

DAT 520 Milestone Three Guidelines and Rubric

In this milestone, you will perform an evaluation of your decision model and revise your decision model as needed. Evaluation examples are if you are performing a bottom-up style recursive partitioning analysis, and you should report on the error rate and variable selection. You might also consider alternative variable categorizations to improve your model. If you are performing a top-down decision tree modeling exercise, what are the threshold values that cause the tree to flip? You should perform sensitivity analysis on the critical variables in your tree and report what those sensitivity analyses are telling you. For either style of modeling, what makes your tree stronger? What breaks the model? For more information on completing this milestone, please refer to the Final Project Notes in the Assignment Guidelines and Rubrics folder.

Specifically, the following **critical elements** must be addressed in your final submission:

- Include the **structure** of your revised decision tree, with a clear description.
- **Evaluate** the results of your revised model, including analysis that is specific to your revised model. In your evaluation, reflect on the appropriateness and adjustments of the revised model, as well as the accuracy of the results you obtained.
- Suitable **diagnostics** should be incorporated into the model.

Guidelines for Submission: This milestone should be 2 to 3 double-spaced pages of text, with tree model images and any other supporting material appended. Review your work to ensure that there are no major errors in writing mechanics. If you have citations, include the sources at the end and cite them APA format.

Critical Elements	Proficient (100%)	Needs Improvement (70%)	Not Evident (0%)	Value
Structure	Decision tree and description are clearly structured	Decision tree and description are somewhat clearly structured	Decision tree and description are not adequately structured	30
Evaluation of Results	Evaluation considers reasonableness, accuracy, missing/extraneous elements, and error in the model	Evaluation does not fully consider reasonableness, accuracy, missing/extraneous elements, and error in the model	Evaluation does not consider reasonableness, accuracy, missing/extraneous elements, and error in the model	30
Model Diagnostics	Model includes clear use of diagnostics	Model builds in partial use of diagnostics	Model does not include diagnostics	30
Articulation of Response	Submission has no major errors related to grammar, spelling, syntax, or organization	Submission has major errors related to grammar, spelling, syntax, or organization that negatively impact readability and articulation of main ideas	Submission has critical errors related to grammar, spelling, syntax, or organization that prevent understanding of ideas	10
Earned Total				100%