CS 211 Final Project Proposal

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1   Proposal

For my final project I will be working alone. The goal of this project will be to produce a report on various statistics relating to customers of a credit card company. Credit card data is sensitive information that could lead to re-identification so we will want to use differential privacy to produce these reports. I will look at statistics relating to average Age, most common income level and education level. If time permits, I would also like to look into producing a synthetic representation of one or more columns of the dataset. For the statistics, I will use a few methods, including using the Sparse Vector Technique to determine clipping bounds, then adding noise with the laplace mechanis to compute counts and sums.

The dataset I will be using is located here: https://www.kaggle.com/sakshigoyal7/credit-card-customers