

Introduction to the AUTtheme for R Markdown with Beamer

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Overview

Usage

Frames

Common Frame Features and Layouts

LaTeX commands



Outline

Usage

- How to load this package
- Compiling this demo file
- Compiling with AUTTheme
- Comparison to Beamer version

Frames

- Common Frame Features and Layouts

LaTeX commands

How to load this package

Load this package from github using the `remotes` package

In R Studio

- File/New File/R Markdown/From Template
- Select AUTBeamer

This will create a new directory containing the required files to run the template

- `bgImages` (folder containing images)
- `AUTtheme.sty`
- `header.tex`
- `untitled.Rmd`

Compiling this demo file

To compile this demo file, this file needs to be located in the same directory as the `bgImages` folder and the `AUTtheme.sty` file. These files are not provided in the demo folder to avoid duplication.



Compiling with AUTTheme

`lualatex` is recommended.



Comparison to Beamer version

The Rmd version of this template does not yet have all the functionality of the beamer version, e.g. customised frame environments such as sectionpages.



Outline

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- Frame Sizes

- Customisation

- Outlines

- `\AtBeginSection`

- Customising `\AtBeginSection`

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Frame Sizes

The template can be used to create 16×9 or 4×3 slides by modifying the YAML header.

The resolution of the background images get updated automatically.

- To create 16×9 slides use classoption: "aspectratio=169"
- To create 4×3 slides use classoption: "aspectratio=43"

Customisation

The file `header.tex` contains the LaTeX commands used at the start of the document.

To use the AUTtheme package, `header.tex` needs to contain, a command like:

- `\usepackage{AUTtheme}` or
- `\usepackage[dct]{AUTtheme}`

The `header.tex` file can also be used to load other packages or customise the Beamer package in other ways, e.g.

```
\AtBeginSection{}
```

or

```
usepackage{lipsum}
```

Outlines

Sections are defined by #, subsections by ## and slides by ###. The `slide_level` can be defined in the YAML header.

An outline of all sections can be created by adding:

```
\tableofcontents[hideallsubsections]
```

\AtBeginSection

In `AUTtheme.sty` the default is that each section starts:

- with a title slide containing the section name
- an outline slide with the following specification

```
\tableofcontents[  
    currentsubsection,  
    sectionstyle=show/shaded,  
    subsectionstyle=show/shaded/hide,  
]
```

Customising \AtBeginSection

This can be customised in `header.tex`. For example, as shown in the header file for this demo

```
\AtBeginSection{
\begin{sectionframe}
\frametitle{Outline}
\tableofcontents[
    currentsection,
    sectionstyle=show/shaded,
    subsectionstyle=show/show/hide,
]
\end{sectionframe}}
```



Outline

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**Common Frame Features and
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Lists

Columns

Tables

LaTeX commands

Unordered list

- Bullet 1
 - sub Bullet
 - sub of sub Bullet
 - sub Bullet
- Bullet 2
- Bullet 3

Ordered list

1. Item 1

- Item 1a
- Item 1b

2. Item 2

3. Item 3

- Item 3a
- Item 3b



List with steps showing

1. Item 1

List with steps showing

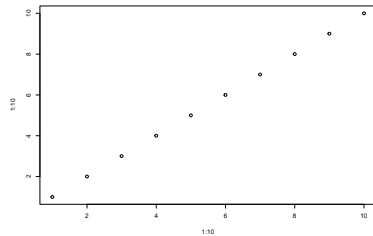
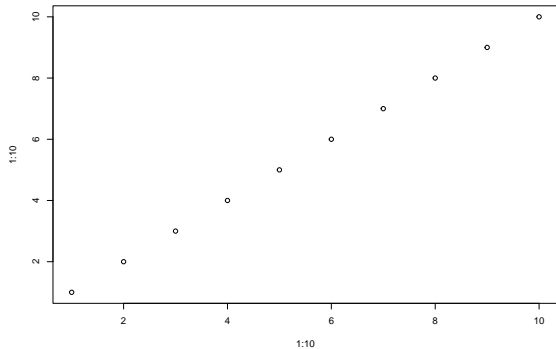
1. Item 1
2. Item 2

List with steps showing

1. Item 1
2. Item 2
3. Item 3

Columns

Column 1



Column 2

Tables

Assessment	Weighting	Hand out	Hand in
Quizzes	15%	Weekly	Weekly
Assignment	25%	Week 6	Week 8
Project	60%	Week 4	Week 12
Total	100%		



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Overlays

Footnotes

Protecting LaTeX commands

LaTeX Environments



Overlays

This appears on all slides.



Overlays

This appears on all slides. **This only appears on slide 2**

Footnotes

There is a really good book about geometric processes.¹ There is also a really good book about stochastic processes.²

¹Lam, Yeh. The Geometric Process and Its Applications. World Scientific, Hackensack, NJ, 2007.

²Ross, Sheldon. Stochastic Processes, 1998.

Protecting LaTeX commands

The following environment can be used to protect raw latex code (see source)

A B

A B

Example 1

For more information see

<https://bookdown.org/yihui/rmarkdown-cookbook/custom-blocks.html>

This paragraph will be centered on the page, and its width is 50% of the width of its parent element.