Code for Good: United Way of San Antonio – Team 8

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For our data visualization, we chose to program our demo purely in Python because of python supports pyplot. Pyplot is a matlab library that allows us to graph data in numerous ways including bar graphs, line graphs, and with some tweaking, even histograms. To showcase our demo, we will be using Colab of Google because it can display static graph outputs of our data. In order to visualize whether the outcome met the annual target expectations, we devised 2 methods of doing this. The first was to sum up all the discrete values of the 12-month period and directly comparing it to the target. This method clearly shows if the goal was met. Our other method of showing whether the strategy and program name will make the target involves AREMA. AREMA is a statistical model that can be implemented in Python for timeseries forecasting. This model is useful for when we have less than a year’s worth of data and we want to predict the likelihood of the strategy and program meeting the target.

In a retrospect, our program could be dynamic if we continue to call the create graph function with the addition of new data sets and modification of parameters. As of now, we only have static graph instances that can be generated from the local data United Way has provided us. Given more time to carry out our idea, we could develop a front end with React that calls the python script to plot the graphs requested by the users especially because these plots can be formatted as PNG’s.