

	D	C	B	A
Data Cleaning, Analysis and Feature Selection <b>0 – 2: Not very well done [Grades D or C]</b> <b>3 – 4: OK [Grades B or A]</b>	Missing data removed.	Missing data imputed (only applicable if less than 30% of instances are missing)	<u>Feature selection done and justification provided in notebook</u>	Imputation based on interacting features and/or distribution of data within feature
Model(s) / Technique(s) / Ensemble(s) <b>0 – 2: Not very well done [Grades D or C]</b> <b>3 – 4: OK [Grades B or A]</b>	Only one model tried. No explanation why it was chosen. <u>Student has not shown evidence of putting in any thought / effort into model selection</u>	Two Models / Techniques listed with no explanation of why these were chosen. Models work but results not compared against each other	At least one ensemble consisting of two or more models tried. <u>Results of each model compared against each other.</u>	Two or more ensembles tried. Graphs showing how results differ by changing composition of ensembles or voting methods shown.
Hyperparameters Tried <b>0 – 2: Not very well done [Grades D or C]</b> <b>3 – 4: OK [Grades B or A]</b>	No hyperparameters tried. Default values chosen	Two hyperparameters chosen for per model, but no analysis of which hyperparameter works better	<u>Multiple hyperparameters chosen. Results of differences in results compared</u>	Differences of results due to hyperparameters analysed with graphs.
Training, Validation, Testing <b>0 – 2: Not very well done [Grades D or C]</b> <b>3 – 4: OK [Grades B or A]</b>	No mention of difference between training and testing split of data. No demonstration of how split was done.	One training /validation/testing split. No other values tested	Multiple training/validation/testing splits experimented, and results shown, but no analysis of how splits affects results	Analysis of how training/validation/testing splits affect results.
Evaluation and Conclusion <b>0 – 2: Not very well done [Grades D or C]</b> <b>3 – 4: OK [Grades B or A]</b>	Simple accuracy tested; no other metric considered	Average class accuracy for multiple classes shown	Precision, recall and F1 metric (or SSE / MSE / RMSE / MAE, depending on what the student has decided to do) calculated for one model	Evaluation metrics for all models compared and best model(s) identified

如何处理 missing value ?  
如何选择 feature ?

有多个模型  
还有两个及以上的Ensemble

展示了多种参数对模型的影响  
利用图的形式展示出不同的参数对模型的影响

多种training/validation/testing split方法的使用

多种Evaluation的方法的使用