**Outline of Procedural Approach**

1. Reading the project description
   1. Interpreting the basic operations of the Convolutional Neural Network in all of its stages
      1. ie. Image Normalization, Rectified Linear Unit, Maxpool, Convolution, Fully Connected, Softmax
2. Programing sub functions of the basic operations listed above
   1. These functions are supporting .m files that will be read from the main file
3. Testing these sub functions and cross evaluating them with known data
4. Creating a main .m file that integrates the supporting functions into a 18 layer convolutional neural net
   1. Main calls a supporting file called NeuralNet.m that performs this operation
   2. A plot is created at the end to help visualize the output matrix
      1. Surf plot is used to give a gradient perspective of the classification accuracies
5. Testing the main function
   1. Test for one iteration of the neural net and then preparing it for iterating through an array of images
6. Quantitative Analysis of the Data and Evaluation
   1. Using supplied data of 10,000 test images and running these through the CNN
      1. Classification Accuracy can be determined from this matrix of probabilities
   2. Creating a Neural Net Demo that takes an image set of 110 thumbnail images and runs these through the CNN
      1. Images were found online and converted to correct size
   3. Running performance evaluation experiments to create plots, figures and graphs