Week 2 Tutorial

Maria Prokofieva

15/01/2020

Week 2: Basics of data viz

This week we are getting into data viz with R. We already started working with RMarkdown - which is "file format" to present your data insights and communicate them to stakeholders

A screencast of the tutorial is available here:

Things to cover:

1. `ggplot2` library: install and start using

2.

3. Work with 2 types of documents:

- `R script`
- `RMarkdown` document.
- how to load libraries
- `R` syntax and basic functions: BUT

Remember: **This is not a programming unit! We focus on data and working with data**

What I need to learn:

- work with `RMarkdown` documents with dataviz
- install and load `ggplot2` library
- work with layers in the grammar of gpaphics in `ggplot2`
- create basics dataviz "shapes": e.g. histograms, line charts, etc. in `ggplot2`
- use colour in your data viz in `ggplot2`
- use themes in `ggplot2`
- use legends, labels and axes names
- use faceting and present multiple data insights on one data viz

Resources

ggplot2: Elegant Graphics for Data Analysis https://ggplot2-book.org/

RMarkdown: https://rmarkdown.rstudio.com/lesson-1.html

Using data viz in `RMarkdown`

This tutorial we are going to have a closer look at `RMarkdown` and put out data viz there

Task

- create an RMarkdown document and select `html` as output - this tells R to create an `html document` when you knit it (you can later swap it to `Word document`)

- Look at the structure of the document and syntax used. Locate the following:

– meta-data section – R code chuncks – text

Homework

Set up your *free* DataCamp account and have a look at the free tutorial Introduction to R they offer. This provides some good insights on the data types you will commonly use in R.