

L^AT_EX Unicode Template

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November 22, 2018

Abstract

Writing simultaneously in several languages in L^AT_EX can produce headaches. Nonetheless, when updated and properly set, it becomes pretty straightforward. The present document explains how to write in (at least) 13 different languages other than English by adding less than 10 lines of code. Of course, compatibility with all packages is not guaranteed.

1 Example

Arabic	يبرء الله
Chinese	这是汉语
French	C'est français
German	Einige große Wörter auf Deutsch
Greek	αυτό είναι ελληνικό
Japanese	これは日本語です
Korean	이것은 한국이다.
Norwegian	Norsk er søtt
Polish	Niektóre słowa po polsku
Portuguese	Português não é espanhol
Russian	Это русский
Spanish	Esto es español
Swedish	Några ord på svenska

2 Making it work

Import the following packages right after defining the document class

2.1 Snippet

```
\usepackage[utf8]{inputenc}
\usepackage[LFE,LAE,T2A,T1]{fontenc}
\usepackage[english,arabic,greek,russian,polish]{babel}
\usepackage{arabtex} % Required for arab
\usepackage{CJKutf8} % Required for Chinese, Japanese and Korean
```

Just copy-pasting these five lines will do most of the work.

2.2 Packages in detail

1. **Input encoding set to utf8:** The source must be encoded using the utf-8 character set, and so it should be told to L^AT_EX.
2. **Set the proper font encoding:** To produce the correct output, all unicode pages in Computer Modern must be enabled. We do so by adding the following options to `fontenc`.

T1 The extended Latin set is accessible by enabling **T1**. This will give us access to virtually all western-European languages like French, German, Italian, Norwegian, Spanish, Swedish, Portuguese,

T2A This little guy gives us access to the Cyrillic pages of the font. Useful for Russian (at least).

LFE,LAE These two fellas allow us to write in Arab.

3. **Add babel with required languages:** Arabic, Greek, Russian, and Polish need to be defined in Babel for this example to work. Here it is important to remark that Greek and Russian are mutually exclusive without Babel (see Sections ?? and ??), and the use of any of these two languages require the `\foreignlanguage` macro.

3 Snippets

4 Latin-1 + Russian