The report should contain the following:

1. **Overview** of the analysis: Explain the purpose of this analysis.

* Design a machine learning model for a nonprofit foundation Alphabet Soup who wants a tool that can help it select the applicants for funding with the best chance of success in their ventures

1. **Results**: Using bulleted lists and images to support your answers, address the following questions:

* Data Preprocessing
  + What variable(s) are the target(s) for your model?
    - The target variables are the 'IS\_SUCCESSFUL'
  + What variable(s) are the features for your model?
* Features are: APPLICATION\_TYPE, AFFILIATION, CLASSIFICATION, USE\_CASE, ORGANIZATION, STATUS, INCOME\_AMT, SPECIAL\_CONSIDERATIONS, ASK\_AMT
  + What variable(s) should be removed from the input data because they are neither targets nor features?
* The EIN and the NAME
* Compiling, Training, and Evaluating the Model
  + How many neurons, layers, and activation functions did you select for your neural network model, and why?
* A total of 210 neurons and four layers were used. Activation functions for the four layers was relu. One layer of output was used with sigmoid (because the target was classification or 0 or 1) activation function. An epoch of 200. However, with an epoch of 200, the losses and val\_losses grew higher indicating that an overfitting scenario.

* + Were you able to achieve the target model performance?
    - I was not able to achieve the required 75 percent performance
  + What steps did you take in your attempts to increase model performance?
    - Second attempt: Added Early\_Stopping technique to control the overfitting, however, it did not help.
* Third attempt: Added Dropout and early stopping together. In the Dropout, I decided to turn off half the neurons for every epoch and it improved the overfitting and the accuracy a bit but I was not able to get it to 75 percent accuracy