COMP2041/9044

First week!

Class Introductions

Let’s get to know everyone!

Short Introduction:

- Your name
- Degree
- Fun Fact

(There are alot of degrees that do this course)

Who attended the lecture?

Course Structure

(For Tutorials)

Week 1-5

- Regular expressions and filtering
- Shell programming (/usr/bin/dash)

Week 7-10

- Regex and filtering in Python
- Python Programming

- 15% Labs
- 10% Weekly Programming Tests
- 15% Assignment 1 — due Monday week 7
- 15% Assignment 2 — due Monday week 11
- 45% Final Exam

What are Regular Expressions (“regex”) ?

Simple explanation:

- Pattern Matching
- Used to check if a sequence/pattern exists in a larger block of text

Examples:

- Searching for complex patterns or within large inputs (i.e scraping a website)
- Manipulating and swapping sequences/patterns
- Sorting texts and input validation

Regular Expression Resources

Cheat Sheet: (Search “regex cheat sheet” and find the one by David Child)

https://cheatography.com/davechild/cheat-sheets/regular-expressions/

Online Regex Tester:

https://regex101.com/

❗ Disclaimer: This website uses a different method to run regular expressions, so there will be some cases where the output differs

Regex Tut Practice

Question 6, 12-13

Grep (Global Regular Expression Print)

Our method of using regular expressions!

Normal usage from lectures:

- grep -E “<regex>” input.txt

Where the -E means extended (without it, we can’t use regex, only normal strings work).

❓ How do I know that? Hint: enter “man grep” in the terminal

Grep Practice

Question 7, 9-11, 14-15

Tutorial “Slides”

https://2041.terencelim.dev/26t1-w09a (will be uploaded during the lab)

LAB Time!

Room: Ainsworth 302 (String Lab)