Opportunity and Significance

Our code is designed to allow someone interested in learning information about skyscrapers or other aspects related to skyscrapers and buildings to be able to do so in a quick and efficient way.

Technical Objectives

We needed to utilize MATLAB in order to create a code and sort a large set of data, which in our case was on different skyscrapers in the United States. We sorted this data based on descriptive statistics such as the building rank, the height of the building, the number of floors in the building, the type of material (steel, concrete, composite), what the building was used for (office, residential, hotel, etc.), the city it was built in, and the date it was completed.

Related Work and State of Practice

The class Intro to Computer Engineering and Computation (BE1500) at Wayne State University is where we got the knowledge and skills needed to put this project together, and through that class we were able to effectively design the best code to sort out the set of data we chose.

Technical Approach, Accomplishments and Results

Our main MATLAB code consists of four main sections, each section which includes its own function. Each of our functions, consisting of the topics heights, cities, dates, and usage, performs a different task and outputs different data that a user may want to know. Most of our code was made through the usage of user-defined functions, loops, graphing, and other major components available in MATLAB.

Here are photos of our data and an example of a graph we are going to use as an output in our code.

Basic Engineering 1500 - Intro to Computer Engineering and Computation

Next Steps for Development and Test

There are currently many ways that we can continue to improve our code; we are continuing to alter and add to parts of our code to allow it to run smoothly.

Commercialization Plan & Partners

At this point our project is just a set of data and code, and so we hope to continue to use MATLAB to better our code, and possibly in the future work continue to expand and utilize our current coding knowledge.