

ConlluEditor: a fully graphical editor for Universal dependencies treebank files

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Universal Dependencies Workshop 2019



Motivation

[Motivation](#)[Features](#)[Demo](#)

Editing CoNLL-U files

- readability (on one line, sub-trees easy to grasp, all important information presented)
- browsing
- searching (for forms, lemmas, U/XPOS, deprels, sequence of all of these)
- modifying any CoNLL-U column in graphic mode (including enhanced relations)
- trees, not flat graphs
- abstraction from underlying format
- git support
- svg/X_LT_E export

Features I

Editing

- full graphical editor for basic and enhanced dependency relations
- word edit (form, lemma, UPOS, XPOS, features, misc-column)
- autocompletion (UPOS, XPOS, deprels, using user provided lists of valid labels)
- editing multitoken words ([1-2] ...) and empty nodes ([5.1] ...)
- comment editing
- support for right-to-left scripts like Arabic or Hebrew
- split and join words (to correct bad tokenization), split and join sentences (to modify sentence segmentation)
- undo/redo
- git support (add/commit every n edits, default: 1)
- export of dependency graphs as .svg-image, \LaTeX -code (for the tikz-dependency package or the deptree.sty \LaTeX style), sd-parse, CoNLL-U

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Features II

Searching

- regex search functions (including sequences of tokens, sub-graphs and comments)

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Validation

- validation: indicates undefined UPOS, XPOS, dependency relations (based on lists given to the server)
- prohibition of invalid (cyclic) trees
- normalisation of token ids (first column, from 1 to n , taking into account multitoken words, empty words and heads)
- validation with external script (such like UD's `validate.py`) on the current sentence
- limited multi-user support: as long as two users do not edit the same sentence

Architecture

ConlluEditor

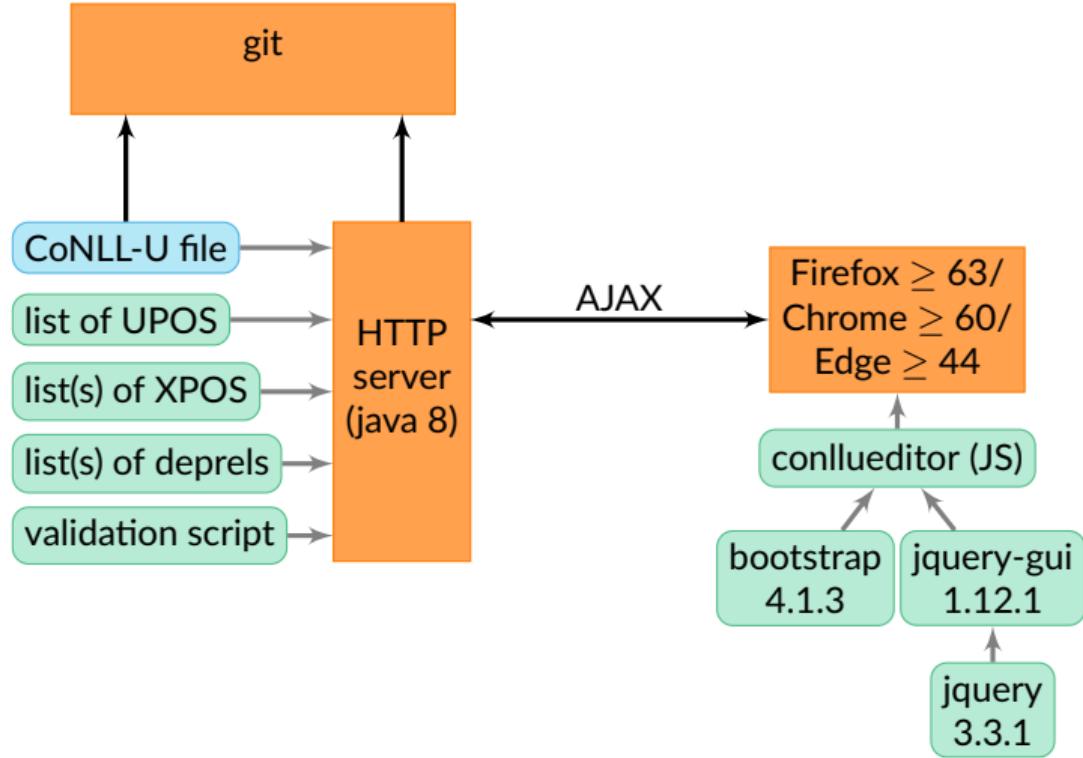
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Let's see the real thing

■ configure validator (in valid.conf):

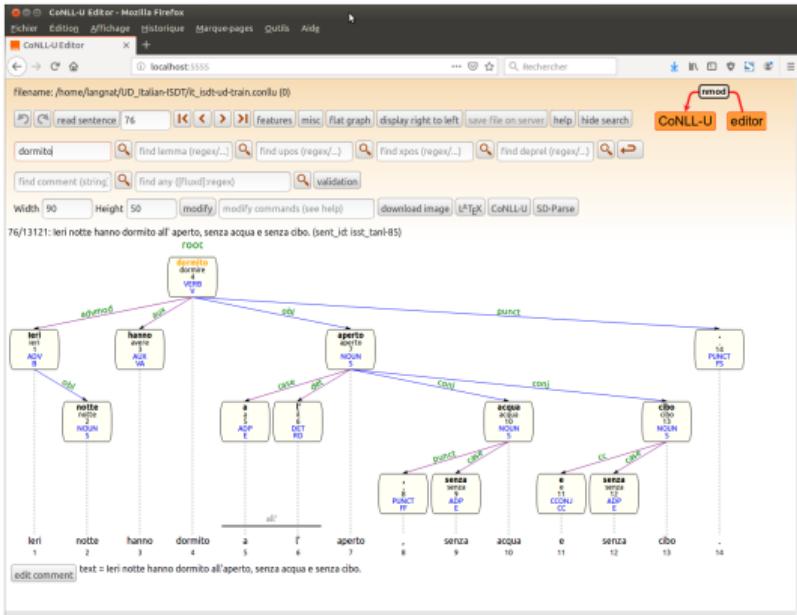
```
$HOME/UD/tools/validate.py --lang cy --max-err 0 --level 5 {FILE}
```

■ start server

```
$CE/bin/conlluedit.sh -r \
--deprels deprel.cy,deprel.ud \
--UPOS cpos.ud \
--XPOS xpos.cy \
--validator valid.conf \
demo.conllu 5555
```

■ open navigator

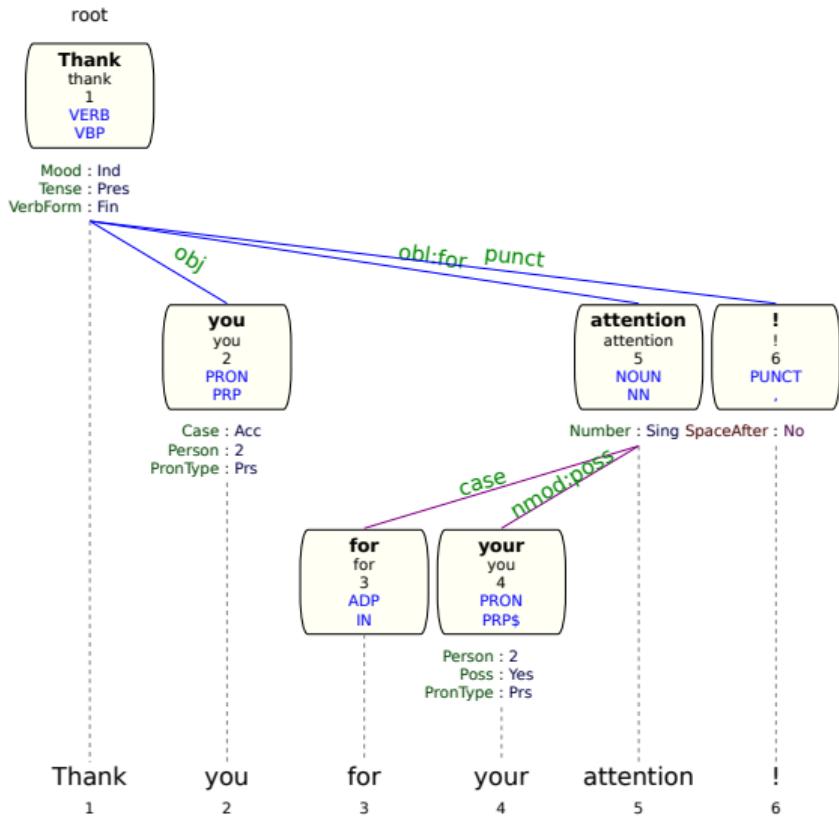
- <http://localhost:5555>
- demo



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<https://github.com/Orange-OpenSource/conllueditor>
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