

Names:

PRESENTATION [30 points]		
Link to your team's Google Presentation slides is included in your submission of Lab 10.	4 points	
- One slide containing at least two data visualizations	8 points	
- One-two slides containing an outline of a "simple" classifier.	4 points	
- One slide containing a summary of your plan for the remaining components of your project	4 points	
Individual presentation grade: Team member participates in presenting the slides, communicates ideas clearly, and displays firm knowledge in what they are presenting. Participated in providing feedback to 1-2 other teams.	10 points	
PROJECT WRITE-UP [150 points]		
Clear Introduction The write-up has an introduction paragraph that outlines the rest of the paper, including brief summaries of		
- the main ideas behind your classifier;	5 points	
- the performance of your classifier, as measured in terms of accuracy and at least one other metric; and	5 points	
- how your classifier compares to a kNN classifier.	5 points	
1. Data exploration and feature selection Your write-up about this step includes		
- at least three data visualizations/summary tables and	15 points	
- a clear and thorough discussion/explanation/interpretation of what is illustrated by the data visualization and analysis, including what the data visualizations tell you about which features are important to incorporate in your classifier.	10 points	
Your data analysis work should include splitting the dataset into training and test datasets; the data exploration step should be done on the training data only.	10 points	
2. Development of your own classifier Your write-up about this step includes		
- a description of what your classifier does;	5 points	
- an intuitive explanation of why what your classifier does seem to make sense; and	5 points	
- an implementation of your classifier. That is, there should be a code cell where you write a new R function to implement this classifier.	10 points	
- your classifier should use at least 3 features, and you should use more than just one pair of if-else statements	10 points	
3. Assessment of your classifier Your write-up about this step includes		
- an R function for computing accuracy; the accuracy of your classifier;	5 points	
- an R function for computing one other performance metric; the value of this metric when you use it to assess your classifier;	5 points	
- a clear description of your second metric and why you chose it; and	5 points	
- a thorough discussions of the results of your assessment in terms of the two metrics.	10 points	
4. Comparing performance to a kNN classifier Your write-up about this step includes		
- an explanation of what value of k you use and why;	5 points	
- the accuracy of this kNN classifier;	5 points	
- the performance of this kNN classifier in terms of your second performance metric;	5 points	
- thorough discussions of the results of your assessment, including how your classifier compares to this kNN classifier in terms of the two metrics you used.	10 points	
Codes and Correctness Any code that you use is included in your write-up. Data analysis methods are used correctly.	10 points	
Grammar, Punctuation, and Spelling The write-up uses correct grammar, punctuation, and spelling. Sentences and paragraph structure make sense.	10 points	
SELF- AND PEER-EVALUATION [20 points]	20 points	
TOTAL	200 points	