# DataViz-Project (Plan)

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| **Group**<br>First and last names of all group members | • Penelope Plos<br>• Nicole Cieplinski<br>• Xenia Zbinden<br>• Elisabeth Hermann |
| **Topic**<br>• What is the topic of your DataViz project?<br>• Which thematic aspects should be addressed?<br>• Which question(s) should the DataViz project answer? | **Topic:**<br>• The topic of our project is the history of past pandemics in Switzerland.<br><br>**Thematic Aspects:**<br>• The development and spread of pandemics in Switzerland over time.<br>• Cases, mortality rates, and excess mortality across different periods.<br>• Seasonal influenza trends and mortality spikes during major outbreaks.<br>• Long-term changes in causes of death and public health transitions.<br>• We initially planned to include demographic and cantonal comparisons, but found no clear or meaningful differences between the regions based on the available data.<br><br>**Questions to answer:**<br>• How severe were past pandemics in Switzerland compared to COVID-19?<br>• How did pandemic death rates and excess mortality change over time?<br>• What role did seasonal influenza play in historical mortality trends?<br>• How did the 1957 Asian Flu pandemic unfold in terms of infections vs. deaths?<br>• How have causes of death in Switzerland shifted over the past 140 years?<br>• What historical patterns can help inform future pandemic preparedness? |
| **Message**<br>Write a key message for your DataViz project. | By visualizing historical data on cases, mortality, and historical patterns, we can gain valuable insights into how pandemics evolved and how society responded. Learning from the past is key to protecting the future |
| **Title**<br>Write a title based on your key message. The title can be provisional and can be changed later. | Lessons from the Past: Visualizing Switzerland's Pandemic History to Prepare for the Future. |

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| **Visualization Product**<br>What form should the visualization product take? For example, dashboard or data story? | We chose Data Story to present insights clearly and engagingly by combining visuals with narratives for better understanding. |
| **Publication Medium**<br>Where should your DataViz project be published, e.g., website of a company or organization, app, or intranet? | If the visualizations are suitable, they will be published on the project website www.leaddata.ch.<br><br>We initially attempted to implement an open-access website using Streamlit; however, due to technical issues, this approach was not successful. However, it can be accessed locally from the terminal. |
| **Target Group(s)**<br>Who is the target group? Search data/information on the target group. This research will later help you to create the 2 personas. | - general public (interested in history and epidemiology, no knowledge - basic knowledge)<br><br>- Researchers (deep knowledge) |
| **Visualization**<br>• How many visualizations are needed to adequately visualize the topic?<br>• Which type(s) of visualization could be suitable? Static, dynamic? | We created 11 visualizations using a combination of Matplotlib and Bokeh. These include bar charts, line charts, area charts, and interactive time series visualizations. They are based on four main datasets covering pandemic deaths, excess mortality, influenza incidence, and long-term cause-of-death trends in Switzerland.<br><br>We used a mix of static and interactive (dynamic) visualizations:<br><br>• **Static:** For high-level comparisons (e.g., pandemic death rates across history).<br>• **Dynamic/Interactive:** To allow users to explore time-series data and detailed breakdowns by year or cause of death (e.g., Bokeh visualizations of influenza mortality, excess mortality, and disease trends). |
| **Sources**<br>List the sources you used for your DataViz project. Include which data sources you searched and which datasets you specifically used. | **The data sets come form the Project '** *Bridging the gap: Dialogues between scientists and the public, policymakers, and journalists about lost past pandemic experiences*. The project is funded by the Swiss National Science Foundation (SNSF).' From the leaddata website |