**Capstone Project Final Report Template**

***Include a title page***

**Title of the Report**  
*Your Full Name*  
*Institution Name:* University of Nebraska at Omaha

*Graduate Program and Department*  
*Course Name / Capstone Title*  
*Date*

# Abstract (150–250 words)

A summary of your project, including the problem you addressed, the methodology used, key results, and conclusions. It should be understandable without needing to read the rest of the report.

# Introduction

* Background and motivation for the study
* Problem statement and objectives
* Scope of the project
* Structure of the report

# Literature Review

* Overview of previous work and related models/approaches
* Gaps in the existing literature that your project addresses
* How does your project add to or differ from existing work

# Data Description

* Source(s) of the dataset(s)
* Key features and structure of the data
* Any limitations or assumptions about the dataset
* Data preprocessing steps (cleaning, transformations, encoding, etc.)

## Second Level Headings

* To get second-level headings in MS Word: Home🡪Heading 2

## Third Level Headings

* To get third-level subsections in MS Word: Home🡪Heading 3
* And so on…

# Exploratory Data Analysis (EDA)

* Descriptive statistics
* Data visualizations (e.g., histograms, scatter plots, correlation heatmaps)
* Insights discovered through EDA
* Handling of missing data, feature selection/engineering if any

# Methodology

* Overview of machine learning models used
* Discuss the novel approaches (R&D) used
* Rationale behind model choices
* Details of train/test split, cross-validation, and hyperparameter tuning
* Tools and packages used (e.g., scikit-learn, XGBoost)

# Results and Evaluation

* Performance metrics (depend on the data: RMSE, MAE, R², accuracy, precision, recall, etc.)
* Visual comparison (e.g., predicted vs. actual, confusion matrix, ROC curves)
* Discussion of model comparisons
* Final model recommendation and justification

# Discussion

* Interpretation of results
* How well does your model solve the problem?
* Insights from the modeling process
* Challenges faced and how they were addressed

# Conclusion

* Summary of findings
* Contributions of the project
* Future work or improvements

# References

* Use proper citation style (APA)
* List all papers, datasets, software packages, or tools referenced

# Appendices

* GitHub links for code
* Extra charts or visualizations (if needed)
* Detailed model output
* Meeting logs or team responsibilities (for group projects)

**Notes:**

* **Font:** Times New Roman or Calibri, size 11 or 12
* **Spacing:** 1.5
* **Margins:** 1 inch on all sides
* **Page Limit:** There is no specific page limit