Read Me

* Overview:
  + Given 2 data sets that split the train and test data (Sales\_data\_test.csv and sales\_data\_training.csv). The data is then preprocessed and scaled creating 2 new data sets (Sales\_data\_test\_scaled.csv and sales\_data\_training\_scaled.csv) that is used in the neural network for training.
  + This project is a neural network that can predict game prices. The neural network model has 4 layers with the output layer activation function being linear.
  + Model compile:
    - Optimizer: adam
    - Loss: mean\_squared\_error
  + This resulted in a MSE of 0.00131 and a loss of 0.0013
* Files Overview:
  + game\_price\_model.ipynb
    - python script where the neural network model is defined
  + game\_price\_prediction.ipynb
    - python script to load the trained model and conduct a prediction
  + preprocessing.ipynb
    - preprocessing data resulting in scaled datasets.
  + Propised\_new\_product.csv
    - Example input data for prediction
  + Sales\_data\_test.csv and sales\_data\_training.csv
    - Original datasets used
  + Sales\_data\_test\_scaled.csv and sales\_data\_training\_scaled.csv
    - Result datasets from the preprocessing stage
  + Trained\_model.h5
    - Trained model h5 file saved to be reused anytime by loading it without having to train the model again.