Neural Network Model Report:

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Overview:

The nonprofit foundation Alphabet Soup wants a tool that can help it select the applicants for funding with the best chance of success in their ventures. Using machine learning and neural networks, I will use the features in the provided dataset to create a binary classifier that can predict whether applications will be successful if funded by Alphabet Soup.

Results:

Data Processing:

What variables are targets in your model?

IS\_SUCCESSFUL 2 Zero is unsuccessful, and 1 is successful

What variables are features in your model?

APPLICATION\_TYPE 17

AFFILIATION 6

CLASSIFICATION 71

USE\_CASE 5

ORGANIZATION 4

STATUS 2

INCOME\_AMT 9

SPECIAL\_CONSIDERATIONS 2

ASK\_AMT 8747

What variables should be removed from the input data because they are neither targets nor features?

EIN and Name were removed from the input data because they had no quantifiable bearing on the data set.

Compiling training and evaluating the model:

How many neurons, layers, and activation functions did you select for your neural network model and why?

Were you able to achieve the target model performance?

What steps did you take in your attempts to increase model performance?

Summary:

Summarize the overall results of the deep learning model. Include a recommendation for how a different model could solve the classification problem and explain your recommendation.