Information Retrieval Spring 2019
Exercise Session Week 2
Exercise sessions

- Discussion of solution from last week's exercises
- Possible recap of lecture
- Tips for next week's exercises
- Place for you to ask questions
Exercises overview

- Theoretical and practical
  - Theoretical: Moodle
  - Practical: Python programming using Jupyter notebooks
- Solving exercises is highly recommended
- Example solution uploaded after submission deadline
- Bonus points
  - Solve 2 out of 3 bonus exercises to get 0.25 bonus on the exam
  - Moodle based, Involving theory and programming part
  - 28.03 (Tolerant Retrieval)
  - 11.04 (Index Compression)
  - 10.05 (Vector Space Model)
Piazza forum

- https://piazza.com/class/js1wfgubra66dp
- Place to ask questions, discuss lecture …
- Use Piazza instead of E-Mail
  - Faster responses: All TAs, Prof & students
  - Others might have the same question
  - Easy to find answers again
- Possible to post anonymous
Moodle

- Theoretical part of exercises
Jupyter server

- https://informationretrieval.systems.ethz.ch
- Login credentials: Received by Mail
- Only accessible inside ETH network, at home use VPN
- RAM usage limited to 350 MB per student
- Automatically logged out when being inactive for 60 min
- Jupyter uses notebooks
  - Each time you click on the exercise, notebook is started
  - Remember to shut down and save when finished
Jupyter: Tips

- Make sure to use right log in credentials
- Code segments all connected
  - Can refer to variable defined in earlier segments
  - Order of execution shown by numbers next to code segment

```python
In [1]:
1   print("Hello, world!")
```

- Save your work when taking a break
- Rerun all necessary code segments in correct order when continuing the exercises
  - E.g. when using variables declared in earlier segments
Exercise 0: Python introduction

- No theoretical questions
- Exercise divided into 3 parts
  - Introduction
  - Control flow
  - Data structures
- Choose according to your Python skills
- Useful reference for further exercises
Part A: Introduccion

- Numbers and operators
- Strings
- Lists
- While statement
Part B: Control Flow

- if statements
- for statements
- range function
- break, continue
- pass statements

Functions
  - Argument values
  - Lambda expressions
  - Documentation strings and function annotations

Coding style
Part C: Data structures

- More on lists
- Tuples and sequences
- Sets
- Dictionaries
- Looping techniques
- Conditions and comparing
Questions?