

Aesthetic Mapping in ggplot2

Spoken Tutorial Project

<https://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in/>

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5 July 2019



Learning Objectives

We will learn:



Learning Objectives

We will learn:

- ▶ **What is aesthetic**



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We will learn:

- ▶ **What is aesthetic**
- ▶ **How to create plots using aesthetic**



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We will learn:

- ▶ **What is aesthetic**
- ▶ **How to create plots using aesthetic**
- ▶ **Tuning parameters in aesthetic**



Pre-requisites



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- ▶ **Basics of statistics**



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- ▶ Basics of statistics
- ▶ Basics of **ggplot2** package



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- ▶ Basics of **ggplot2** package
- ▶ Data frames



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- ▶ Basics of statistics
- ▶ Basics of **ggplot2** package
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Please locate the relevant tutorials on <https://spoken-tutorial.org/>



System Specifications



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- ▶ **Ubuntu Linux OS v 16.04**



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- ▶ **R v 3.4.4**



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- ▶ **RStudio v 1.1.463**



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- ▶ **R v 3.4.4**
- ▶ **RStudio v 1.1.463**

R version 3.2.0 or higher



Download Files

We will use:



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We will use:

- ▶ A data frame **moviesData.csv**



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We will use:

- ▶ A data frame **moviesData.csv**
- ▶ A script file **aesPlots.R**



Download Files

We will use:

- ▶ A data frame [moviesData.csv](#)
- ▶ A script file [aesPlots.R](#)

Download these files from the [Code files](#) link of this tutorial



What is Aesthetic



What is Aesthetic

- ▶ **Aesthetic is a visual property of the objects in a plot**



What is Aesthetic

- ▶ **Aesthetic is a visual property of the objects in a plot**
- ▶ **It includes lines, points, symbols, colors and position**



What is Aesthetic

- ▶ **Aesthetic is a visual property of the objects in a plot**
- ▶ **It includes lines, points, symbols, colors and position**
- ▶ **It is used to add customization to our plots**

Summary

We have learnt:

- ▶ **What is aesthetic**
- ▶ **How to create plots using aesthetic**
- ▶ **Tuning parameters in aesthetic**



Assignment

1. Using built-in data set *mtcars*, draw a bar chart from the object *cyl*
2. Add suitable labels to this bar chart



About the Spoken Tutorial Project

- ▶ Watch the video available at http://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- ▶ It summarises the Spoken Tutorial project
- ▶ If you do not have good bandwidth, you can download and watch it



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- ▶ Gives certificates to those who pass an online test
- ▶ For more details, please write to contact@spoken-tutorial.org



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- ▶ Explain your question briefly
- ▶ Someone from the **FOSSEE** team will answer them. Please visit

<http://forums.spoken-tutorial.org/>



Forum to answer questions

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- ▶ Do you have general / technical questions on the Software?
- ▶ Please visit the FOSSEE Forum
<http://forums.fossee.in/>
- ▶ Choose the Software and post your question



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- ▶ We give honorarium and certificates to those who do this

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<https://r.fossee.in/>
<https://fossee.in/>



Acknowledgements

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- ▶ It is supported by the National Mission on Education through ICT, MHRD, Government of India
- ▶ More information on this Mission is available at:

<http://spoken-tutorial.org/NMEICT-Intro>



Thank You

- ▶ The script for this tutorial was contributed by Varshit Dubey (CoE Pune)
- ▶ The video has been created by Sudhakar Kumar, IIT Bombay

