

What is Beamer?

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Introduction

Creating a beamer class document really isn't very hard at all once you learn the basics! It has so many different features and you can put just about anything you want into a presentation!

How to Begin With Beamer

The screenshot displays the RStudio IDE interface. The main editor window shows a Beamer presentation file named `4870Presentation.Rnw`. The code includes package loading, title setting, and document structure commands. The right-hand pane is divided into two sections: 'Environment' and 'Search Results'.

```
1 \documentclass{beamer}
2
3
4 \mode{presentation} {
5   \usetheme{Rochester}
6   \usecolortheme{seahorse}
7 }
8
9 \usepackage{graphics} % Allows including images
10 \usepackage{booktabs} % Allows the use of \toprule, \midrule and \bottomrule in tables
11
12
13 \title{What is Beamer?}
14
15 \author{Erin Krelling}
16 \institute{ASU}
17 {
18   Appalachian State University\\
19   \nakedip
20   \textit{krelling@emill.appstate.edu}
21 }
22 \date{\today}
23
24 \begin{document}
25
26 \begin{frame}
27   \titlepage
28 \end{frame}
29
30 \begin{frame}
31 \frame{Introduction}
32 Creating a beamer class document really isn't very hard at all once you learn the basics! It has so
33 many different features and you can put just about anything you want into a presentation!
34 \end{frame}
35
36 \begin{frame}
37 \frame{Graphics}
38 \begin{frame}{Flourish!}
39
40 \end{frame}
41 \end{document}
```

Environment

- Diff
- Commit
- History
- More...

Your branch is ahead of 'origin/master' by 3 commits.

Staged Status

- .Rhistory
- 4870Presentation-figure/
- 4870Presentation.Rpres
- 4870Presentation.md
- ScreenShot1.jpg
- Rproj.user/AD974875/pcs/files-pane.pper
- Rproj.user/AD974875/pcs/windowlayoutstate.pper
- Rproj.user/AD974875/pcs/workbench-pane.pper
- Rproj.user/AD974875/sdb/prop/INDEX
- Erin/STAT4870Presentation-concordance.tex

Search Results

The search string was "unmode"

Vignettes:

- [Matrix: sparseModels](#) Sparse Matrix Models [PDF](#) [source R code](#)
- [survival: tests](#) Cox models and "type 3" Tests [PDF](#) [source R code](#)

Code demonstrations:

- [stats: lm.glm](#) Some linear and generalized linear modelling examples from 'An Introduction to Statistical Modelling' by Annette Dobson [\(Run demo in console\)](#)

Help pages:

What Can Beamer Do For You?

■ The Central Limit Theorem

If a sample is sufficiently large, then the distribution is approximately normal and the sample mean will be approximately equal to the population mean.

■ The Fundamental Question of Inference

How does what we observe compare to what would actually happen if the null hypothesis were true and we repeated the test over and over?

How To Set Up Lists and Special Commands like Theorems

The screenshot displays a Beamer presentation editor interface. The main window shows LaTeX code for a presentation slide. The code includes commands for including graphics, setting frame titles, and defining theorems. The console window at the bottom shows error messages related to font shape and file paths. The file explorer on the right shows the project structure, including files like `.Rhistory`, `FinalScreenShot.jpg`, and `ScreenShot1.jpg`.

LaTeX Code:

```
38 \centering
39 \includegraphics[width=90mm]{FinalScreenShot.jpg}
40 \end{figure}
41 \end{frame}
42
43
44 \begin{frame}
45 \frametitle[What Can Beamer Do For You?]
46 \begin{itemize}
47 \item
48 \newtheorem{thm}[The Central Limit Theorem]
49 \newtheorem{rmk}[The Fundamental Question of Inference]
50 \begin{thm}
51 If a sample is sufficiently large, then the distribution is approximately normal and the sample
52 mean will be approximately equal to the population mean.
53 \end{thm}
54 \begin{rmk}
55 How does what we observe compare to what would actually happen if the null hypothesis were true
56 and we repeated the test over and over?
57 \end{rmk}
58 \end{itemize}
59 \end{frame}
```

Console Output:

```
./usr/local/texlive/2013/texmf-dist/tex/latex/beamer/beamerbaserequires.sty
Line 78: Font shape 'OT1/cms/m/n' in size <4> not available!Font size <5> substituted on input line 78.
Line 92: File 'FinalScreenShot.jpg' not found on input line 92.
Line 92: Package pdfref.def Error: File 'FinalScreenShot.jpg' not found.
Overfull vbox (47.73602pt too high) detected at line 92
~/Documents/4870Presentation2.vrb
Line 4: Citation 'p1' on page 11 undefined on input line 4.
./usr/local/texlive/2013/texmf-dist/tex/latex/beamer/beamerbaserequires.sty
File '4870Presentation2.out' has changed.
Size substitutions with differences(Font) up to 1.0pt have occurred.
There were undefined references.
Label(s) may have changed. Rerun to get cross-references right.
```

File Explorer:

Name	Size	Modified
..		
.Rhistory	2.6 KB	Mar 2, 2014, 10:19 PM
FinalScreenShot.jpg	277.3 KB	Mar 2, 2014, 10:17 PM
ScreenShot1.jpg	277.3 KB	Mar 2, 2014, 10:06 PM
Screen Shot 1.png	293.2 KB	Mar 2, 2014, 9:53 PM
4870presentation.Rpres	757 bytes	Mar 2, 2014, 9:39 PM
4870presentation.Rpres	492 bytes	Mar 2, 2014, 9:39 PM
ggmapTemp.png	303.8 KB	Mar 1, 2014, 3:49 PM
.RData	9.3 KB	Feb 26, 2014, 10:02 PM
.gitignore	31 bytes	Feb 24, 2014, 4:41 PM
SEMINAR.Rproj	204 bytes	Feb 17, 2014, 4:26 PM
README.md	19 bytes	Jan 26, 2014, 9:02 PM
README	18 bytes	Jan 13, 2014, 4:38 PM
4870presentation-figure		
Alan		
Andrew		
Brian		

Other Options in Beamer

- Definition

A **prime number** is a number that has exactly two divisors.

- - 2 is prime (two divisors: 1 and 2).

Other Options in Beamer

■ Definition

A **prime number** is a number that has exactly two divisors.

- ■ 2 is prime (two divisors: 1 and 2).
- ■ 3 is prime (two divisors: 1 and 3).

Other Options in Beamer

■ Definition

A **prime number** is a number that has exactly two divisors.

- 2 is prime (two divisors: 1 and 2).
- 3 is prime (two divisors: 1 and 3).
- 4 is not prime (**three** divisors: 1, 2, and 4).

Answered Questions

How many primes are there?

Open Questions

Is every even number the sum of two primes?

Explanation

The screenshot displays the RStudio IDE interface. The main editor window shows a Beamer presentation file named `STAT4870Presentation.Rnw`. The code is written in LaTeX and includes sections for a title, a definition of a prime number, and a list of items. The console window at the bottom shows the R prompt and the output of the `library()` function, indicating that the `knitr` package is loaded. The file explorer on the right shows the project structure, including the `4870Presentation.Rmd` file. The package list on the right shows various installed packages, including `knitr`, `reshape2`, `rpart`, `rstudio`, `scales`, `spatial`, `spines`, `stats`, `stats4`, `stringr`, `survival`, `tktk`, `tkzDevice`, `tools`, `utils`, and `xtable`.

```
67 \begin{frame}
68 \FrameTitle{Other Options in Beamer}
69 \begin{itemize}
70 \item
71 \item
72 \begin{definition}
73 A \textit{prime number} is a number that has exactly two divisors.
74 \end{definition}
75 \item
76 \begin{itemize}
77 \item 2 is prime (two divisors: 1 and 2).
78 \pause
79 \item 3 is prime (two divisors: 1 and 3).
80 \pause
81 \item 4 is not prime (\textit{three} divisors: 1, 2, and 4).
82 \end{itemize}
83 \begin{block}{Answered Questions}
84 How many primes are there?
85 \end{block}
86 \begin{block}{Open Questions}
87 Is every even number the sum of two primes?
88 \end{block}
89 \end{itemize}
90 \end{frame}
82:21 (Top Level) >
```

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

[Workspace loaded from ~/git_repositories/SEMINAR/Rdata]

> library("knitr", lib.loc="/Library/Frameworks/R.framework/Versions/3.8/Resources/Library")

Workspace History Git
Diff Revert Commit More
Your branch is ahead of 'origin/master' by 4 commits.
master +

Staged Status Path
✓ .DS_Store
✓ .Rhistory
✓ .gitignore
✓ 4870Presentation.Rpres
✓ 4870Presentation.Rmd
✓ Rproj.user/AD974875/pics/source-pane.ppr
✓ Rproj.user/AD974875/pics/windowlayoutstate.ppr
✓ Rproj.user/AD974875/sdb/prop/INDEX
✓ 4870Presentation-figure/unnamed-chunk-2.png
✓ Erin/STAT4870Presentation-concordance.tex

Files Plots Packages Help
Install Packages Check for Updates
✓ **knitr** 0.2.7-1
flexibly reshape data: a reboot of the
reshape package.
✓ **reshape2** 1.2.2
Recursive Partitioning and Regression
Trees
✓ **rpart** 4.1-5
Tools and Utilities for RStudio
✓ **rstudio** 0.97.551
Scale functions for graphics.
✓ **scales** 0.2.3
Functions for Kriging and Point
Pattern Analysis
✓ **spatial** 7.3-7
Regression Spline Functions and
Classes
✓ **spines** 3.0.2
The R Stats Package
✓ **stats** 3.0.2
Statistical Functions using S4 Classes
✓ **stats4** 3.0.2
Make it easier to work with strings.
✓ **stringr** 0.6.2
Survival Analysis
✓ **survival** 2.37-7
Tcl/Tk Interface
✓ **tktk** 3.0.2
R Graphics Output in LaTeX Format
✓ **tkzDevice** 0.7.0
Tools for Package Development
✓ **tools** 3.0.2
The R Utils Package
✓ **utils** 3.0.2
Export tables to LaTeX or HTML
✓ **xtable** 1.7-1