The challenge was to develop a predictive model to assist Alphabet Soup with choosing applicants who are more likely to be successful. A binary classifier was developed to predicts which applicants would be successful if Alphabet Soup funded them.

The data provided was processed by dropping the “EIN” and “NAME” columns. The data was then narrowed down and cutoff points were created for “APPLICATION\_TYPE” and “CLASSIFICATION.”

A screenshot of a computer program

Description automatically generated

A screen shot of a computer

Description automatically generated

The unique columns found are as shown:

A screenshot of a computer

Description automatically generated

The columns that did not make the cutoff were categorized as “OTHER”

The target value is “IS\_SUCCESSFUL” and the features are “APPLICATION TYPE” and “CLASSIFICATION”

The model with test data ended up showing an accuracy of 72% after 20 epochs. The goal is to get an accuracy of 75%. The closest I could get was 74% after 100 epochs.

268/268 - 1s - loss: 0.5560 - accuracy: 0.7282 - 628ms/epoch - 2ms/step

Loss: 0.5559850335121155, Accuracy: 0.7281632423400879

A screenshot of a graph

Description automatically generated

