Data Analysis and Business Insights Project Assignment

- **Data Selection and Presentation:**
  - Choose a dataset from French Government Open Data Portal and introduce it by describing its context and contents.
  - https://www.data.gouv.fr/fr/datasets/

- **Data Preprocessing:**
  - Begin by formulating a meaningful business question and a target variable that you will try to explain or predict
  - Inspect the dataset to identify any missing values, outliers, and inconsistencies.
  - Apply appropriate data cleaning methods and justify your treatment choices.

- **Exploration and Cleaning:**
  - Conduct exploratory analysis to understand the distribution and nature of the variables.
  - Document the cleaning steps and transformations applied, such as normalization, transformation, or the creation of new variables.

- **Target Variable and Business Questions:**
  - Identify a target variable and formulate clear and relevant business questions.
  - These questions should align with the objectives of a decision-maker in the related domain.

- **Descriptive Analysis and Question Response:**
  - Use descriptive statistics, visualizations, and other analysis methods to address the business questions.
  - Interpret your results within a business context.

- **Conclusion:**
  - Synthesize your findings and provide business recommendations based on your analysis.
  - Discuss the limitations of your study and suggest directions for future analysis.

Data Analysis and Business Insights Grading Scheme

- **Data Preprocessing (20%):**
  - Identification and handling of missing values (5%)
  - Management of outliers and errors (5%)
  - Relevance of applied cleaning and transformations (10%)

- **Exploration and Cleaning (20%):**
  - Depth of initial exploratory analysis (10%)
  - Clarity in documentation of cleaning steps (10%)

- **Target Variable and Business Questions (15%):**
  - Wise selection of the target variable (5%)
  - Relevance and articulation of business questions (10%)

- **Descriptive Analysis (25%):**
  - Consistency of analysis methods with business questions (10%)
  - Quality of visualizations and interpretation (15%)

- **Conclusion (10%):**
  - Ability to synthesize and conclude the analysis (5%)
  - Validity of recommendations and future outlook (5%)

- **Presentation (10%):**
  - Structure and coherence of slides (5%)
  - Visual and editorial quality (5%)

Data Analysis and Business Insights Instruction

Submission Instructions:

Your presentation must include 15-25 slides, with a title page and a conclusion page.

Submit in PDF format **by Friday, December 22, 2023 23:59pm**

Ensure **to cite all sources** of external code used, or the prompt from a language model, such as ChatGPT, that led to the code utilized in your Kaggle notebook.

Work may be completed individually or in groups, as per course rules.

Submit your slides and a publicly shared Kaggle notebook in a zipped file labeled with the trigrams of group members' first names (e.g., Simon Coulet -> SCO). Include all group members' full names on the first slide of the presentation followed by the link to your notebook.

The zipped file should be sent to simon.coulet@saegus.com.