Opportunity and Significance
A program was developed to help extract only the information necessary from tens of thousands of cells using MATLAB. It was originally designed and tested with NFL Data, but can be manipulated to fit different types of data.

Technical Objectives
The objective of our program is to give people the ability to extract only the necessary information from very large sets of data. This program will attempt to answer the questions regarding the nature of large sets of data and how to riffle through only the important information. Lots of user control was one of our biggest initiatives when constructing this program, and so we aim to allow the user to control nearly every aspect of the data through a variety of techniques. This large scale data manipulation is very relevant to our society today and is very feasible in terms of being applicable.

Technical Approach, Accomplishments and Results
Our design process consisted of creating an outline of our code and how to go about each and every detail we hoped to include. User-friendliness was by far our #1 factor and our project revolved around that. Our program is easy to use, easy to read, and can be manipulated and fine-tuned to fit different occasions.

Related Work and State of Practice
Many people currently under Dr. Whitehead have done similar projects. This project builds on the foundation of Dr. Whitehead's BE1500 class. It is all done in MATLAB, which is a program professionals use in a variety of fields and still very relevant to us. We tested our program with NFL Data from the 2016-2017 NFL year, and we were able to have it sift through the large amounts of data while maintaining user friendliness.

Next Steps for Development and Test
Further steps will include other data sets of different sizes. Our data set was about 22,000 cells, and so we hope to be able to make this code applicable to those with tens of thousands of more cells. We hope to continue to test this code and make it so that you can change between data sets with very minimal work.

Commercialization Plan & Partners
This was a project between four group members with some help from our advisor and peer mentors who assist the class. To commercialize this process, we hope to work with companies who deal with big databases. Our biggest hurdle to finding a partner is putting ourselves out there and showing them that we are unique.

Reference
statcrunch.com/app/index.php?dataid=2520661