Neural Network Model Report

Overview:

* This analysis was used to create a deep learning network model that can be utilized by Alphabet Soup Charity to choose applicants that they should fund, those of which would have the best chance at success in their ventures. The applicants come from a CSV file containing more than 34,000 organizations that have received funding from Alphabet Soup over the years.
* Below is a picture of our data:

A screenshot of a computer code

Description automatically generated

Results:

* Data Preprocessing
  + What variable(s) are the target(s) for your model?
    - Our target is to predict the IS\_SUCCESSFUL.
  + What variable(s) are the features of your model?

A list of words on a white background

Description automatically generated

* + What variable(s) should be removed from the input data because they are neither targets not features?
    - EIN & NAME columns
* Compiling, Training, and Evaluating the Model
  + How many neurons, layers, and activation functions did you select for your neural network model, and why?
    - I tried different approaches, using multiple numbers of neurons, ranging between 2-5 layers and two different activation functions.
  + Were you able to achieve the target model performance?
    - No
  + What steps did you take in your attempts to increase model performance?
    - I originally tried to create multiple attempts with different layers which yielded me no success. For my last attempt, I tried to optimize the model using hyperparameter options and kerastuner, which would have given me the best number of neurons, layers and activation but still had no success.

Summary: