Mongolian Cyrillic Support for \texttt{Xe\La}T\texttt{X} and \texttt{Lua\La}T\texttt{X}

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Abstract

The \texttt{xecyrmongolian} package provides basic support for Mongolian Cyrillic so to be able to prepare documents with either \texttt{Xe\La}T\texttt{X} or \texttt{Lua\La}T\texttt{X}.

1 Introduction

The package \texttt{xecyrmongolian} has been designed for people who want to prepare documents whose main language is Mongolian Cyrillic and want to typeset their work with either \texttt{Xe\La}T\texttt{X} or \texttt{Lua\La}T\texttt{X}. The package allows users to load other hyphenation patterns so to be able to create truly multilingual documents. In addition, all standard enumerations use the Cyrillic alphabet used in Mongolia. The following simple \LaTeX code is a typical usage example of the package.

\begin{verbatim}
\documentclass[a4paper]{article}
\usepackage{xlttextra}
\usepackage{enumitem}
\usepackage{xecyrmongolian}
\begin{document}
\setmainfont{MenkGarqagTig.ttf} % or any font you like
\begin{enumerate}[label=(\Alph*)]
  \item an apple
  \item a banana
  \item a carrot
  \item a durian
\end{enumerate}
\Useg{12}
\end{document}
\end{verbatim}

2 The Source Code

First we define the various strings that correspond to the standard \LaTeX captions.

\begin{verbatim}
\texttt{\langle*xecyrmongolian\rangle}
\message{Package `xecyrmongolian' version 1.0.0 by \%J$
Apostolos Syropoulos and Bat-erdene Altangerel}$
\def\prefacename{Оршил}%
\def\refname{Ашигласан ном}%
\def\abstractname{Товчлол}%
\def\bibname{Ашигласан номзүй}%
\def\chaptername{Бүлэг}%
\def\appendixname{Хавсралт}%
\end{verbatim}
Next, we define the macros \Useg and \useg that are the Mongolian counterpart of \Alph and \alph, respectively. However, these commands should not be used in enumerations, etc. It is better to make the \Alph commands to produce Cyrillic letters by giving the command \usegalph. The behavior of this command is the default behavior of the package.

\Useg\@mong#1\or
A\or Б\or В\or Г\or Д\or Е\or Ё\or Ж\or З\or И\or Й\or К\or Л\or М\or Н\or О\or Ө\or П\or Р\or С\or Т\or У\or Ү\or Ф\or Х\or Ц\or Ч\or Ш\or Щ\or ъ\or Ы\or ь\or Э\or Ю\or Я\else\@ctrerr\fi
\useg\@mong#1\or
а\or б\or в\or г\ор д\ор е\ор ё\ор ж\ор з\ор и\ор й\ор к\ор л\ор м\ор н\ор о\ор ө\ор п\ор р\ор с\ор т\ор у\ор ү\ор ф\ор х\ор ц\ор ч\ор ш\ор щ\ор ъ\ор ы\ор ь\ор э\ор ю\ор я\else\@ctrerr\fi

The previous commands do not work if their argument is a counter. And since we may want to use them in enumeration or to number chapters, we introduce the following commands that work properly when their arguments are counters.

\def\useg@mong#1\expandafter\useg\expandafter{\the#1}
\def\Useg@mong#1\expandafter\Useg\expandafter{\the#1}

\mongmonth
Now we redefine \today so as to produce dates in Mongolian. The names of months are defined by the macro \mongmonth.

\def\mongmonth{%
\ifcase\month\or 1-р ~сарын\or 2-р ~сарын\or 3-р ~сарын\or 4-р ~сарын\or 5-р ~сарын\or 6-р ~сарын\or 7-р ~сарын\or 8-р ~сарын\or 9-р ~сарын\or 10-р ~сарын\or 11-р ~сарын\or 12-р ~сарын\fi
\def\today{\number\year~оны~\mongmonth~ \number\day}

LuaLaTeX and XeLaTeX have different ways to load hyphenation patterns. Package luahyphenrules by Javier Bezos facilitates this process for people who want to use LuaLaTeX and the “traditional” way to load hyphenation patterns. To ensure proper inclusion of LuaTeX staff, I use the following “idiom”:

\ifx\directlua\undefined non LuaLaTeX code\else LuaLaTeX code\fi
\fi

The code that follows loads the hyphenation patterns. The XeLaTeX code is quite standard and depends on the babel pattern loading mechanism, while the LuaLaTeX code uses the \HyphenRules macro, which has essentially the functionality of the \selectlanguage macro.

\ifx\directlua\undefined% \fi
\language\l@mongolian\else\HyphenRules{mongolian}\fi%
By default the Mongolian alphabetic enumeration is used instead of enumerations with Latin letters.

\input\alphalph
\input\Alphalph
\input\usegalp
\input\usegAlph
\input\nousegalph
\input\usegalph. If for some reason, the user needs to have the original enumeration back, then the user should used the command \nousegalph. And if she wants to switch back, then she has to use the \usegalph command:

\input\nousegalph
\input\usegalph
\input\ndef\nousegalph{\input\latinalph\input\latinAlph}
\input\def\usegalph{\input\usegalp\input\usegAlph}
\input\setlanguage

We provide the \setlanguage command which activates the hypothesis patterns of some other language. It is similar to babel's \selectlanguage, but we opted to use a new name to avoid possible name conflicts. Valid arguments include mongolian, and american. As was noted previously, package \luahyphrules provides the command \HyphenRules which has exactly the same functionality as this command. So when using \LaTeX users will actually use the \HyphenRules command. And since the main language of the document will be Mongolian, we have to load the Mongolian hypothesis patterns.

\input\if\undefined\input\undefined\input\expandafter\input\input\typeout{\input\error: No hypothesis pattern for language #1 loaded,}\input\typeout{\input\error: No hypothesis pattern for language #1 loaded,}\input\language=0\input\else\input\language=\input\endcsname \input\fi
\else\input\setlanguage\input\HyphenRules\input\fi
\input\setlanguage\input{mongolian}
\input{/>ecyrmongolian}