

## LX-Center: A center of online services for education, research and development on natural language science and technology

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### Abstract

This is a short note that supports the demonstration of the LX-Center at the 1st Joint SIG-IL/Microsoft Workshop on Speech and Language Technologies for Iberian.

**Index Terms:** natural language processing, computational linguistics, online services, Portuguese

### 1. LX-Center: online services

LX-Center is a web-based center of freely available online linguistic services. These services are targeted at human users and aimed at both demonstrating a range of language technology tools and at fostering the education, research and development in natural language science and technology.

The LX-Center is located at [1]. It encompasses linguistic services that are being developed, in all or part, and maintained at the University of Lisbon, Department of Informatics, by the NLX-Natural Language and Speech Group. At present, this center makes available the following **functionalities**:

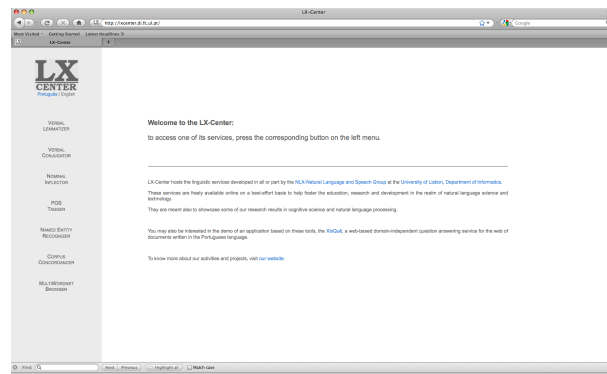
- Sentence splitting
- Tokenization
- Nominal lemmatization
- Nominal morphological analysis
- Nominal inflection
- Verbal lemmatization
- Verbal morphological analysis
- Verbal conjugation
- POS-tagging
- Named entity recognition
- Annotated corpus concordancing
- Aligned wordnet browsing

These functionalities are provided by one or more of the services integrating the LX-Center. For instance, the LX-Suite service accepts raw text and returns it sentence split, tokenized, POS tagged, lemmatized and morphologically analyzed. Some other services, in turn, may support only one of the functionalities above. For instance, the LXNER service ensures only named entity recognition.

As of July 2009, these are the **online services** offered:

- LX-Conjugator
- LX-Lemmatizer
- LX-Inflector
- LX-Suite
- LX-NER
- CINTIL Concordancer
- MWN.PT Browser

The access to each one of these services is obtained by clicking on the corresponding button on the left menu of the LX-Center web page:



Fully fledged descriptions of each service are available at the corresponding web pages and in the white papers referred to there.

### 2. Web services

Most of the online services that integrate the LX-Center have a counterpart in terms of a web service for software agents. These web services are available under the LXService, presented elsewhere [2].

### 3. References

- [1] <http://lxcenter.di.fc.ul.pt>.
- [2] A. Branco, F. Costa, P. Martins, J. Silva and S. Silveira. 2008. "LXService: Web Services of Language Technology for Portuguese". *Proceedings of LREC2008*. ELRA, Paris.

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