GA TECH THEMED QUARTO TEMPLATE

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Abstract

Provide a brief summary of the assignment, including objectives, methods, and key findings.

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Main Sections for Each Question

Each top-level section is named after the specific question or problem being addressed (e.g., Question ##). This ensures clarity and helps reviewers or graders quickly locate your answers.

You can input references and have them notated as well.[1], [2], [3]

Why use it?

- Mimics the format of assignments where each question is treated as a standalone unit.
- Maintains a clear link between the problem and your analysis.
- Encourages modular thinking for multi-part assignments.

> Can use the callout note boxes as a way to list the actual homework question word of word or to call out the information as important.
>
> > **!** You can also nest a callout box so that additional callouts can be made.

Methodology

Purpose: Describe how you approached the problem, including any analytical tools, techniques, or frameworks you used.

Why use it?

- Demonstrates your thought process and analytical rigor.
- Provides enough detail for reproducibility without overwhelming with technical specific

Data Pre-Processing

If using code boxes throughout the report vs at the bottom in one section ensure you import the proper libraries here or before.

```
1  # Library imports
2  library(ggplot2)
3  data(mtcars)
4  library(stats)
5  library(utils)
6  library(reticulate) # to allow python code blocks                    ①
```

① Can also use annotation not just comments

```
1  import pandas as pd # For data handling
```

Data Processing

Summary

Purpose: Summarize your findings and results in a concise, narrative form.

Why use it?

- Allows readers to grasp your key results without diving into detailed data or visuals.
- Bridges the gap between methodology and insights.

Key Insights

Purpose: Present the actionable insights or conclusions derived from the analysis.

Why use it?

- Focuses on the "so what?" aspect of your work.
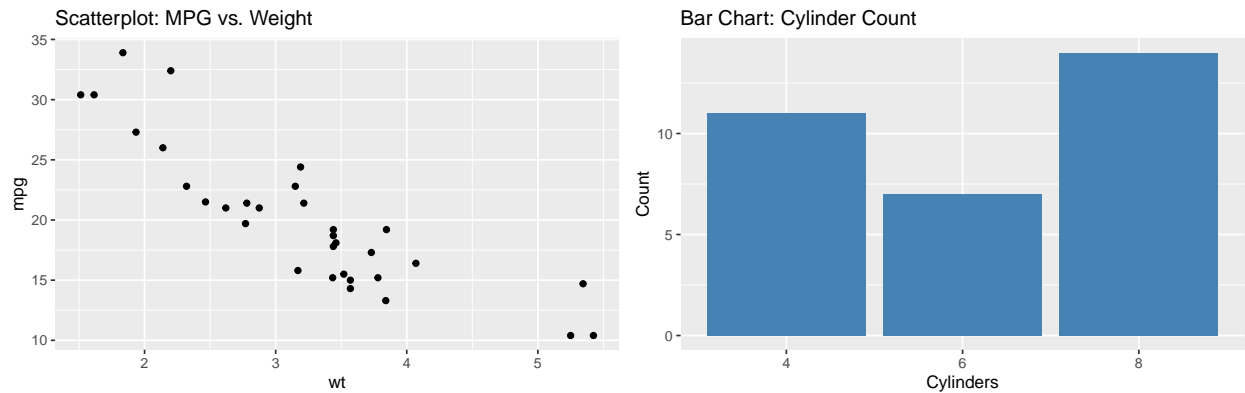- Encourages you to think critically about the implications of your results.

Optional Code(Blocks) Section

Purpose: Include code used for analysis and visualizations.

Why use it?

- Keeps technical implementation separate from the narrative, making the report cleaner and easier to read.
- Ensures your work is reproducible and transparent.

```
1  ggplot(mtcars, aes(x = wt, y = mpg)) +
2    geom_point() +
3    labs(title = "Scatterplot: MPG vs. Weight")
4  ggplot(mtcars, aes(x = factor(cyl))) +
5    geom_bar(fill = "steelblue") +
6    labs(title = "Bar Chart: Cylinder Count",
7        x = "Cylinders",
8        y = "Count")
```

Scatterplot: MPG vs. Weight

Bar Chart: Cylinder Count

References

[1]   J. Q. Doe, *The fake book of data science*, 1st ed. Nowhere City: Imaginary Press, 2023.

[2]   J. A. Doe, "How to pretend you're doing research," *Journal of Pretend Science*, vol. 99, no. 42, pp. 123–456, 2022, doi: 10.fake/12345. Available: https://www.fakejournal.org/pretendresearch

[3]   A. T. Smith and S. Davis, "Inventing results for a conference," in *Proceedings of the 42nd fake conference on data science*, Fictionalville, Neverland: Make Believe University, 2021, pp. 987–999. doi: 10.fake/987654

Figures & Tables

Figures, tables, and their legends, should be included at the end of the document. Figures and tables are easily included with Quarto, e.g. Figure 1 and Table 1. See the relevant Quarto documentation for figures and tables.

Table 1: Legend (350 words max). Example legend text.

car	color	mgp
mazda	blue	10.4
fiat	read	15.43

Appendix (Optional)

Purpose: Include supplementary materials like extended analyses, additional visualizations, or raw data.

Why use it?

Keeps the main report focused while providing access to detailed information if needed.

Figure 1: Legend (350 words max). Example legend text.