Project Title: Customer Segmentation using data science

Phase5

1. Problem Statement:

- Briefly describe the problem you aimed to address with customer segmentation.
- Explain the significance of this problem in the context of your business or project.

2. Design Thinking Process:

- Summarize the key steps in your design thinking process, such as empathizing, defining, ideating, prototyping, and testing.
- Mention any user research or feedback that influenced your project.

3. Phases of Development:

- Outline the phases your project went through, which typically include: a. Data Collection and Preparation b. Data Analysis and Modeling c. Customer Segmentation d. Evaluation and Validation

4. Dataset Description:

- Provide details about the dataset used, including its source, size, and relevant attributes.
- Mention any challenges or limitations associated with the dataset.

5. Data Preprocessing Steps:

- List the steps you took to clean and prepare the data for analysis. This may include handling missing values, encoding categorical variables, and scaling features.

6. Analysis Techniques:

- Explain the analytical methods used for customer segmentation (e.g., clustering algorithms like K-Means or hierarchical clustering).
- Discuss the rationale behind choosing these techniques.

7. Key Findings:

- Summarize the significant findings from your analysis. What are the main customer segments that emerged?
- Include any visualizations or graphs that illustrate these findings.

8. Insights:

- Discuss the insights gained from the customer segments. What common characteristics or behaviors do these segments exhibit?
- Highlight any surprises or unexpected discoveries.

9. Recommendations:

- Provide actionable recommendations based on the customer segments. How can your business or project leverage these segments?
- Suggest strategies for personalized marketing, product development, or customer service.

10. Conclusion:

- Sum up the key takeaways from your customer segmentation project.
- Discuss the potential impact of these findings on your business or project.

11. References:

- List any data sources, research papers, or tools you used in your project.

12. Appendices:

- Include any supplementary materials, such as code snippets, additional visualizations, or detailed technical documentation.