Report requirements

What is part of the report?

Throughout this book, you will find two kinds of exercises:

- Exercises for which we provide solutions. These are NOT part of the final report and solutions are provided for self-study.
- Exercises in sections called "Report Exercise", which are part of your Final Report. These are:
    1. Chapter 4 (Tidy data)
    2. Chapter 5 (Air quality data visualisation)
    3. Chapter 8 (Collaborating with git)
    4. Chapter 9 (Stepwise regression)
    5. Chapter 10 (KNN)
    6. Chapter 11 (Flux modelling)

The data to solve all these exercises is accessible here.

How do you hand in your report?

You will send us a link to your GitHub account by email (benjamin.stocker *an der* unibe.ch) that holds the following three repositories:

- Out of the six report exercises, solve five to.
- Your report repository that holds your report as five .html files that is created from the respective five .Rmd files (one for each Report Exercise, see above).
- Two repositories from the exercise in Chapter 8 (Collaborating with git):
    - Your original repository that your partner's cloned repository where you accepted a pull request.
    - Your forked repository from your partner on which you opened a pull request.
    - "Hand in" the "report" by pointing us to the URL of your repositories by 09.06.2024 at 8.00 CET.

How do we grade the report?

For each Report Exercise you can obtain a maximum of 12 points. The final grade is the average across the number of points across Report Exercises (capped at 6, of course).

The grading will consider:

- The code for each Report Exercise needs to be reproducible (3 P).
- Good coding practice (legibility of code, workspace organisation, proper code management) (3 P).
- Quality of visualisations (3 P).
- Interpretations (3 P).

Note that we consider the commit history of your repository to ensure ownership and plausibility of your code contributions. This is to make sure that you cannot copy a repository from someone else and submit it under your name.

Important: Reproducibility is key and and we expect that after completing this course, you are able to conduct reproducible workflows! You can ensure that your report is reproducible by letting a colleague or yourself from re-cloning code from GitHub and run your code. This gets you the first 3 P per Report Exercise.

FAQ

Can Report Exercises be done as partner or group work?

No. Each (registered) student hands in their Report Exercise individually. We will check whether submitted Report Exercises have exact duplicates. Note that there is usually no right or wrong way to solve the Report Exercises. The process is important and for our assessment, we will consider the complete implementation of

the workflow, the code, the visualisation, and interpretation rather than the exact solution. Do it yourself - it's your opportunity to practice and gain confidence in mastering the data science workflow.

Can I use AI for creating the Report Exercises.

The use of AI is permitted as a aid. However, you are responsible for all contents. AI often fails with details that could make your work unreproducible or generate wrong or unintended results. AI generally generates generic statements. In assessing your Report Exercises, we put a strong focus on these points, your interpretation of the results, and the written and visual communication. Reliance on outputs generated by an AI implies a high risk of failing on these grounds, resulting in poor grades and failure of the course. If we see that your Report Exercises look like a copy of an output of an AI, we apply a very strict grading. This course (and studying at a University in genreal) is your opportunity to learn. Make the best of it and prove us that you're not replaceable by an AI. It would be sad and a waste of your and our time.