

# Beamer Font: Change its Size, Family and style



By Admin August 18, 2021



Fonts are the big cheese of any presentation. They play a crucial role in conveying information to the audience in the most straightforward manner. In this tutorial, we will learn different properties of a Beamer font, available fonts, and how to set up new fonts from parent ones.

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## 1. Font size

Size is one of the essential properties of a font. The visibility of our content majorly depends on the font size. Predominantly, the Beamer font size was defined in terms of points—for instance, 9 pts, 11 pts, 32 pts, etc .



Beamer has set 11 pts as the normal size of the font. This is the size which is considered as readable from an average distance. Keeping

this normal size as datum, other font sizes are defined such as: `\tiny`, `\scriptsize`, `\footnotesize`, `\small`, `\normalsize`, `\large`, `\Large`, `\LARGE`, `\huge` and `\Huge`.

The following code highlight different Beamer font size that can be obtained using the above commands:

```
1. % Beamer font size
2. \documentclass{beamer}
3.
4. % Theme choice
5. \usetheme{Copenhagen}
6.
7.
8. \begin{document}
9.
10.
11. \begin{frame}{Font size in Beamer (default)}
12.
13. \tiny This is tiny font size
14.
15. \scriptsize This is scriptsize font size
16.
17. \footnotesize This is footnotesize font size
18.
19. \small This is small font size
20.
21. \normalsize This is normalsize font size
22.
23. \large This is large font size
24.
25. \Large This is Large font size
26.
27. \LARGE This is LARGE font size
28.
29. \huge This is huge font size
30.
31. \Huge This is Huge font size
32.
33. \end{frame}
34.
35. \end{document}
```

Copy

which yields the following output:

## Font size in Beamer (default)

This is tiny font size

This is scriptsize font size

This is footnotesize font size

This is small font size

This is normalsize font size

This is large font size

This is Large font size

This is LARGE font size

This is huge font size

This is Huge font size

Navigation icons: back, forward, search, etc.



Font sizes can also be changed using the beamer class options. We have the sizes: [8pt], [9pt], [10pt], [11pt], [12pt], [14pt], [17pt], [20pt], [bigger], and [small].

Replacing `\documentclass{beamer}` to `\documentclass[14pt]`

`{beamer}`, all font sizes will be shifted where the normal size now is 14pt instead of 11pt. Here is the obtained result:

# Font size in Beamer (14pt)

This is tiny font size

This is scriptsize font size

This is footnotesize font size

This is small font size

This is normalsize font size

This is large font size

This is Large font size

This is LARGE font size

This is huge font size

This is Huge font size

Navigation icons: back, forward, search, etc.

## 2. Font family

Font family is the second most important property of a Beamer font.

Beamer typesets all its text in the [Computer modern font](#). There are three types of CM fonts : CM Roman, CM San Serif and CM Typewriter.

Check the following code to get an idea about setting the font family in Beamer:

```
1. % Beamer Font family
2. \documentclass{beamer}
3.
4. % Theme choice
5. \usetheme{AnnArbor}
6.
7.
8. \begin{document}
9.
10.
11. \begin{frame}[fragile]{Beamer Font family}
```

Copy

```

12.
13.  \verb|\rmfamily|: \rmfamily CM Roman
14.
15.  \verb|\sffamily|: \sffamily CM Sans serif
16.
17.  \verb|\ttfamily|: \ttfamily CM Typewriter
18.
19.  \verb|\mathrm|: \mathrm CM upright and sans-serif math font
20.
21.  \end{frame}
22.
23.  \end{document}

```

which yields the following:

## Beamer Font family

```

\rmfamily: CM Roman
\sffamily: CM Sans serif
\ttfamily: CM Typewriter
\mathrm:  CM upright and sans-serif math font

```

- The used commands are: `\rmfamily` for CM Roman, `\sffamily` for CM Sans serif, `\ttfamily` for CM Typewriter and `\mathrm` for CM upright and sans-serif math font.
- We added the option `[fragile]` to be able to use verbatim inside a frame, a more details can be found in “Beamer Code Listing — Syntax

highlighter” lesson.



The other fonts that can be supported by beamer are : Times, Helvetica, Futura.

Besides the font family, beamer has two font series which decide the stroke intensity of the font. The two types of series are : regular and bold. These are obtained using the commands `\mdseries` and `\bfseries`, respectively.

### 3. Font shape and style



Beamer supports four types of font shapes: upright, slanted, italics and small caps. Check the example below!

```
1. % Beamer font shape
2. \documentclass{beamer}
3.
4. % Theme choice
5. \usetheme{CambridgeUS}
6.
7. \begin{document}
8.
9. \begin{frame}[fragile]{Beamer Font shape and style}
10.
11. \verb|\upshape|: \upshape This is upright text.
12.
13. \verb|\slshape|: \slshape This is slanted text.
14.
15. \verb|\itshape|: \itshape This is italics text.
16.
17. \verb|\scshape|: \scshape This is small caps text.
18.
19. \end{frame}
20.
21. \end{document}
```

Copy

which yields the following output:

## Beamer Font shape and style

`\upshape`: This is upright text.  
`\slshape`: *This is slanted text.*  
`\itshape`: *This is italics text.*  
`\scshape`: THIS IS SMALL CAPS TEXT.

The upright shape is the default shape for the normal text. The slanted and italics text are seldom used in presentations. The italics font will look same as slant font if the sans-serif font family is used. To have a Times italics effect, the serif font family is mandatory. Italics font shape is used for math. However, the practice of using bold colored text for highlighting is recommended.

The last shape is the small caps. This shape uses smaller versions of the uppercase letters for normal typesetting lowercase letters.



The reading time for the small caps font shape is higher than that for normal text. Thus, making it inadvisable for presentations.

## 4. Font weight

The thickness of the font is referred to as the font weight. The two weights that are often used are : regular and bold. The bold text is used to create emphasis on a particular topic. The other font weights available in beamer are semibold, ultrabold, thin, and ultrathin.

## 5. Font Themes

In this section, we will learn the different pre-defined font themes in beamer. These themes can be used to change the global structure of the presentation.



To change the font family of a theme, we use the command `usefonttheme{}` together with one of these font themes:

- `default`,
- `serif`,
- `professionalfonts`,
- `structurebold`,
- `structureitalicserif`,
- `structuresmallcapsserif`.

### – Theme font: Default

The default font theme installs sans serif font for all text of the presentation and installs different font sizes for elements like titles, headlines and footlines, but does not use boldface or italics for “highlighting.”

Consider the following code that loads the default font theme:

```
1. % Beamer Theme Fonts
2. \documentclass{beamer}
3.
4. % Theme choice:
5. \usetheme{Warsaw}
6.
7. % Beamer theme font
```

Copy



```

8. \usefonttheme{default}
9.
10. % Title page details:
11. \title{Beamer Font Themes (default)}
12. \author{latex-beamer.com}
13. \date{\today}
14.
15.
16. \begin{document}
17.
18. % Title page frame
19. \begin{frame}
20.   \titlepage
21. \end{frame}
22.
23. \begin{frame}
24.
25.   \begin{block}{Math equations}
26.     The Pythagorean theorem is a fundamental relation in Euclidean
27.     geometry among the three sides of a right triangle:
28.     \begin{equation}
29.       a^2+b^2=c^2
30.     \end{equation}
31.   \end{block}
32. \end{frame}
33.
34.
35. \end{document}

```

Compiling this code yields:

Beamer Font Themes (default)

latex-beamer.com

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Math equations

The Pythagorean theorem is a fundamental relation in Euclidean geometry among the three sides of a right triangle:

$$a^2 + b^2 = c^2 \quad (1)$$

– Theme font: professionalfonts

Using `\usefonttheme{professionalfonts}` instead of `\usefonttheme{default}` in the above code, we get the following result:

---

Beamer Font Themes (professionalfonts)

latex-beamer.com

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Math equations

The Pythagorean theorem is a fundamental relation in Euclidean geometry among the three sides of a right triangle:

$$a^2 + b^2 = c^2$$

(1)

latex-beamer.com

Beamer Font Themes (professionalfonts)

latex-beamer.com

Beamer Font Themes (professionalfonts)

## – Theme font: serif

This theme causes all text to be typeset using the default serif font.

---

Beamer Font Themes (serif)

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Math equations

The Pythagorean theorem is a fundamental relation in Euclidean geometry among the three sides of a right triangle:

$$a^2 + b^2 = c^2$$

(1)

latex-beamer.com

Beamer Font Themes (serif)

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Beamer Font Themes (serif)

## – Theme font: structurebold

This font theme will cause titles and text in the headlines, footlines, and sidebars to be typeset in a bold font.

## Beamer Font Themes (structurebold)

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### Math equations

The Pythagorean theorem is a fundamental relation in Euclidean geometry among the three sides of a right triangle:

$$a^2 + b^2 = c^2 \quad (1)$$

latex-beamer.com

Beamer Font Themes (structurebold)

latex-beamer.com

Beamer Font Themes (structurebold)

## – Theme font: structureitalicserif

This theme is similarly as the structurebold font theme, but where structurebold makes text bold, this theme typesets it in italics and in the standard serif font.

## *Beamer Font Themes (structureitalicserif)*

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### Math equations

The Pythagorean theorem is a fundamental relation in Euclidean geometry among the three sides of a right triangle:

$$a^2 + b^2 = c^2 \quad (1)$$

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Beamer Font Themes (structureitalicserif)

latex-beamer.com

Beamer Font Themes (structureitalicserif)

## – Theme font: structuresmallcapsserif

Again, this theme does exactly the same as the structurebold font theme, only this time text is set using small caps and a serif font.

$$a^2 + b^2 = c^2 \quad (1)$$

## Summary

- In this lesson, we presented different commands and options to change Beamer font size, shape and family. Moreover, we highlighted different available theme fonts.

Next Lesson: 14 Beamer Table – Full guide with examples

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