Final Project Quantitative Assessment

Standard / Level	0	1 (Beginning)	2 (Developing)	3 (Accomplished)	4 (Exemplary)
Pick a novel, interesting problem at the right challenge level	Forgot	Answer a given question	Answered an obvious question	Combine existing questions in unique ways Picked common data set	Created original work on tricky data or implemented cutting-edge algorithm
Handle text encoding	Forgot	75% correctly formated data	90% correctly formated data	100% correctly formated data	Handled especially tricky issues
Present descriptive statistics	Forgot	Calculated few statistics	Inadequate descriptive statistics	Explored enough to understand data	Found insights in data
Present visualizations	Forgot	Plotted few visualizations	Inadequate adequate visualizations	Visualized enough to understand data	Created novel visualization
Preprocess data	Forgot	Data not ready for later analysis	100% data in the correct data structure	Explored different methods	Explored different methods with benchmarking
Fit machine learning model	Forgot	No test step	No separate validation step	Complete machine learning model (train, test, and validate)	Fit machine learning model not covered in class
Explore between models	Forgot	Fit a single model	Fit multiple models	Fit multiple models Compared performance on metrics	Demonstrated that specific models were better than others according to some metric and gave a convincing explanation as to why
Explore within models	Forgot	Used default hyperparameters	Random changed hyperparameters	Systematically tuned hyperparameters	Demonstrated that specific parameters were better than others according to some metric and gave a convincing explanation as to why
Present to a technical audience	Forgot	Unintelligible	Unclear Hard-to-follow Incomplete	Engaging talk with insights and lessons	Live demo!
Commit code to GitHub	Forgot	Code not in GitHub	Does not have README	GitHub is clear and understandable	GitHub repo is public
Write quality code	Forgot	Code is incomplete	Code does not work Code is hard to read	Code works Code is readable	Code has comments and tests Professional level
X factor: Did something out-of-the-box	Forgot	Routine project	Repeated analysis from class	Showed creativity	Ground-breaking