Final Project Quantitative Rubric

Name: _____

Project: _____

Standard / Level		Beginning	Developing	Accomplished	Exemplary
Pick a novel, interesting problem at the appropriate challenge level	Forgot	- Used a dataset from class 1 | 2 | 3 | 4 | 5	- Answered an obvious question 1 | 2 | 3 | 4 | 5	- Combine existing questions in unique ways - Picked a common dataset 1 | 2 | 3 | 4 | 5	- Created original and meaningful work - Analyzed a challenging dataset 1 | 2 | 3 | 4 | 5
Preprocess data	Forgot	- Data not ready for later analysis 1 | 2 | 3 | 4 | 5	- 100% correctly structured data - Handled missing values 1 | 2 | 3 | 4 | 5	- Explored different methods 1 | 2 | 3 | 4 | 5	- Handled especially tricky issues - Explored different methods with benchmarking 1 | 2 | 3 | 4 | 5
Describe data	Forgot	- No visualizations - No discussion of distributions - Calculated few statistics 1 | 2 | 3 | 4 | 5	- Inadequate visualizations - Fit inappropriate distributions - Inadequate descriptive statistics 1 | 2 | 3 | 4 | 5	- Fit the most appropriate distributions - Visualized enough to understand data - Explored enough to understand data 1 | 2 | 3 | 4 | 5	- Created novel visualizations - Compared multiple distributions - Fit distributions outside of class - Found insights in data 1 | 2 | 3 | 4 | 5
Fit models	Forgot	- No model fitting 1 | 2 | 3 | 4 | 5	- Attempted basic model - Incorrect application - Misinterpreted results 1 | 2 | 3 | 4 | 5	- Correctly fit a single model - Correctly interpreted model results - Summarized model meaning and impact 1 | 2 | 3 | 4 | 5	- Compared multiple models - Fit models outside of class materials - Detailed numerical and visual analysis 1 | 2 | 3 | 4 | 5
Present to a technical audience	Forgot	- Unintelligible 1 | 2 | 3 | 4 | 5	- Unclear - Hard-to-follow - Incomplete 1 | 2 | 3 | 4 | 5	- Engaging talk with insights and lessons 1 | 2 | 3 | 4 | 5	- Live demo! 1 | 2 | 3 | 4 | 5
Write quality code	Forgot	- Code is incomplete 1 | 2 | 3 | 4 | 5	- Code does not work - Code is hard to read 1 | 2 | 3 | 4 | 5	- Code works - Code is readable 1 | 2 | 3 | 4 | 5	- Code has comments and tests - Professional level / pep8 1 | 2 | 3 | 4 | 5
Commit code to GitHub	Forgot	- Code not on GitHub 1 | 2 | 3 | 4 | 5	- Does **not** have README - Commit messages are not helpful 1 | 2 | 3 | 4 | 5	- GitHub is clear and understandable 1 | 2 | 3 | 4 | 5	- GitHub repo is public 1 | 2 | 3 | 4 | 5
X factor: Did something out-of-the-box	Forgot	- Routine project 1 | 2 | 3 | 4 | 5	- Repeated analysis from class 1 | 2 | 3 | 4 | 5	- Showed creativity 1 | 2 | 3 | 4 | 5	- Ground-breaking 1 | 2 | 3 | 4 | 5