# Documentation

Depression Therapy using Chatbot Programming Club - IIT Kanpur

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## Week 1

### Coursera - Intro to Machine Learning

Completed course by Andrew Ng in the first semester. Went through the reading material for all the lectures again.

### Udacity - Intro to Machine Learning

Completed chapter on text learning, based on preprocessing of text by tokenisation, removal of stopwords, stemming and tf-idf representation of documents using the python libraries scikit-learn and NLTK.

### Neural Networks and Deep Learning

Completed all chapters of the online ebook neuralnetwork-sanddeeplearning.com, and implemented convolutional neural networks on MNIST and CIFAR-10 each using the python libraries tensorflow and keras, separately.

#### Word2Vec

Learnt about the Word2Vec model for representation of words as vectors using embeddings (as a part of the NYO internship, but can be applied in this project), and implemented it in the python library gensim.