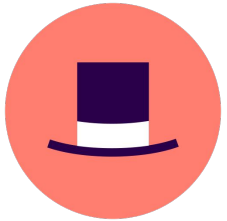
annif tutorial



MLLM project

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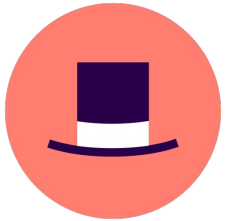
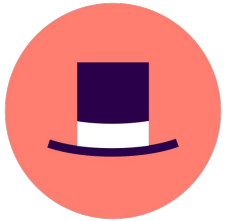
Exercise 5: Set up and train a MLLM project



Let's set up a MLLM project. MLLM is an algorithm for lexical automated subject indexing, i.e. matching terms in document text to terms in a controlled vocabulary.

MLLM (Maui-like Lexical Matching) is inspired by Maui, an older lexical automated subject indexing tool, but it is implemented in Python within Annif.

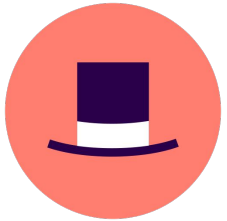
Define MLLM project in projects.cfg



```
[yso-mllm-en]
name=YSO MLLM project
language=en
backend=mllm
vocab=yso
analyzer=snowball(english)
```

```
[stw-mllm-en]
name=STW MLLM project
language=en
backend=mllm
vocab=stw
analyzer=snowball(english)
```

Train MLLM on fulltext documents



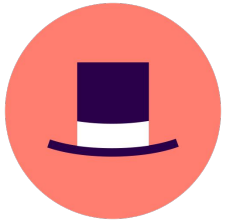
MLLM requires a relatively small number (hundreds or at most a few thousand) of training documents.

The training should be done with similar documents to those we will use in testing. We will select 400 documents from the train folder for this purpose:

```
# Command for yso-nlf
annif train yso-mllm-en --docs-limit 400 data-sets/yso-nlf/docs/train/

# Command for stw-zbw
annif train stw-mllm-en --docs-limit 400 data-sets/stw-zbw/docs/train/
```

Testing and evaluating the MLLM project



1. Test on example documents:
   a. Using one sentence:

      ```
      echo "This is an example." | annif suggest PROJECT_ID
      ```

   b. Using a text file:

      ```
      annif suggest PROJECT_ID <FILE.TXT
      ```

2. Evaluate on a corpus: **`annif eval PROJECT_ID path/to/corpus`**