The beamer-rl class

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Repository: https://github.com/seloumi/beamer-rl
Bug tracker: https://github.com/seloumi/beamer-rl/issues

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Creating beamer presentation for right to left languages (like arabic) using pdfLaTeX or XeLaTeX still poses many problems due to bugs not currently resolved especially for colors and hyperlinks.

The LuaTeX team set solutions for these issues thanks to them and to Javier Bezos for his works on the package babel and bidi writing.

This class provides patches of some beamer templates and commands to create right to left beamer presentation, the class call babel with bidi=basic option and require LuaLaTeX engine.
\documentclass{beamer-rl}

% import language
\babelprovide[import=ar-DZ, main]{arabic}

\usetheme{Madrid}

\begin{document}
...
\end{document}
The class define Amiri as default sans serif font, we can modify this in the preamble with

\babelfont{sf}{<font name>}

All options provided by beamer can be added with beamer-rl. Additional options can also be passed to package babel with beamer-rl like this

\documentclass[babel={<babel options>}]{beamer-rl}
The `beamer-rl` class swap the definition of `\blacktriangleright` with `\blacktriangleleft` in RTL context

<table>
<thead>
<tr>
<th></th>
<th>\blacktriangleright</th>
<th>\blacktriangleleft</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTR context</td>
<td>◄</td>
<td>►</td>
</tr>
<tr>
<td>RTL context</td>
<td>►</td>
<td>◄</td>
</tr>
</tbody>
</table>

Class option `arabic` call an Arabic dictionary to translate strings like "theorem, example, definition"

```latex
\documentclass[arabic]{beamer-rl}
```

In some cases you need to use `\babelsublr` command from `bebel` package to insert a left to right text within your right to left text, e.g. if you need to insert a `pspicture` drawing in RTL context

```latex
\bebelsublr{LTR context ... }
```
Examples
On 21 April 1820, during a lecture, Ørsted noticed a compass needle deflected from magnetic north when an electric current from a battery was switched on and off.
\setbeamertemplate{enumerate item}[ball]
\begin{enumerate}
\item First
\item Second
\end{enumerate}

% in RTL context
\setbeamertemplate{itemize item}[triangle]
\begin{itemize}
\item First
\item Second
\end{itemize}
First
Second

\begin{itemize}
\item First
\item Second
\end{itemize}
\hyperlink{jumptofirst}{\beamergotobutton{return to first slide}}
\hypertarget<1>{jumptofirst}{}
\hyperlink{jumptofirst}{\beamergotobutton{return to first slide}}
\hypertarget<1>{jumptofirst}{}
Theorems

The proof uses \textit{reductio ad absurdum}.

\textbullet \textit{There is no largest prime number}

\begin{itemize}
  \item Suppose \( p \) were the largest prime number.
  \item Let \( q \) be the product of the first \( p \) numbers.
  \item Then \( q + 1 \) is not divisible by any of them.
  \item But \( q + 1 \) is greater than \( 1 \), thus divisible by some prime number not in the first \( p \) numbers.
\end{itemize}
Theorem

There is no largest prime number.

Proof

1. Suppose $p$ were the largest prime number.
2. Let $q$ be the product of the first $p$ numbers.
3. Then $q + 1$ is not divisible by any of them.
4. But $q + 1$ is greater than 1, thus divisible by some prime number not in the first $p$ numbers.
5. Therefore, $p$ is not the largest prime number.
Theorem

The proof uses reductio ad absurdum.

There is no largest prime number.

1. Suppose $p$ were the largest prime number.
2. Let $q$ be the product of the first $p$ numbers.
3. Then $q + 1$ is not divisible by any of them.
4. But $q + 1$ is greater than 1, thus divisible by some prime number not in the first $p$ numbers.
The proof uses *reductio ad absurdum*.

*There is no largest prime number.*

1. Suppose $p$ were the largest prime number.
2. Let $q$ be the product of the first $p$ numbers.
3. Then $q + 1$ is not divisible by any of them.
4. But $q + 1$ is greater than $1$, thus divisible by some prime number not in the first $p$ numbers.

Thus divisible by some prime number not in, $1$ is greater than $q + 1$ but

numbers $p$ the first
\framezoom<1><2>[border=2](1cm,1cm)(2cm,2cm)
\% (1cm,1cm)=(<upper right x>,<upper right y>)
\% (2cm,2cm)=(<zoom area width>,<zoom area depth>)
\pgfimage[height=5cm]{example-image}
Image