Statistics with R WS 2025/2026

## Class Sheet 0

You will have to hand in this class sheet after 60 minutes! This week, it will not be graded, but discussed immediately afterwards.

## **Preliminaries**

- find two more students and create an assignment group on cms!
- make sure to have joined the datacamp classroom using the link from cms, check, if you can work on assignments and ask tutor or group mates for help, if this is not possible

## Measurement Scales, Populations and Samples

1. Give an example of a continuous and a discrete measurement variable from your interest area (e.g. HCI, Bioinformatics, etc.). What are their scales?

CONTINUOS DISCRETE

Money students spend at Mensa. Grade of a student

137.46 E 1.0

2. Give an example of a population and of a sample (in the context of some specific research question). Do you know (from studies you have read or heard about), how the samples are typically chosen in your field?

Population: Students in Germany Sample: 200 students UDS

Randomly select people with particular course or bg.

3. In your example, is it really a random sample of the population or not? Why? No because the students will only come from Saculard

- 4. Identify the independent and dependent variable in the following example and mention its scale
  - (a) Comparing the nutritional value (in calories) of UdS Mensa's complete meal, vegetarian meal and free flow meal.

Ind. Var. Type of tood (Drscrete ordinal)

Dependent Var. Amount of colones (Continues vatio)

(b) Measuring the satisfaction of train passengers on a five-point Likert scale relative to the delay they experienced in their last trip.

Ind Questions (Discrete Norminal)
Dep Satistaction (Discrete Ordinal)

(c) counting the number of "yes" and "no" responses to the question "Should the number of parking spots in the city center be reduced to create more space for bikes" in a random sample of the population by gender.

Ind Gender (Discrete Nominal)

Dep Number of yes/no. (Drscreh hadra)