The bangla Package

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Contents

1 Introduction

1.1 About bangla Package
The bangla package is a programming tool geared primarily towards LaTeX document authors. It provides all necessary LaTeX frontends for Bangla language.

1.2 Licence
Copyright © 2021 Nahid Hossain. Permission is granted to copy, distribute and/or modify this software under the terms of the LaTeX Project Public License, version 1.3c or later.

2 Commands

2.1 Use Package
The basic command to use the package is-

\usepackage{bangla}
2.2 Font Selection

The default font of the \texttt{bangla} package is \texttt{Kalpurush}. If you do not mention any font name in the parameter, the \texttt{Kalpurush} will be your default font. However, an author can easily change the font using the parameter of the \texttt{usepackage} command.

\texttt{\usepackage[<font name>]{bangla}}

For example, if an author wants \texttt{Noto Serif Bengali} as the font for the whole article, he can write-

\texttt{\usepackage[notoserifbengali]{bangla}}

The following SIL Open Font Licence (OFL) Bangla fonts are currently associated with the \texttt{bangla} package-

<table>
<thead>
<tr>
<th>Font Name</th>
<th>Command Keyword</th>
<th>Licence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kalpurush</td>
<td>\texttt{kalpurush}</td>
<td>SIL OFL</td>
</tr>
<tr>
<td>Shimanto</td>
<td>\texttt{shimanto}</td>
<td>SIL OFL</td>
</tr>
<tr>
<td>Noto Sans Bengali</td>
<td>\texttt{notosansbengali}</td>
<td>SIL OFL</td>
</tr>
<tr>
<td>Noto Serif Bengali</td>
<td>\texttt{notoserifbengali}</td>
<td>SIL OFL</td>
</tr>
</tbody>
</table>

2.3 With Parameter Definitions

In this subsection, we have demonstrated the commands that require parameters (at least one or more).

2.3.1 \texttt{\banglatext{<bangla text here>}}

\texttt{\banglatext} displays any Bangla texts provided inside the parameter. Insert Bangla text in the parameter.

\begin{tabular}{|l|l|}
\hline
\textbf{Command} & \textbf{Output} \\
\hline
\texttt{\banglatext{আমি বাংলায় কথা বলি।}} & আমি বাংলায় কথা বলি। \\
\hline
\end{tabular}

2.3.2 \texttt{\banglabold{<bangla text here>}}

\texttt{\banglabold} bolds the Bangla texts provided inside the parameter. It can make texts bold automatically of any font that has no bold fonts available.

\begin{tabular}{|l|l|}
\hline
\textbf{Command} & \textbf{Output} \\
\hline
\texttt{\banglabold{আমি বাংলায় কথা বলি।}} & আমি বাংলায় কথা বলি। \\
\hline
\end{tabular}
2.3.3 \texttt{banglaitalic\{<bangla text here>\}}

\texttt{banglaitalic} makes the Bangla texts italic provided inside the parameter. It can make texts italic automatically of any font that has no italic fonts available.

<table>
<thead>
<tr>
<th>Command</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>\texttt{banglaitalic{আিম বাংলায় কথা বিল।}}</td>
<td>আিম বাংলায় কথা বিল।</td>
</tr>
</tbody>
</table>

2.3.4 \texttt{banglatranslit\{<bangla text here>\}}

\texttt{banglatranslit} generates a comprehensive and sophisticated transliteration of Bangla into Latin based on ISO 15919. \texttt{banglatranslit} works on character, word, and sentences as well.

<table>
<thead>
<tr>
<th>Command</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>\texttt{banglatranslit{আিম বাংলায় কথা বিল।}}</td>
<td>আিম বাংলায় কথা বিল।</td>
</tr>
</tbody>
</table>

2.3.5 \texttt{banglaipa\{<bangla text here>\}}

\texttt{banglaipa} generates equivalent International Phonetic Alphabets(IPA) symbols for Bangla alphabets. \texttt{banglaipa} works on character, word, and sentences as well.

<table>
<thead>
<tr>
<th>Command</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>\texttt{banglaipa{আিম বাংলায় কথা বিল।}}</td>
<td>আিম বাংলায় কথা বিল।</td>
</tr>
</tbody>
</table>

2.4 Without Parameter Definitions

In this subsection, we have demonstrated the commands that require no parameter at all.

2.4.1 \texttt{banglapage}

\texttt{banglapage} produces bangla page numbering. \texttt{banglapage} does not need any parameters. Put \texttt{banglapage} command before \texttt{\begin{document}} command. Such as:

\texttt{\banglapage}

2.4.2 \texttt{banglasection}

\texttt{banglasection} produces bangla numbering for all sections in the article including all subsections and subsubsections. \texttt{banglasection} does not need
any parameters. Put \banglasection command before \begin{document} command. Such as:
\banglasection

2.4.3 \texttt{\banglaenumerate}

\banglaenumerate produces level-2 bangla numbering for enumerate or the list in latex for the whole article. \banglaenumerate does not need any parameters. Put \banglaenumerate command before \begin{document} command or anywhere above the enumerate. Such as:
\banglaenumerate

2.4.4 \texttt{\banglaequation}

\banglaequation produces bangla numbering for all equations in the whole article. \banglaequation does not need any parameters. Put \banglaequation command before \begin{document} command or anywhere above the equations. Such as:
\banglaequation

2.4.5 \texttt{\banglatable}

\banglatable produces bangla numbering for all tables in the whole article. \banglatable does not need any parameters. Put \banglatable command before \begin{document} command or anywhere above the tables. Such as:
\banglatable

2.4.6 \texttt{\banglafigure}

\banglafigure produces bangla numbering for all figures/images in the whole article. \banglafigure does not need any parameters. Put \banglafigure command before \begin{document} command or anywhere above the figures. Such as:
\banglafigure

2.4.7 \texttt{\banglaallcounters}

\banglaallcounters produces bangla numbering for everything in the whole article. \banglaallcounters does not need any parameters. Put \banglaallcounters command before \begin{document} command. Such as:
\banglaallcounters

3 Reporting issues

To report any error or issue please send an email at nahid@cse.uiu.ac.bd or mailbox.nahid@gmail.com.
4 Revision History

Version 2.0 bug fixes.
Version 1.9 new command added. minor bug fixes.
Version 1.8 bug fixes.
Version 1.7 bug fixes.
Version 1.6 a new OFL SIL font added. bug fixes.
Version 1.5 solved font licence issues and bug fixes.
Version 1.0 primary version.