

Information Retrieval

Exercise – Winter term 2025/2026

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Agenda

1. TIRA Account
2. TIRA Token
3. TIRA Dry Run
4. TIRA Submission

Assignment

- ❑ Implement one or more retrieval systems
- ❑ Due Date: Monday, 15.12.2025, 23:59
- ❑ Deliverable: TIRA submission(s)

TIRA Account

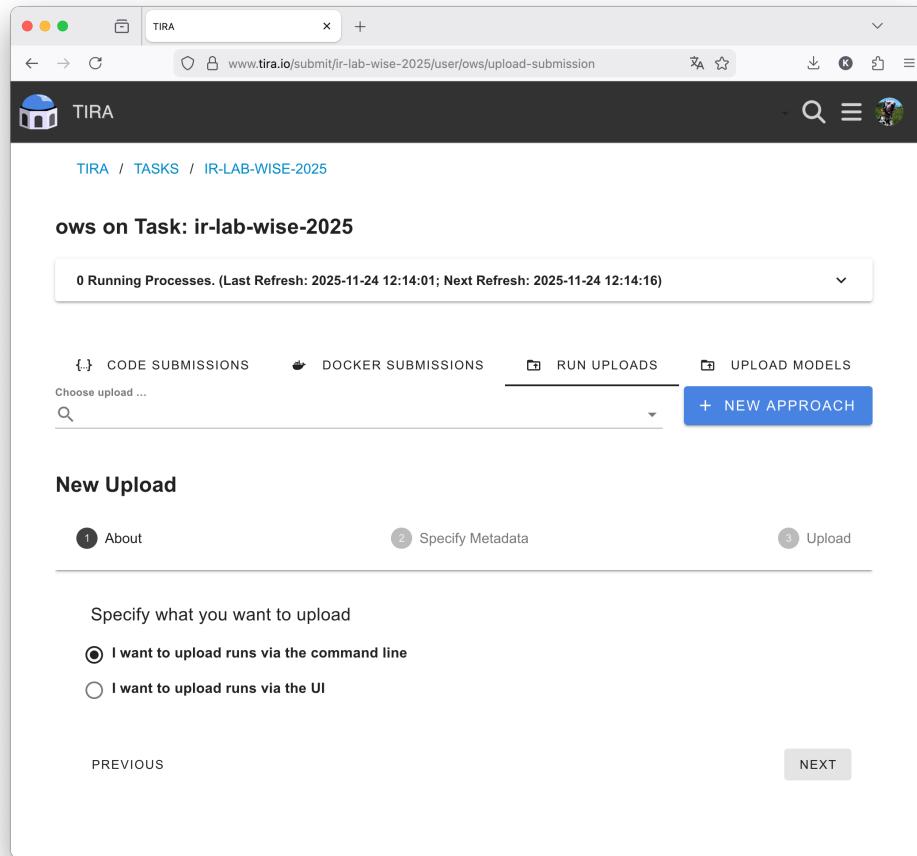
TIRA Integrated Research Architecture

1. Sign up to TIRA.
 - You may use Login in with GitHub.
2. Go to GET STARTED.
3. Go to IR Lab Jena/Kassel/Radboud WiSe 2025.
4. Register your team.

TIRA Token

Upload Runs

(1) Go to IR Lab Jena/Kassel/Radboud WiSe 2025, (2) click on SUBMIT.



Display personal token for uploading runs to TIRA by clicking on NEXT.

TIRA CLI

The TIRA CLI is included in the Python-based TIRA client.

To install it, simply install the TIRA client via: pip install tira.

```
● klara@ws04 pyterrier-baseline % tira-cli --help
usage: tira-cli [-h] [-v] {download,upload,evaluate,login,verify-installation,code-submission,dataset-submission} ...

positional arguments:
  {download,upload,evaluate,login,verify-installation,code-submission,dataset-submission}
    download      Download runs or datasets from TIRA.io
    upload       Upload runs or datasets to TIRA.io
    evaluate     Evaluate runs locally.
    login        Login your TIRA client to the tira server.
    verify-installation
                  Verify that your local TIRA client is correctly installed.
    code-submission   Make a code submission via Docker from a git repository.
    dataset-submission Submit a new task/dataset to tira.

options:
  -h, --help            show this help message and exit
  -v, --version         show program's version number and exit
```

TIRA CLI help page * .

```
PROBLEME 5 AUSGABE TERMINAL ...
zsh - template-new-approach + ∨ □ ✎ ⌂ | ⌂ ×
● klara@ws04 template-new-approach % pwd
/Users/klara/Developer/Uni/WS2526/wows-code-ws2526/ecir26/template-new-approach
● klara@ws04 template-new-approach % ls output/runs/radboud-validation-20251114-training/pyterrier-BM25-on-title
ir-metadata.yml run.txt.gz
```

Ensure that the directory you upload follows the expected submission structure
described in the [README] file.

* As of 08.12.2025, TIRA version 0.0.192.

TIRA Dry Run

Verify your submission

```
! ir-metadata.yml x
ecr26 > template-new-approach > output > runs > radboud-validation-20251114-training > pyterrier-BM25-on-title > ! ir-metadata.yml
  1 implementation:
  2   executable: null
  3   python:
  4     interactive: false
  5     modules: 3.10.12
  6     packages:
  7       - Deprecated==1.3.1
  8       - GitPython==3.1.45
  9       - Jinja2==3.1.6
 10      - MarkupSafe==3.0.3
 11      - PyGObject==3.42.1
 12      - PyYAML==6.0.3
 13      - Pygments==2.19.2
 14      - asttokens==3.0.1
 15      - beautifulsoup4==4.14.2
 16      - cbor==1.0.0
 17      - certifi==2025.11.12
 18      - charset-normalizer==3.4.4
 19      - click==8.3.1
 20      - comm==0.2.3
 21      - dbus-python==1.2.18
 22      - debugpy==1.8.17
 23      - decorator==5.2.1
 24      - dill==0.4.0
 25      - docker==7.1.0
 26      - exceptiongroup==1.3.1
 27      - executing==2.2.1

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④ klara@ws04 template-new-approach % tira-cli upload --dry-run --directory output/runs/radboud-validation-20251114-training/pytrier-BM25-on-title/ --dataset radboud-validation-20251114-training
* Please specify the name of your system. Either:

Incorporate the tag into your ir-metadata (see https://ir-metadata.org),
or, pass --system to tira-cli upload
```

Example for error upon invalid `ir-metadata.yml` file.

Placeholders for missing content of file is defined in the [submission-skeleton].

TIRA Dry Run

Verify your submission

```
! ir-metadata.yml x
ecir26 > template-new-approach > output > runs > radboud-validation-20251114-training > pyterrier-BM25-on-title > ! ir-metadata.yml
 1   method:
 2     description: |
 3       This approach uses PyTerrier's BM25 implementation to retrieve documents based on their titles.
 4       The BM25 parameters are set to their default values.
 5       The retriever is configured to operate on the title field of the documents in the Radboud validation collection.
 6     name: pyterrier-BM25-on-title
 7
 8   actor:
 9     team: teachers
10
11  data:
12    test collection:
13      name: radboud-validation-20251114-training
14
15  platform:
16    software:
17      # Which software and tools did you use for training, tunning and running your system?
18      # You can maintain the software that you used manually.
19      # Alternatively, you can use repro_eval or the tirex_tracker to track this.
20    libraries:
21      - pyterrier
22
23  implementation:

PROBLEME AUSGABE TERMINAL DEBUGGING-KONSOLE PORTS zsh - template-new-approach + □ ✎ ... | ⌂ ×
① klara@ws04 template-new-approach % tirex-cli upload --dry-run --directory output/runs/radboud-validation-20251114-training/pyterrier-BM25-on-title/
I check that the submission in directory 'output/runs/radboud-validation-20251114-training/pyterrier-BM25-on-title/' is valid...
✓ I will check that the data in output/runs/radboud-validation-20251114-training/pyterrier-BM25-on-title is valid ...
✓ The run in directory output/runs/radboud-validation-20251114-training/pyterrier-BM25-on-title is valid.
✓ The file ir-metadata.yml is valid.

Result:
✓ The run is valid. I skip upload to TIRRA as --dry-run was passed.
```

Example for valid `ir-metadata.yml` file.

If `tira-cli upload --dry-run` fails, log in first using `tira-cli login -token <YOUR-KEY>`. You can find `<YOUR-KEY>` as described on the slide “TIRA Token”.

TIRA Submission

Upload your solution

Upload a valid submission following the steps described in the [TIRA](#) submission instructions.

You can find guidance on where to access the **TIRA** submission instructions on the slide “TIRA Token”.