1. Title and Introduction

- A clear and concise title that reflects the main objective of the project.
- A brief overview of the problem statement, the significance of the project, and the dataset used.

2. Problem Statement

- Clearly define the problem you are addressing.
- Explain why the problem is important and how it relates to real-world scenarios.
- Specify the goals and objectives of your machine learning project.

3. Data Collection and Preprocessing

- Describe the data sources and provide relevant information about the dataset.
- Explain how the data was collected and if any preprocessing steps were taken.
- Discuss data cleaning, handling missing values, and dealing with outliers.
- Detail any data transformations, feature engineering, or dimensionality reduction.

4. Exploratory Data Analysis (EDA)

- Provide insights gained from analyzing the dataset.
- Include visualizations (e.g., histograms, scatter plots) to highlight important characteristics.
- Discuss any patterns, trends, or correlations observed in the data.

5. Methodology

- Explain the machine learning algorithms or techniques used.
- Provide a rationale for choosing these methods and their suitability for the problem.
- Describe the train-test split or cross-validation strategy used to evaluate the models.

6. Model Development

- Present the architecture of the chosen model(s), including layers, units, and activation functions.
- Detail any hyperparameters used and how they were selected (e.g., learning rate, batch size).
- Discuss any regularization techniques applied (e.g., dropout, L2 regularization).

7. Model Training

- Describe the process of training the model(s) on the dataset.
- Include information about the number of epochs, optimization algorithm, and convergence criteria.
- Mention any adjustments made during training based on validation results.

8. Model Evaluation

- Provide the evaluation metrics used to assess the model(s) (e.g., accuracy, precision, recall, F1-score).
- Include the results of the evaluation for both the training and test datasets.
- Discuss the model's performance in the context of the problem statement.

9. Results and Discussion

- Summarize the main findings of the project.
- Compare different models' performance and discuss their strengths and weaknesses.
- Address any challenges faced during the project and how they were overcome.

10. Conclusion

- Recap the key takeaways from the project.
- Emphasize the project's contributions to solving the problem.
- Mention any potential future improvements or directions for further research.

11. References

- Cite any external sources, papers, or libraries used in the project.

12. Code Repository (Optional)

- If applicable, provide a link to the GitHub repository containing the project code.

13. Acknowledgments (Optional)

- Acknowledge individuals, mentors, or resources that contributed to the project's success.

14. Student Details (Optional)

- Provide your contact information in case anyone wants to reach out regarding your project.

15. Dataset: https://data.mendeley.com/datasets/y6d3z6f8z9/1