PROJECT SPECIFICATION

Predicting Bike-Sharing Patterns

Code Functionality

CRITERIA	MEETS SPECIFICATIONS
All code works appropriately and passes all unit tests	All the code in the notebook runs in Python 3 without failing, and all unit tests pass.
Sigmoid activation function	The sigmoid activation function is implemented correctly

Forward Pass

CRITERIA	MEETS SPECIFICATIONS
Forward Pass - Training	The forward pass is correctly implemented for the network's training.
Forward Pass - Run	The run method correctly produces the desired regression output for the neural network.

Backward Pass

CRITERIA	MEETS SPECIFICATIONS
Batch Weight Change	The network correctly implements the backward pass for each batch, correctly updating the weight change.
Updating the weights	Updates to both the input-to-hidden and hidden-to-output weights are implemented correctly.

Hyperparameters

CRITERIA	MEETS SPECIFICATIONS
Number of epochs	The number of epochs is chosen such the network is trained well enough to accurately make predictions but is not overfitting to the training data.
Number of hidden units	The number of hidden units is chosen such that the network is able to accurately predict the number of bike riders, is able to generalize, and is not overfitting.
Learning rate	The learning rate is chosen such that the network successfully converges, but is still time efficient.
Output nodes	The number of output nodes is properly selected to solve the desired problem.

CRITERIA	MEETS SPECIFICATIONS
Final Results	The training loss is below 0.09 and the validation loss is below 0.18.