)

What do you do?
I will be starting Year 12 this year, doing the equivalent of the HSC in Queensland. My subjects are a lot of maths, physics, music and possibly computing.

You play an instrument?
Yeah, I play the saxophone and also the piano. I’m considering taking music extension as well.

Why NCSS?
I’ve been to a lot of informatics camps, and heard the NCSS was pretty cool - and it is pretty cool!

Future plans?
After I finish high school I’m hoping to do computer science at UNSW - there is a large informatics community there.

Why informatics?
Informatics in general tends to be more about algorithms rather than projects, and I really enjoy that kind of computing. I’ve been in quite a few informatics olympiads and am hoping to compete globally this year!

Altium game strategy?
I noticed there was a large line of particles near the start, and also heard there were power-ups - I managed to find two of them!

NanoBoard plans:
It’s similar to the Arduino board, yes, but 9001x more complex. So I’m not entirely sure yet.

Best bit of NCSS so far?
Being able to meet and talk to IT industry people via the sponsors has been really great!

On Friday morning, representatives from various sponsor companies came to act as mentors for the NCSS students, interviewing them for a prospective “job”. The goal of this was to give the students valuable experience in what to expect when it comes to job interviews, and how to deal with the pressures involved in a more friendly environment.

We hung out on level 4 of SIT and watched the interviews taking place, as well as speaking to students as they came out of the interviews. Before the interviews, students were a bit intimidated by the prospect of an interview but excited about the chance to practice. Afterwards everyone was extremely positive about the outcome, saying it was a good experience that will help for future interviews and they got lots of good feedback!

“It was a really good experience, I got advice about what I was doing right and how to do better in future. They gave me tips about how to improve my resume as well! The hardest question was about a recent difficult choice that I had made - I couldn’t think of one. But hopefully I got the job!”
- Rochelle, NCSS student
VISITING MACQUARIE

Sarah Williams gives an opening speech introducing the company, her role and what they do.

Trisha Harding from Macquarie encouraged students and tutors to step out of their comfort zones and shake hands with the people next to them.

NCSS students visit Macquarie Group @ Shelley Street

Students took two buses into the city to the famous Shelley Street building of Macquarie Group for the first of the site visits on Thursday. The unique architecture of the building was admired by many students as they were led inside to one of the conference rooms.

An introduction to Macquarie Group and the importance of IT was given by Sarah Williams who has worked in the business for around twenty years. She emphasised that everything Macquarie does relies on IT and computing. This was followed by a talk on the building and philosophy of the environment by Trisha Harding, showing how Shelley Street is extremely different to traditional workplaces. The students were also shown how Macquarie Edge works in terms of components.

Students enjoyed morning tea with Macquarie representatives and were able to find out more about what Macquarie does and why IT is so important, as well as having tours of the building. This site visit certainly made a big impression on many students, some of who may have come to realise just how diverse an IT career can be!

TUTOR SPOTLIGHT

Name: Nicky Ringland
Age: 25
School: University of Sydney

What do you do?
I'm in my second year of doing PhD with James, working on integrated named entity structures.

Why NCSS?
Participating in NCSS is such an awesome opportunity, because it's taught and attended by passionate like-minded people. You'll find that most tutors either attended NCSS themselves or would have killed for the opportunity to do so! Tutoring is lots of fun and very rewarding.

Future plans?
I'm aiming to finish my PhD, and after that? Let's go with world domination, most likely via the interwebs!

You know German?
My grandparents knew six languages because of various circumstances (Romanian, German, Russian, English, Italian, French) and I picked up some German from my oma. I found it so fun and easy at school that I studied it and also studied German overseas.

German music helped?
Definitely! I listened to all kinds of German music, I love the clever wordplay of the lyrics. Listening to music helps with picking up accents!

Fave German phrase?
NCSS ist ja geil! (Guess where I studied!)
Yesterday's events in a nutshell and what to expect for today

It might have seemed that things would quiet down after the busy days of site visits, but the program has instead intensified. Although students returned to a more regular timetable with lectures and tutorials in the lab, they have quickly developed their skills and are moving on to more difficult challenges every day.

The mentor interviews in the morning provided a useful opportunity for students to practice their interview skills in a relaxed and constructive environment and most students gained much from the experience.

The programming competition was a great chance for the students to work together as a team and apply their knowledge, as well as working with an industry member or tutor to guide their approach to solving problems.

WHAT’S COMING UP NEXT?
Business continues as usual over the weekend with a similar timetable of lectures, tutorials and project work. The evening’s activity will be the crypto challenge, and from what we hear it should be quite entertaining!