

Project DIS18

01 – Introduction

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24-10-28 – Cologne, Germany

<https://ir.web.th-koeln.de>



Technology
Arts Sciences
TH Köln



Cologne Information Retrieval Research Group (CIR)



Prof. Dr. Philipp Schaer

- Information Retrieval, IR evaluation

Prof. Dr. Christin Kreutz (TH Mittelhessen)

- Scientometrics, metadata, recommender

Prof. Dr. Narjes Nikzad (GISMA University)

- Deep Learning, NLP, knowledge graphs

Dr. Timo Breuer

- Living Labs, reproducibility

Fabian Haak, M.Sc.

- Bias in query suggestions, language models

Björn Engelmann, M.Sc.

- Information extraction, table retrieval

Jüri Keller, M.Sc.

- Continuous and longitudinal IR evaluation

Andreas Kruff, M.Sc.

- Simulation of IR user interactions

Open Postions @ CIR

Hands-on experience in applied research

- Deepen skills you learned during study
- Programming (Python), data annotations, date cleaning, literature research, etc.
- Find spin-off topics for your thesis

Hard facts

- Flexible/student-friendly working hours
- 8-10 hours/week and €15 hourly
- 12 months contract, extension possible

Coffee and Kamelle

- Nice & friendly place to work + great team!
- apply@cir-group.org



Your Homework

TASK:

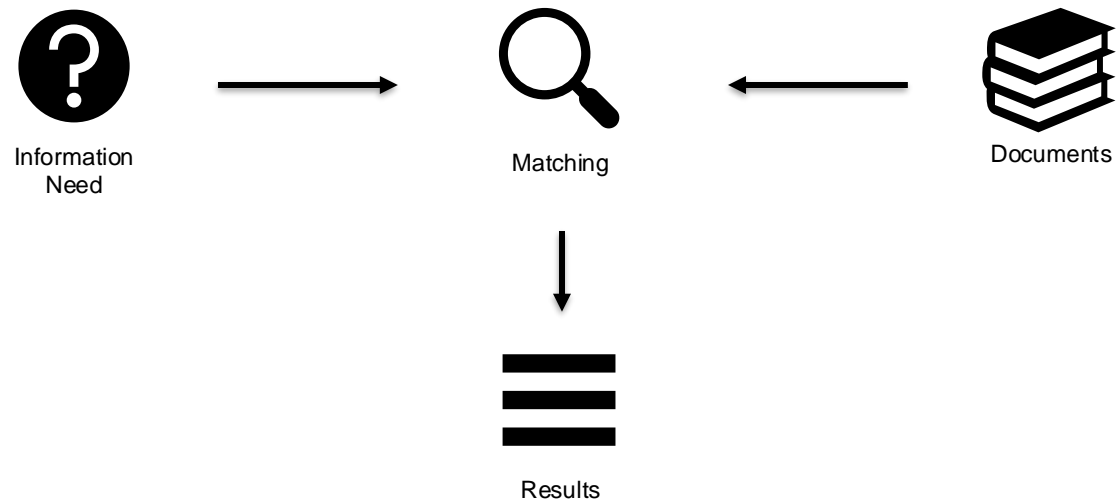
Bereiten Sie mindestens drei inhaltliche Fragen zum Text vor, die bei Ihnen nach der Lektüre offengeblieben sind.



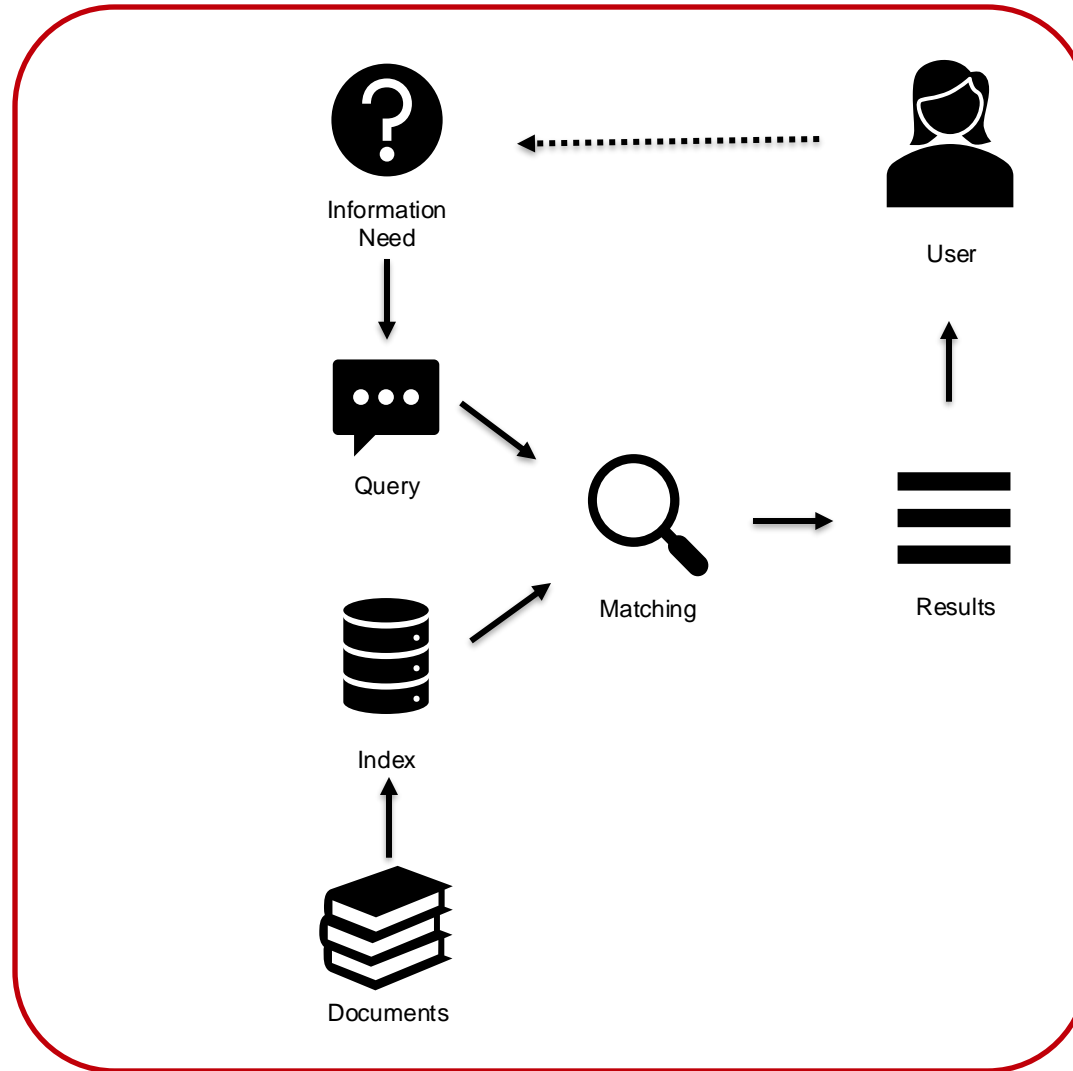
Information Retrieval Problem

“Information retrieval (IR) is **finding material** (usually documents) of an unstructured nature (usually text) that **satisfies an information need** from within large collections (usually stored on computers).”

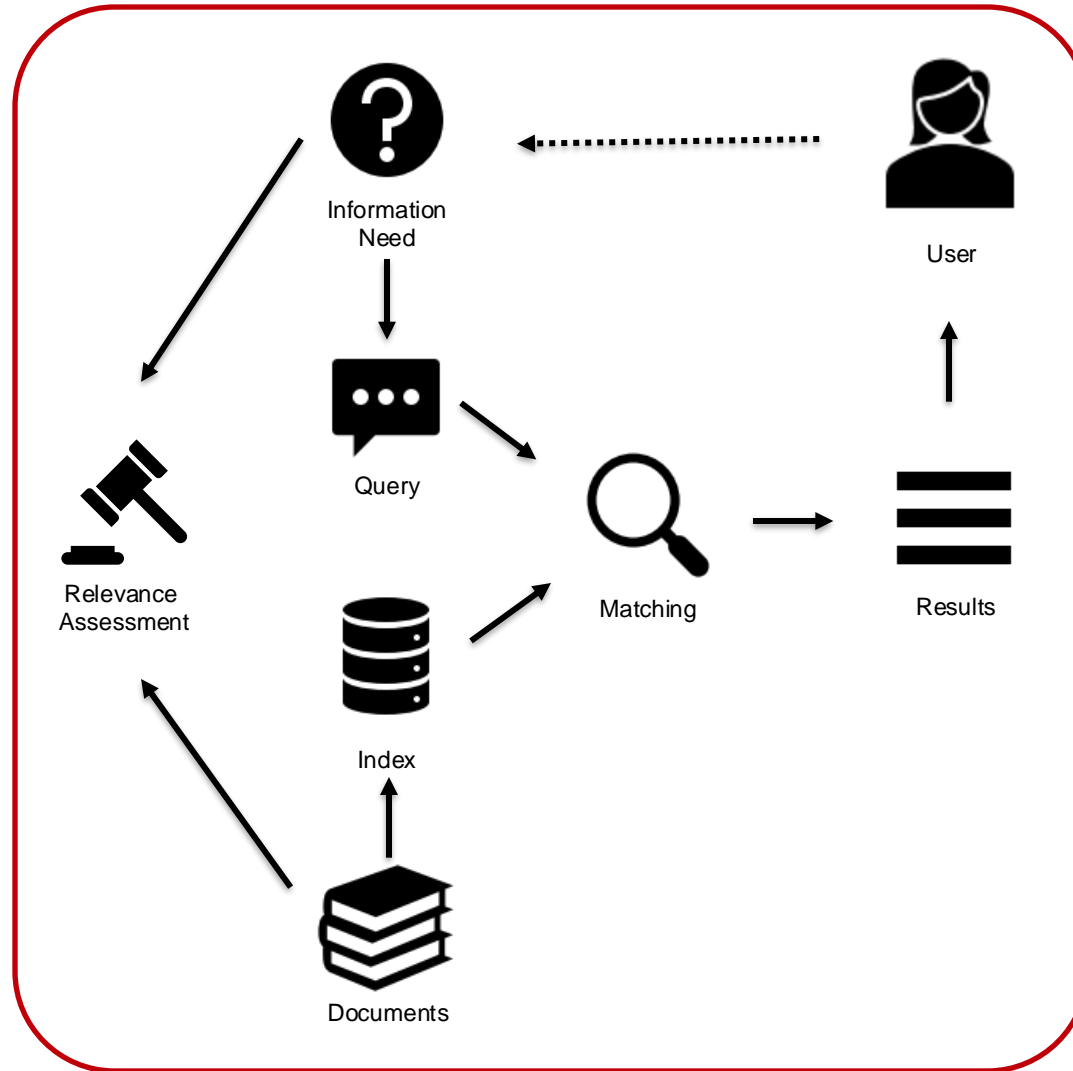
– Manning et al. (2008)



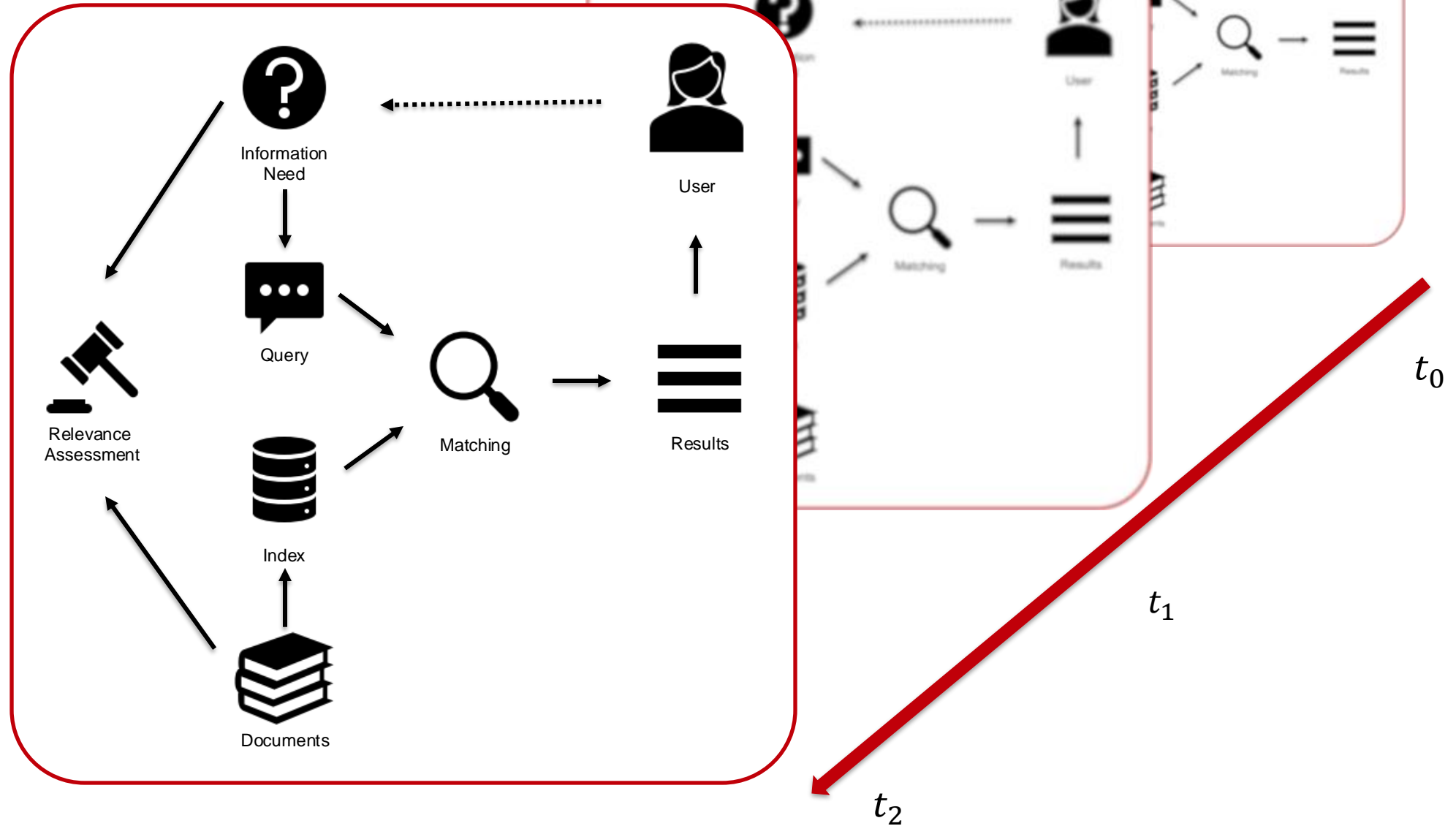
Problem



Problem

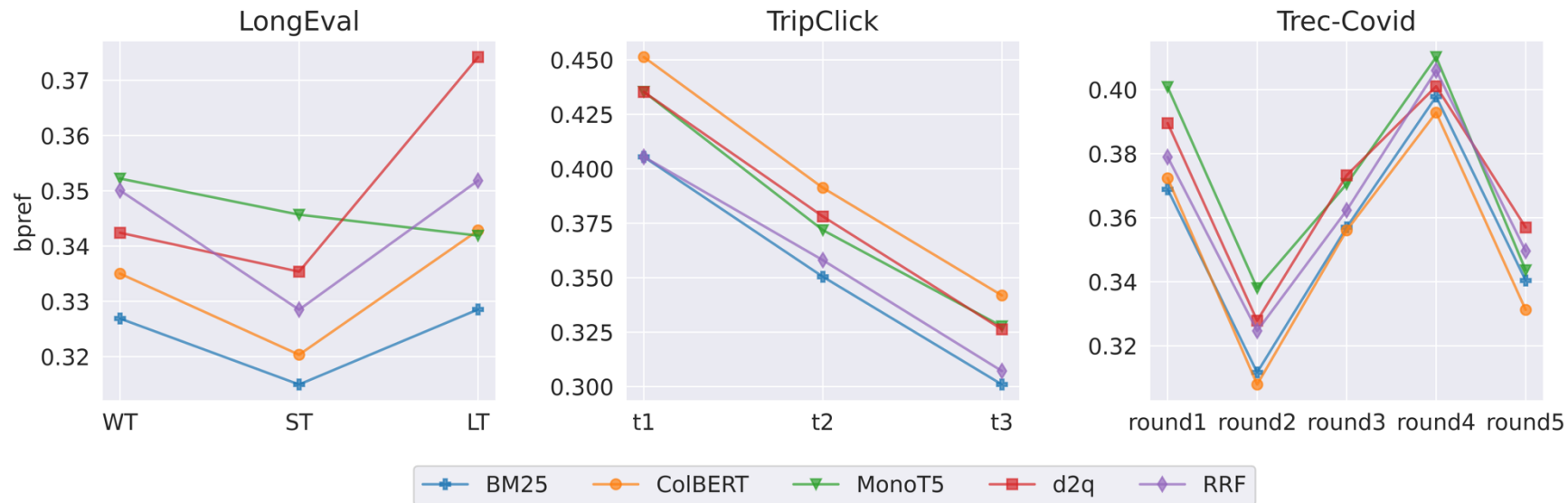


Problem



Longitudinal Evaluation

Retrieval effectiveness according to $nDCG$, $Bpref$ and $P@20$ at the different points in time WT , ST and LT for six retrieval systems



- Effectiveness varies across time and measure

LongEval Shared Task

- *Longitudinal Evaluation of Model Performance*
- Two tasks: retrieval and classification
- Classic web search
- Two languages: French and English
- Over time!

LongEval CLEF 2024 Lab

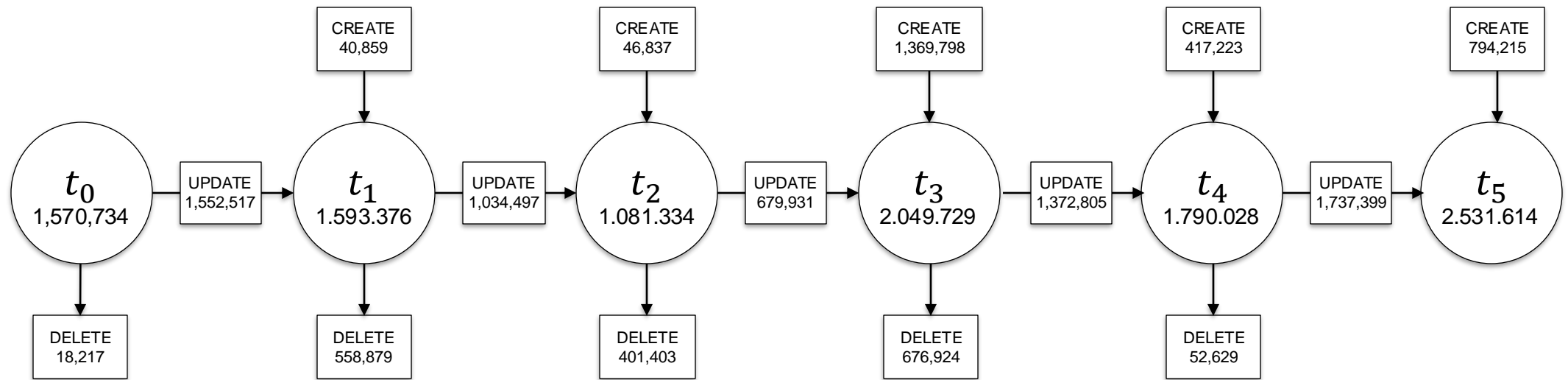


LongEval CLEF 2023 Lab



[Description](#) [Dates](#) [Organizers](#) [Tasks](#) [Data](#) [Submissions](#)

LongEval Shared Task



Topics

Title

Cuba, sugar, exports

Description

How much sugar does Cuba export and which countries import it?

Narrative

A relevant document will provide information regarding Cuba's sugar trade. Sugar production statistics are not relevant unless exports are mentioned explicitly.

Temporality

1. Nicht Zeitlich	2. Explizit Zeitlich	3. Fixes Event	4. Variables Event	5. Wiederkehrend
Informatik	EM 2024	EM in Deutschland	Tsunami	Halloween

TASK: Topics untersuchen

TASK:

Klassifizieren Sie die Topics in die verschiedenen Kategorien. Lassen sich alle Topics klassifizieren? Fehlen vielleicht Kategorien? Notieren Sie sich ihre Beobachtungen.

Senden Sie die ausgefüllte Tabelle bis spätestens zum **6.11.2024** an jueri.keller@th-koeln.de

How to pass this project

Hard requirements

- Be. Active. And. Participate. In. The. Project.
- Active means to code, label, document, plan, organize, ...
- Milestone presentations after 1st semester
- Do final presentation at the end of the course (2nd semester)
- Write a final term paper / project documentation (and maybe submit it to CLEF).

Soft requirements

- Be. Active. And. Have. Fun. In. The. Project.
- Learn a lot new and interesting stuff about Python, Data Labeling, project management, test collection design, search engines, and other DIS-related topics.

Provisional Schedule

	Datum	Notiz	
W1	18.10.24		
W2	25.10.24		Einführung zu Temporal IR
W3	01.11.24	Entfällt (Allerheiligen)	
W4	08.11.24		Gute und schlechte topics
W5	15.11.24		Topics selbst erstellen
W6	22.11.24	Projektwoche	
W7	29.11.24		Relevanzbewertungen und Projekte
W8	06.12.24		Projektphase
W9	13.12.24		...
W10	20.12.24		...
		Weihnachten	
W11	03.01.25		Start LongEval
W12	10.01.25		
W13	17.01.25		

Provisional Schedule

	Datum	Notiz	
W1	24.03		
W2	07.04		
W3	14.04		
W4	21.04		
W5	28.04		
W6	05.05	<i>Submission Runs</i>	LongEval Runs einreichen
W7	12.05		
W8	19.05		
W9	26.05	<i>Submission Notebooks</i>	LongEval Bericht einreichen
W10	02.06		Abschlusspräsentation
W11	09.06		entfällt
W12	16.06		entfällt
W13	23.06		entfällt