CSC8110 Cloud Computing

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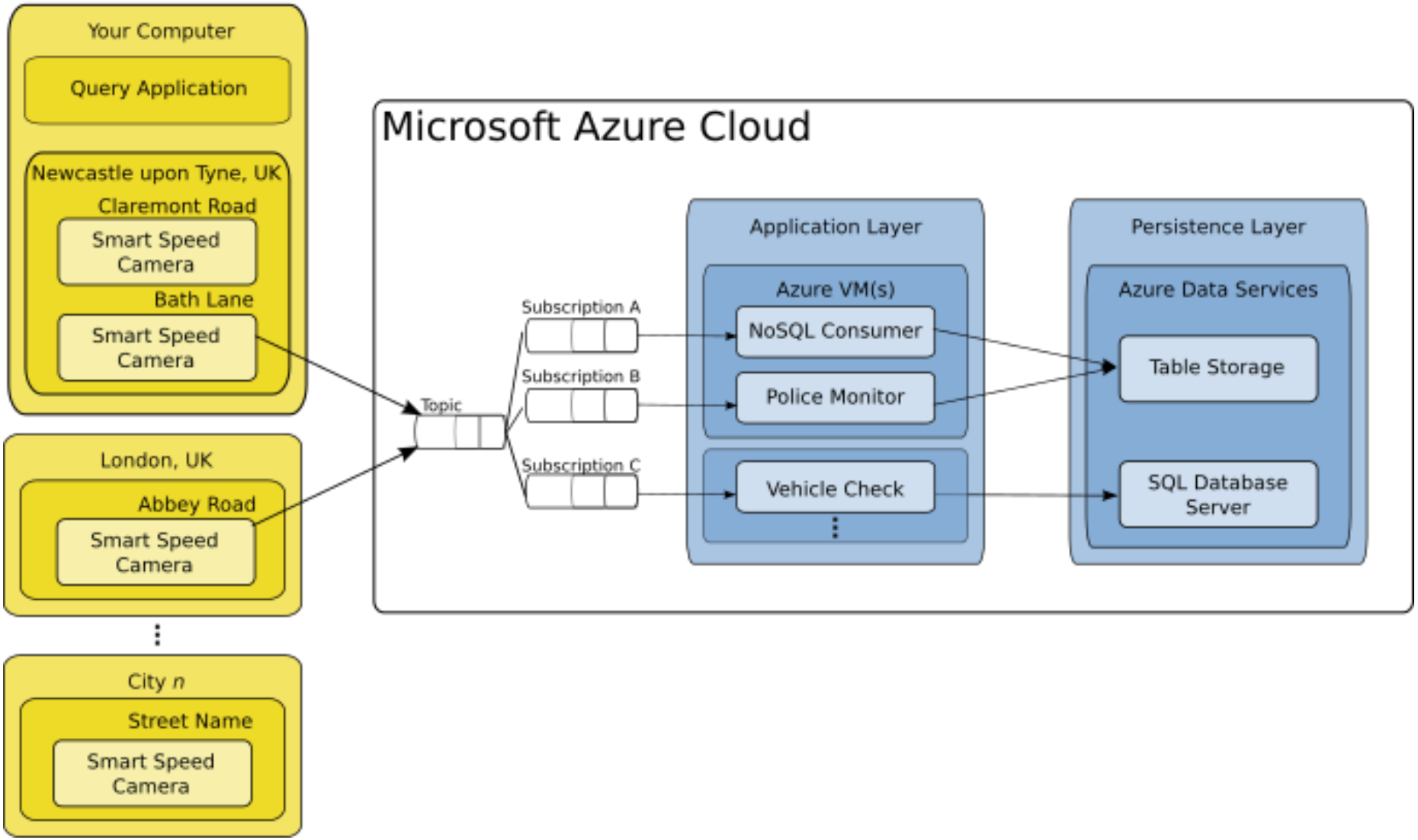
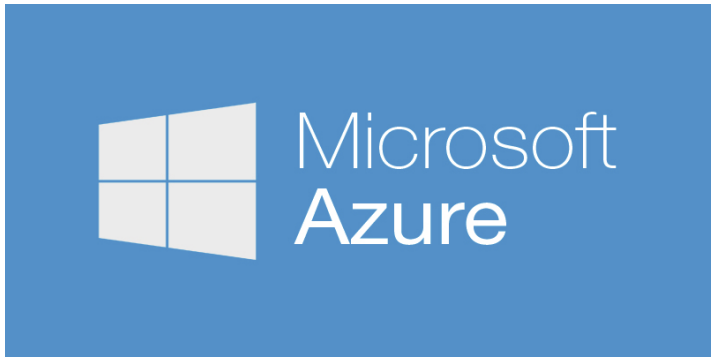
Coursework Outline

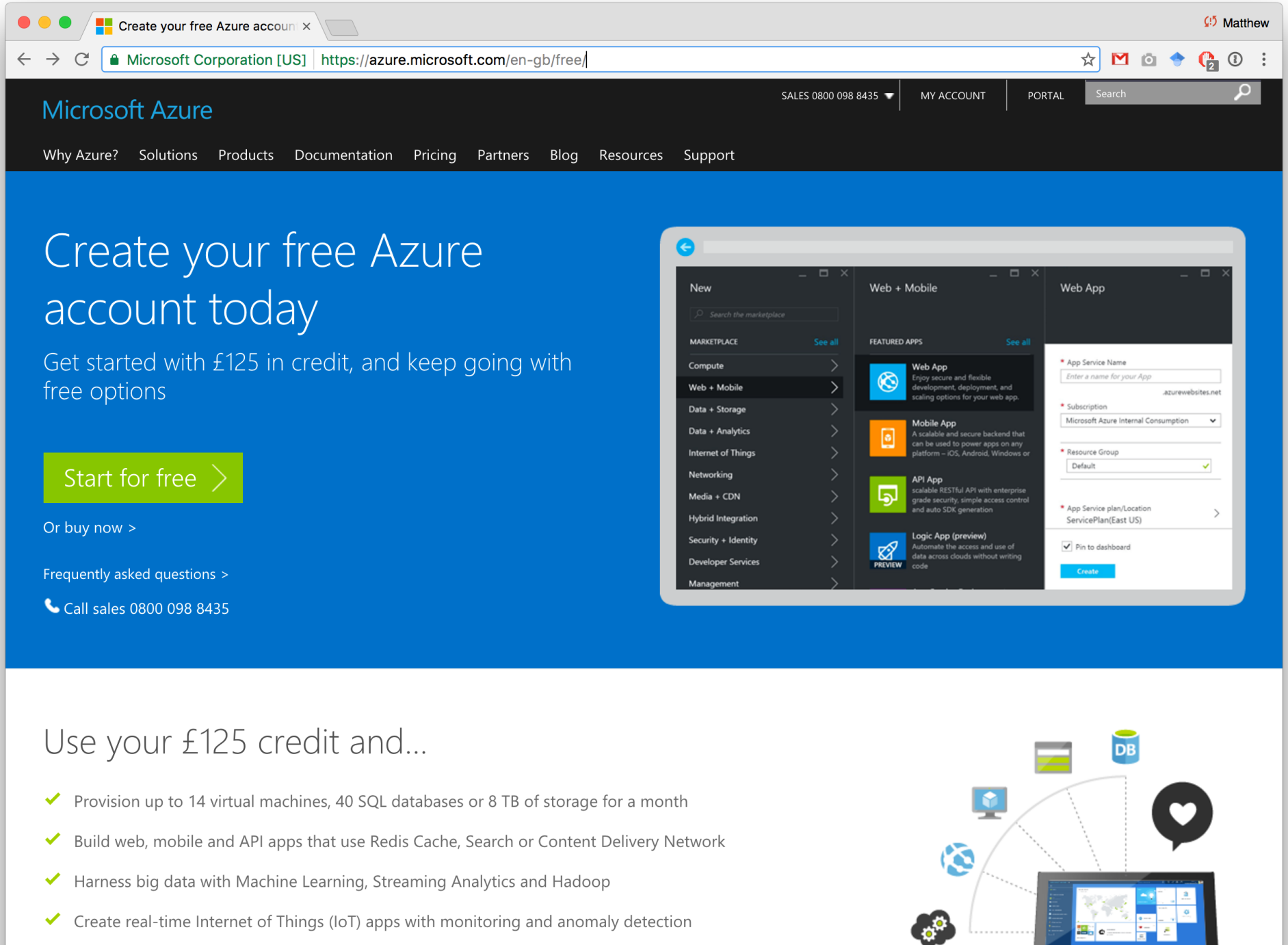
Image: http://www.roadtraffic-technology.com/contractor_images/pips-technology/2-MMB-Spike.jpg


Your Computer
Query Application
Newcastle upon Tyne, UK
Claremont Road
Smart Speed Camera
Bath Lane
Smart Speed Camera
London, UK
Abbey Road
Smart Speed Camera
City n
Street Name
Smart Speed Camera
Microsoft Azure Cloud
Topic
Subscription A
Subscription B
Subscription C
Application Layer
Azure VM(s)
NoSQL Consumer
Police Monitor
Vehicle Check
Persistence Layer
Azure Data Services
Table Storage
SQL Database Server

- Aims
  - To make appropriate use of a **variety of technologies** to build a traffic management application in the Microsoft **Azure** cloud.
  - To gain familiarity, and reflect on, the use of Cloud technologies to tackle a **real-world problem**.
- Objectives
  - **Programming, problem solving and system-design skills.**
  - To gain experience using Microsoft Azure and the Azure SDK.
  - To gain **practical experience** using a message brokering system in the Cloud.
  - To gain experience using Azure Table Store data stores in the Cloud.



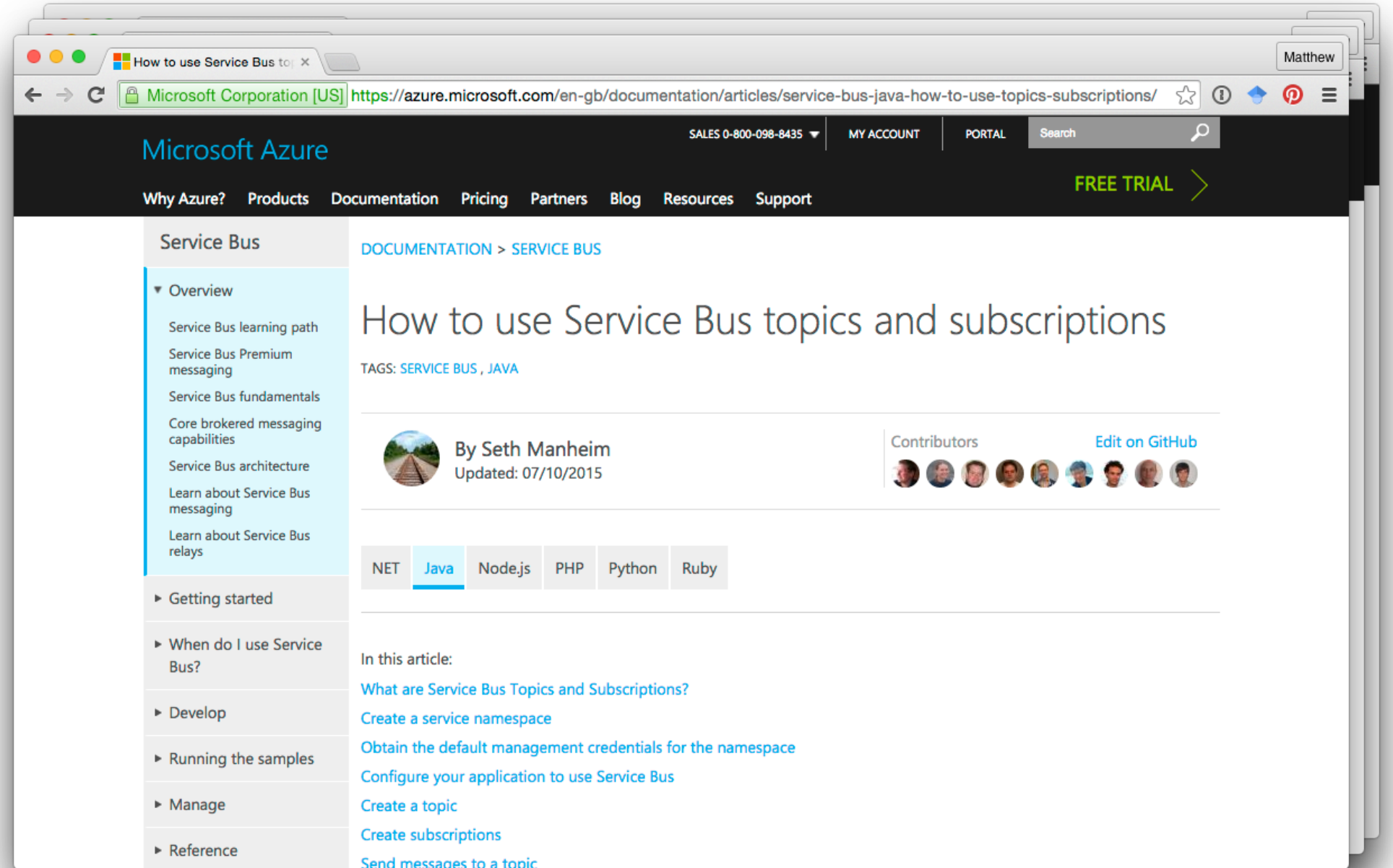
https://azure.microsoft.com/en-gb/free/



Programming languages and tools

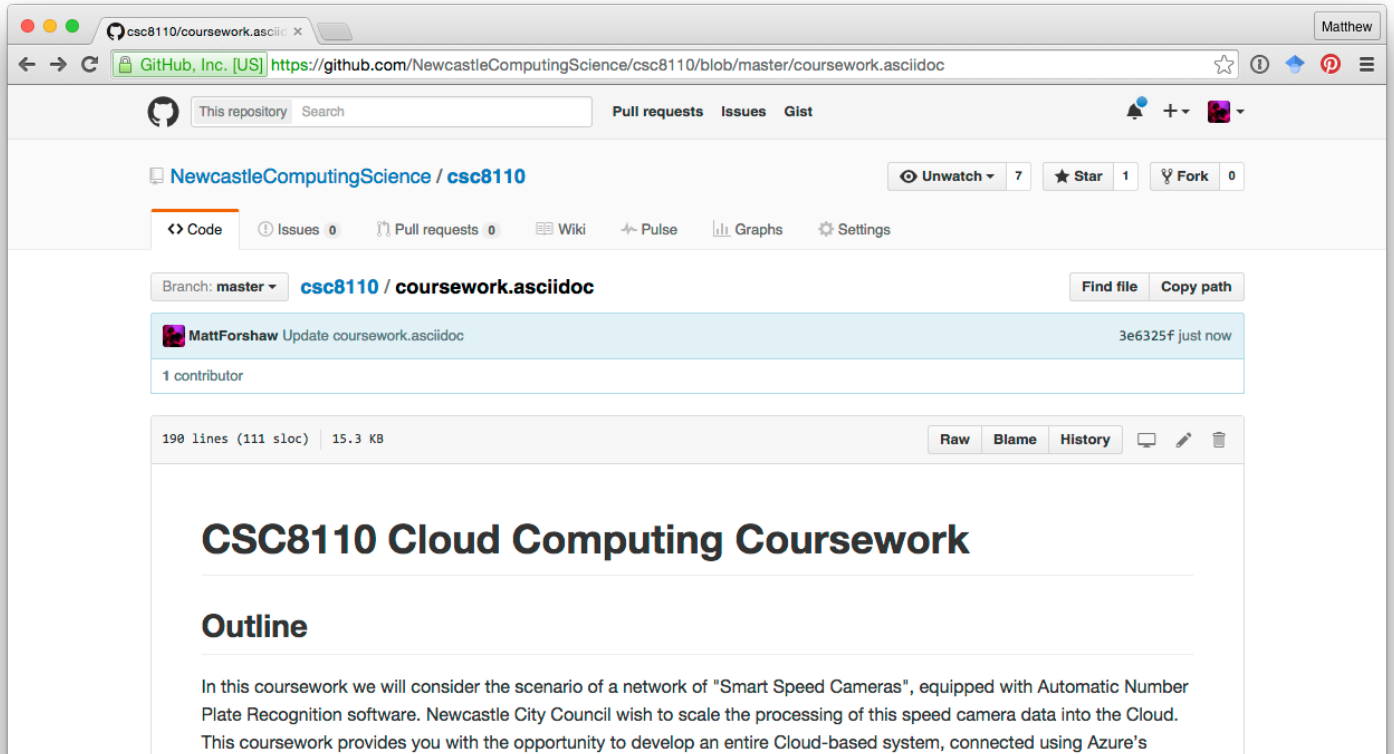
- We encourage you to make your own decision over the choice of programming languages and tools.
  - Is there an Azure SDK available for the programming language?
    - Java, Python, .NET, Node.js, PHP, Ruby, etc…
  - Which technologies are you most familiar and comfortable with using?
  - Will the demonstrators have the experience using these technologies to be able to help you?
  - Have these technologies been used on Azure before?
    - Blogs, Microsoft website, Stack Overflow?
- **If in doubt, check with a demonstrator!**

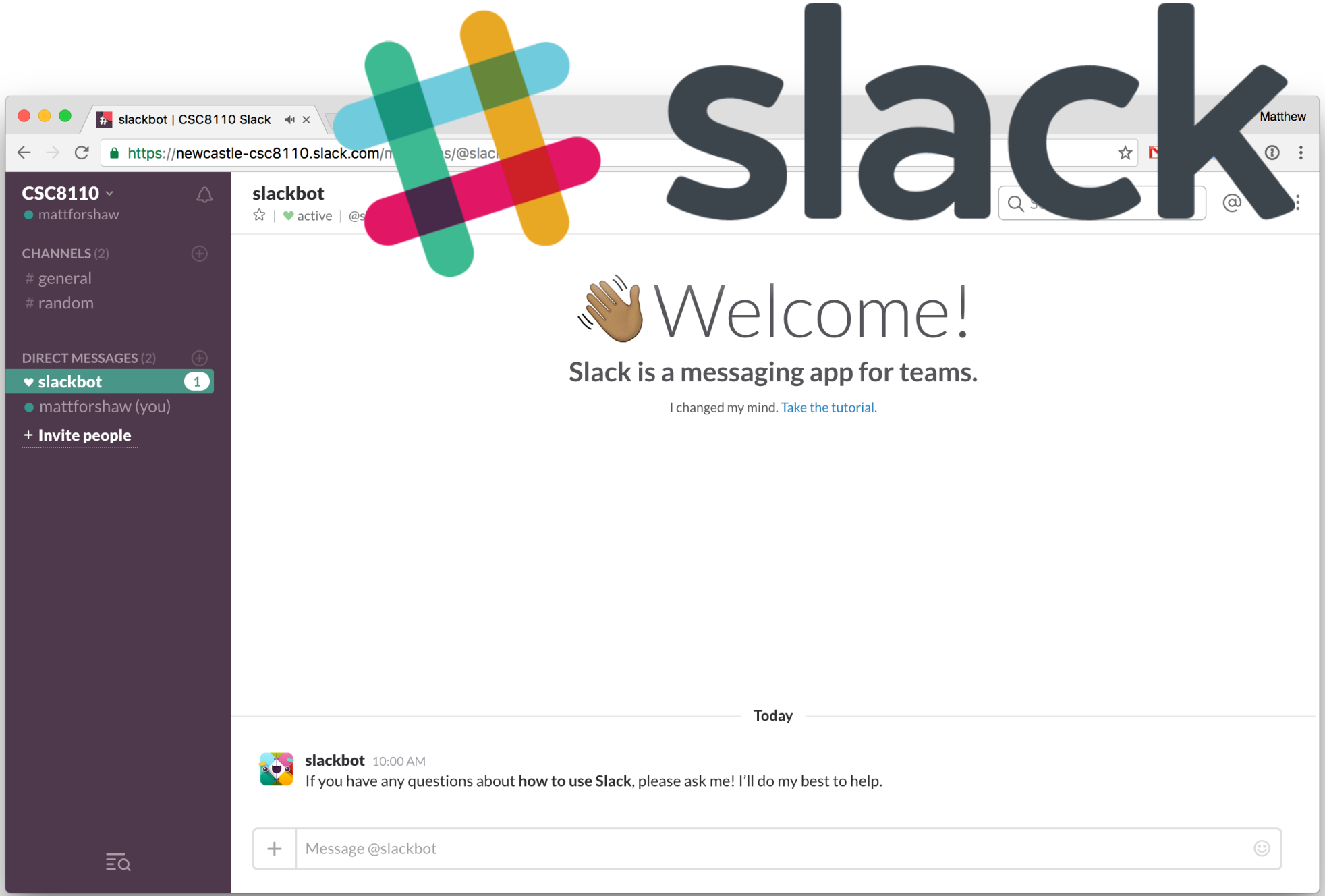
Practical Exercises



Coursework Materials

- All course materials are stored in a Github repository
  - http://github.com/NewcastleComputingScience/csc8110
- Check back regularly for additional content.
  - Frequently Asked Questions (FAQs)
  - Additional Resources





https://newcastle-csc8110.slack.com/

Practical Timetable

- Thursday 1st December, 4-5pm: Introduce coursework assignment / Practical

- Monday 5th December, 9-10am: Practical (Lecture 10-11am)

- Tuesday 6th December, 9-11am: Practical

- Tuesday 13th December, 9-11am: Practical ** (We may repurpose this slot as a lecture, but we will give you advanced notice if this is the case)*

- Wednesday 14th December, 9-11am: Practical

- Thursday 15th December, 9-11am: Practical

- Thursday 15th December, 4-6pm: Student Code Demonstrations/Chat

- Demonstrators: Matt Forshaw, Peter Michalák, Saleh Mohamed, Hugo Firth, Sami Alajrami, Yinhao (Frank) Li

Rooms?

Deadlines

- Completed assignments including all source code and your written report must be submitted electronically through NESS.
  - Thursday 15th December 2016 at 4:00pm
- Demonstrate your solution (compulsory)…
  - Thursday 15th December 2016 4:00pm-6:00pm
- This assignment is worth **30%** of your final mark for this module.

Any questions?

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