

## **Data Processing**

- What variable(s) are the target(s) for your model?
  - Target variable is the “IS\_SUCCESSFUL” column from the application\_df
- What variable(s) are the features for your model?
  - The feature variables are the other columns included in the application\_df, this was defined when we dropped the “IS\_SUCCESSFUL” column from the dataframe.
- What variable(s) should be removed from the input data because they are neither targets nor features?
  - Both “EIN” and “NAME” columns were dropped and removed because they were neither target nor features for the dataset

## **Compiling, Training, and Evaluating the Model**

- How many neurons, layers, and activation functions did you select for your neural network model, and why?
  - I used 8 hidden\_nodes\_layer\_1 and 5 hidden\_nodes\_layer\_2
- Were you able to achieve the target model performance?
  - No I was not able to achieve the 75 percent model accuracy target
- Steps to increase model performance
  - I could have added more layers, removed more columns, add more hidden nodes or switched up the activation functions to achieve higher model accuracy.

Summary:

The deep learning model was around 73% accurate in predicting the classification problem. Higher accuracy could be achieved by doing the steps stated above.