453 Project Proposal

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For our semester's project, we will implement the anonymity algorithm laid out in this research paper. This paper experiments with an anonymization algorithm that generalizes data according to the (α, L)-diversity K-anonymity model. This model requires that data be generalized to achieve a desired K-anonymity, L-diversity, and α "weight" for each sensitive attribute. This paper argues that the modified anonymity model is an improvement over K-anonymity and L-diversity, and we will assess this claim through experimentation.

This group will use the UCI Machine Learning Repository used in Assignment 1 to conduct our own analysis of this algorithm. This will require our own implementation of this algorithm and an acute understanding of its operation. We will study the parameter α and how it affects information loss and execution time of the algorithm. We will be able to assess the utility of this anonymity model and compare it to other common models. The results from our experimentation will be directly compared and contrasted with those of the article's authors.