Agenda

- 1. Organization
- 2. Project Info

Organization

Communication

□ Slides, Announcements & Materials will be available at

```
temir.org/teaching/information-retrieval-ss22/information-retrieval-ss22.html
```

- Main Communication channel is email
 - Official announcements via Mail (check your student mails regularly!)
- Lab Project group organization via moodle:

```
https://moodle2.uni-leipzig.de/course/view.php?id=38544
```

Optional Discord for group communication ¹

¹server "webis-lectures", mail us for access code

Exam

- Exam at the end of the term
- Lab Project (optional, for bonus points in exam), Deadline: 12th of July
- Grade: passed exam grade + bonus (0 / 0.5 / 1.0) for lab project (not passed / passed / passed well)
 - E.g. exam grade is 2.3, but lab project is passed well, then the final grade is 2.3 - 1.0 = 1.3
 - E.g. exam grade is 1.0, but lab project is not passed, then the final grade will stay 1.0 0 = 1.0
- Biweekly programming exercises to build a basic search engine

Organization

Lab Sessions

Exercise contents:

- Building and evaluating an basic information retrieval system
- Data handling, indexing, implementation of suitable retrieval models, evaluation of search quality
- Biweekly exercises throughout the semester

Project contents:

- Building and evaluating an information retrieval system for a specific domain
- Related work search, data handling, indexing, selection and implementation of suitable retrieval models, evaluation of search quality
- Write a research paper
 - How to do literature research
 - Introduction to scientific writing
- Submission of a written report and documented source code

Lab Project

Milestones

□ Task Definition [~ 1 week]

Find a domain and get corresponding dataset for your domain-specific retrieval system.

Literature Research [~ 1 week]

Find existing research relevant to the task (similar domains, specific retrieval systems,...).

Data Analysis [~ 1 week]

Take a closer look at the data, use descriptive statistics, identify interesting patterns.

Technology Stack [~ 1 week]

Decide upon the software libraries you are going to use.

□ Vertical Prototype [~ 2 weeks]

Build a working prototype with a basic retrieval model.

□ Refined Prototype [~ 2 weeks]

Build a prototype that uses an advanced/refined retrieval model.

Evaluation [~ 3 weeks]

Evaluate the results of your retrieval models.

Documentation [~ 1 week]

Write a README, including deployment instructions.

□ Report [~ 1 week]

Write the paper.

Project Groups

- □ You can work in groups of 4 people
- □ Each group will receive:
 - A unique group name
 - A Discord channel (optional, request as group per email)

Project Hand-Ins

- At the end of the term you hand in
 - A written report in the form of a scientific paper in ECIR Demonstration paper style (4 pages + references) [Latex packages/Word templates]
 - Your code + README with instructions and full history in a git repository
 - Deadline: 12th of July 2022

Project Datasets

- Dataset sources(selection):
 - Huggingface
 - Tensoflow Datasets
 - Allen Institute
 - Kaggle
- You can choose dataset from other sources as well.
- Datasets should contain more than 10000 documents!