Folder components:

- 'Presentation.pptx': Presentation to be presented on July 14 during the interview
- 'ml_case_test_output_result.csv' result of the test data set which can be regenerated from the code
- 'Code + Results':
  - Folder contains the Python code and generated csv files.
  - Python environment details:
    - Developed under Python 3.5. (Could work on 2.7 but Neural Network code will not work)
    - Mandatory libraries:
      - SKlearn (v 0.18+)
      - Keras
      - TensorFlow
      - Theano
      - Numpy
      - Matplotlib

Instructions to run the code:

1. Run dataExploration_prices.py to save the data in a format suitable for building the ML algorithm.
2. Run 'correlations.py' to plot the correlations between churn and features, as well as correlations among features.
3. Run 'best_features.py' to obtain the ranking of the most important features in terms of predictive power.
4. Run 'all_models.py' to evaluate all the algorithms using ROC, F1, Brier, etc.
5. Run 'revenueMaximization.py' to obtain the optimal discount for a given churn percentage.
6. Run 'predict_dataExploration.py' to format the test dataset in the format which fits into the model algorithm.
7. Run 'predict_all_models.py' to save the resulting csv file as 'ml_case_test_output_result.csv'