Execute a small NLP research/design project of your choice. You may work in groups of up to 3.

Write a ≈8-page report describing your experiment and findings.

Please submit your report in pdf form along with your code as a zip file. Include with your code a README file if it requires any special setup, e.g. extra Python packages or datasets.

Report Guidelines

1. **Introduction** ($\approx$ 1 page)
   Describe:
   - the question that you wish to answer
   - any dataset(s) that you will use
2. **Methods** ($\approx$ 2 pages)
   Describe:
   - any tools/algorithms you use that we did not discuss in class
   - why these methods were chosen rather than... anything else

   These descriptions should be sufficient for anyone who has taken this course, e.g. your classmates.
3. **Results and Discussion** ($\approx$ 5 pages)
   Present the results of your project in tabular or graphical form, as appropriate. Give detailed analysis. For example, rather than just percent correct, provide an ROC curve or confusion matrix. Rather than just RMSE, provide a distribution of residuals, etc.

   Discuss *why* you observed these results. Anything strange/unexpected/unusual requires explanation (and frankly, probably debugging). Compare your approach to an appropriate baseline.

   Suggest extensions or improvements. Explain specifically why you think an alternative approach would work better. For example, do not just say that an RNN might be better because RNNs are good at lots of things. Instead explain how your simpler approach has limited expressiveness and outline how you could structure an RNN to solve your problem.