iCorpora: Compiling, Managing and Exploring Multilingual Data

Hernani Costa[1a], Gloria Corpas Pastor[1], Miriam Seghiri[1] and Ruslan Mitkov[2]
{hercos,gcorpas,seghiri}@uma.es, r.mitkov@wlv.ac.uk

[1]LEXYTRAD, University of Malaga, Spain
[2]RIILP, University of Wolverhampton, UK

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Introduction

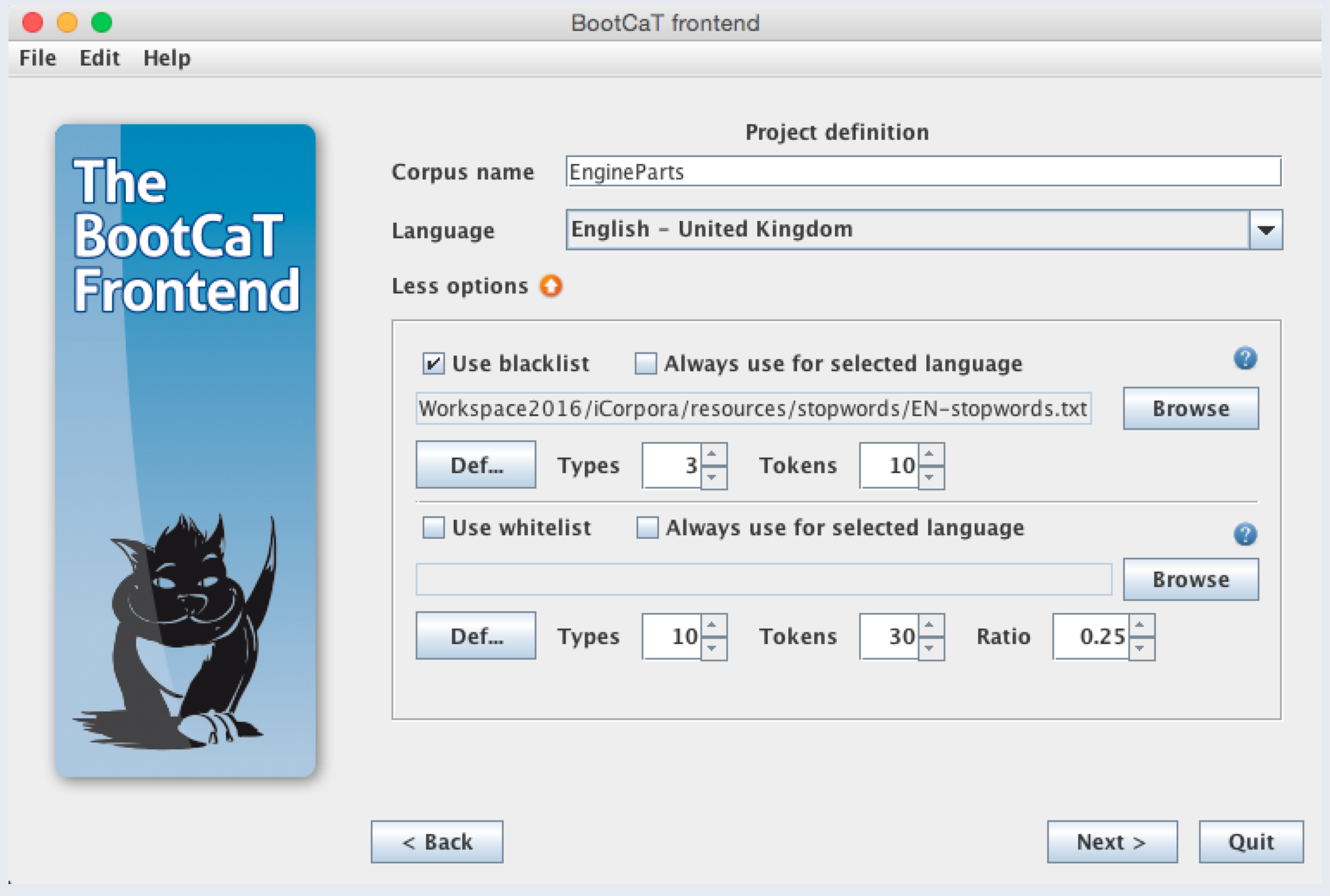
- The interest in mono-, bi- and multilingual corpora is vital in many research areas, such as:
  - terminology and specialised language
  - automatic and assisted translation
  - language teaching
  - natural language processing
- Particularly in translation, their benefits have been demonstrated by various authors [1, 2, 3, 4]

Objectives

- Against the background of increasing importance of comparable corpora given the scarcity of suitable parallel corpora, iCorpora's objectives are:
  - to develop of a novel flexible and robust web-based application for compilation, management and exploitation of comparable corpora
  - to address the needs of translators and interpreters as well as other professional and casual users

Existing Corpora Compilation Solutions and their limitations

BootCaT [5]



BootCaT frontend

Project definition

Corpus name: EngineParts

Language: English – United Kingdom

Less options

☑ Use blacklist ☐ Always use for selected language

Workspace2016/iCorpora/resources/stopwords/EN-stopwords.txt Browse

Def... Types 3 Tokens 10

☐ Use whitelist ☐ Always use for selected language

Browse

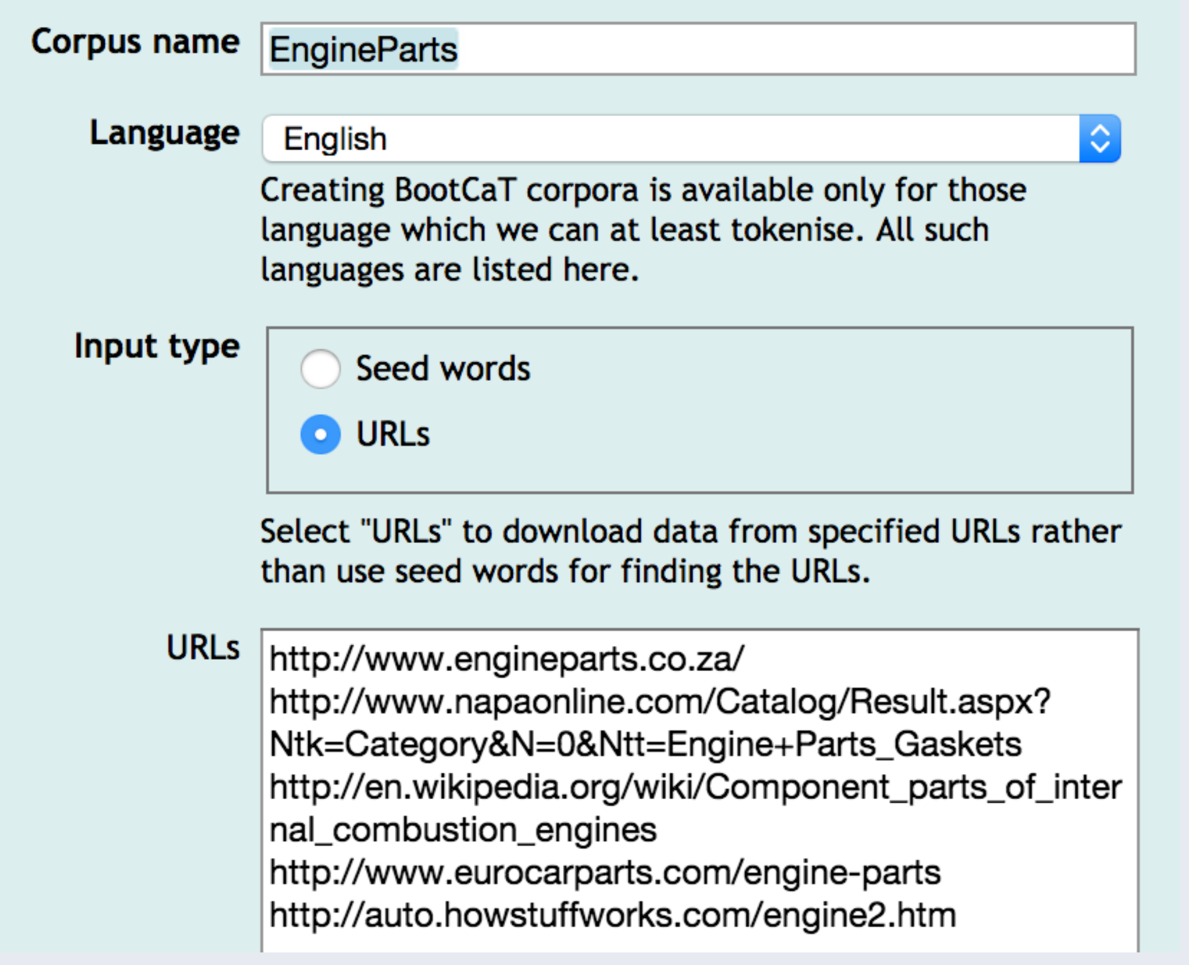
Def... Types 10 Tokens 30 Ratio 0.25

< Back Next > Quit

Current limitations

- compilation tools are scarce or proprietary
- simplistic with limited features [6]
- built to compile one monolingual corpus at a time
- or do not cover the entire compilation process (i.e. they do not allow managing and exploring both parallel and multilingual comparable corpora)

WebBootCaT [7]



Corpus name: EngineParts

Language: English

Creating BootCaT corpora is available only for those language which we can at least tokenise. All such languages are listed here.

Input type: ○ Seed words ● URLs

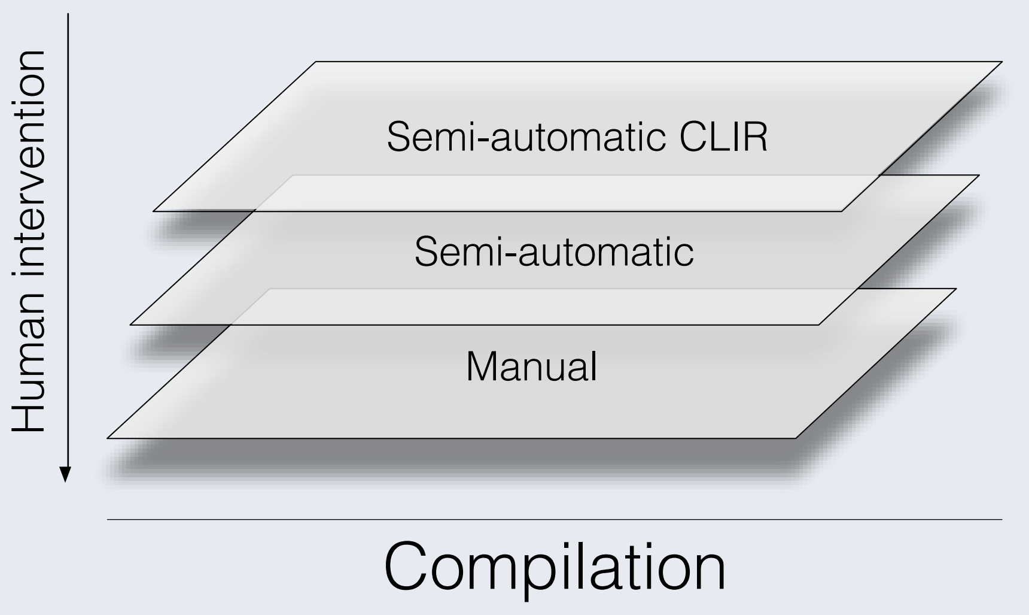
Select "URLs" to download data from specified URLs rather than use seed words for finding the URLs.

URLs:
http://www.engineparts.co.za/
http://www.napaonline.com/Catalog/Result.aspx?Ntk=Category&N=0&Ntt=Engine+Parts_Gaskets
http://en.wikipedia.org/wiki/Component_parts_of_internal_combustion_engines
http://www.eurocarparts.com/engine-parts
http://auto.howstuffworks.com/engine2.htm

iCorpora

iCompileCorpora

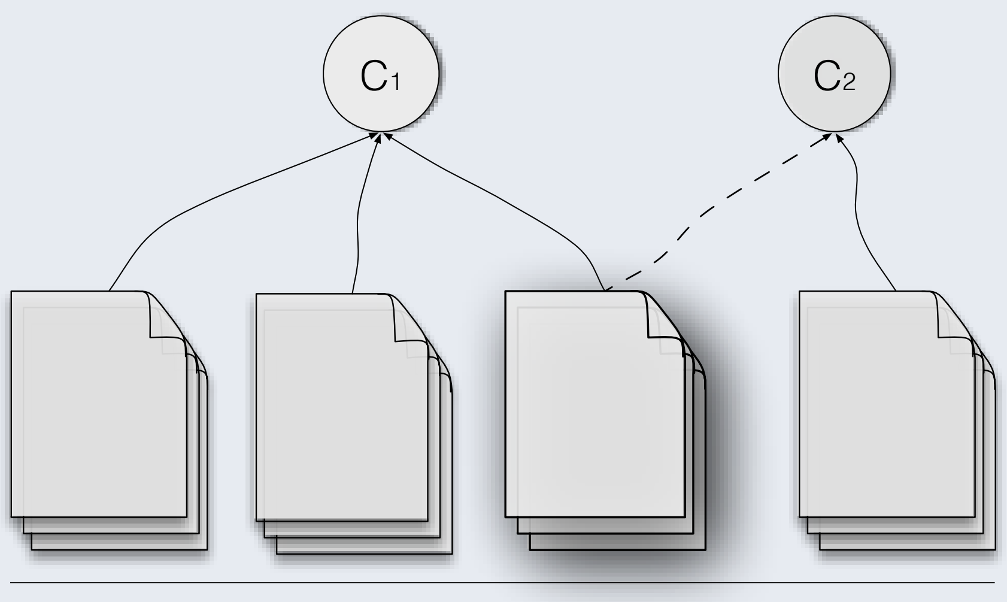
- Offers the functionality of compiling monolingual and multilingual corpora
- Allows for the manual upload of documents from a local or remote directory



Compilation

iManageCorpora

- Management and reusability:
  - edit, copy and paste sentences and documents from and to documents and corpora, respectively
  - measure the similarity between documents
  - explore the representativeness of the corpora



Management

iExploreCorpora

- It will allow to:
  - search for words in context
  - extract the most frequent words and multi-words

Exploration

References

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Hernani Costa (hercos@uma.es)