

# Project Delivery Guidelines

## 1. Project/Report Skeleton:

In your project you should address some points that can be structured under the following headings:

- **Project Title**
- **Team members' info:** names and e-mail addresses
- **Percent of Contribution** table (refer to section 3.Grading).
- **Abstract:** Briefly describe the data and what were the main achievements of your visualizations
- **1. Background and Motivation.** Discuss your motivations and reasons for choosing this project, especially any background or research interests that may have influenced your decision.
- **2. Project Objectives.** Provide a list of questions (and sub questions if relevant) which you plan to answer with your visualizations. What would you like to learn and accomplish?
- **3. Data.**
  - **From where** did you get your data? If appropriate, provide a link to your data sources.
  - **Description:** describe all the relevant variables, number of records and any special feature of your data (if there is any)
  - **Data Processing.** Did you need to do substantial data cleanup? If yes, what techniques did you use?
- **4. Visualization/Dashboard:**
  - **Design.** How will you display your data? Provide some general ideas that you have for the visualization design. Describe your designs and justify your choices of visual encodings.
  - **Must-Have Features.** List the features without which you would consider your project to be a failure.
    1. You must have **at least three types of graphs** (i.e barchart, timeseries plot or boxplots) and
    2. **at least one animated graph** (using for example ganimate).
    3. **An AI-generated graph** must be included in the dashboard with description on how (from what platform and with what prompts) it is produced. Also you must specify which question regarding the dataset it answers.
    4. **In total at least 9 graphs.** Provide clear and well-referenced images showing the key design and interaction elements.
    5. **A link to the dashboard/Visualization** must also be included in the report.
    6. **An option to download the report** as a manual from the dashboard
  - **Optional Features.** List the features which you consider to be nice to have, but not critical.
    1. A visualization you designed that is so unique and customized that no existing function or graph in R or Python could implement it. It might be hand-drawn or created using a specialized tool like D3.js. **Example:** Spike Map in D3.js (<https://observablehq.com/@d3/spike-map/2> )

- **5. Story/Results** here you should provide answers to the questions in section 2. Project Objectives. Tell the story of the data that you saw in the visualization. What were your expectations and how close they were to what data revealed. What did you learn about the data by using your visualizations? How did you answer your questions? How well does your visualization work, and how could you further improve it?
- **6. Conclusion/Discussion** finally you conclude the report by a summary of what you achieved, how you achieved, what were the challenges for you and how the course can be improved.

Make sure that you plan your work so that you can avoid a big rush right before the **final project deadline (end of December)**, and delegate different modules and responsibilities among your team members. You can write this in terms of weekly deadlines. Page limit is **minimum 12 and maximum 15**.

## 2. Final Project/Report Submission

For your final project you must hand in the following items in a .zip file via Digital Exam:

1. **Report:** the report can also be a manual for the dashboard, that can be downloaded from the dashboard.
2. **The code** (R, Python or...) that was used to develop the dashboard.
3. **A two minutes video** showing a demo of your dashboard that describes the most important features of your visualization.

Name the file after the course, semester and your group, i.e. DV\_E25\_group03.zip

## 3. Grading

Grading is based on two parts:

1. Group projects – 65%
2. Written exam – 35%

The exam consists of written answers only (NO multiple-choice questions).

### 3.1. Group projects

Projects are expected to be submitted by the end of December. Grading will follow the Danish 7-point scale. Your individual grade for the group project will be determined based on the percentage of contribution you report in the final project documentation.

For instance, if the overall grade is 10 and the percent of contributions for team members are:

A team with equal contributions			
student	Percent of Contribution (PoC)	Project grade (G)	Individual grades (PoC*G/100)
1	100	10	10
2	100	10	10
3	100	10	10
4	100	10	10

A team with unequal contributions			
student	Percent of Contribution (PoC)	Project grade (G)	Individual grades (PoC*G/100)
1	100	10	10
2	60	10	6 (will be converted to 7)
3	70	10	7
4	20	10	2

The following criteria will be considered for the grading:

- Report in general: Is the visualization/dashboard well documented in your report?
- Visualization: Is your visualization effective in answering your intended questions? Does it have all the must-have(s)? Do the graphs and the animation follow the basic design guidelines? Does it have a good level of interactivity?

### 3.2. Written exam

- Approximate date for the written exam is **early January**.
- You will have **90 minutes** to answer approximately **6 to 10 questions**.
- The exam will be held **in person** at SDU.
- Each question has a score depending on its difficulty level.
- Your total score from the written exam will be converted to the Danish 7 point scale.

### 3.3. Final grades

Final grades will be calculated based on the individual grades from the projects and the written exam's grades. Here is an example:

Individual grade from the project	Grade from the written exam	Final grade
10	7	$0.65 \times 10 + 0.35 \times 7 = 8.95 \simeq 10$
4	10	$0.65 \times 4 + 0.35 \times 10 = 6.1 \simeq 7$