University of Koblenz - AG Softlang

Data Science

Assignment 1: Intro

To be submitted until the 17.11.2021 (2 p.m.)

November 3, 2021

Question 1: Experimental vs. Observational

List two what-if (causal) research questions that should better be answered by an **experimental** and **observational study** each (in total four questions). Give the question and a short description of the study design. Explain for each question, why the other type is less suited or impossible for answering the question. List existing (digital) data source for your observational research questions. Please do not copy the exact examples from the lecture. Report on the results according to the following schema (e.g., in terms of a table).

- **Questions:** Write 1 sentences covering a research question.

- **Design:** Write 1-2 sentences describing the study design.

- **Study Type:** Classify the study design into the experimental and observational study type.

- **Critical for the Study Type:** Write 1-2 sentences to explain why you associate it with the particular study type and not the other.

- **Data Sources:** Add existing digital data sources (if not experimental study).