Sample weights implementation

Sklearn Decision Trees

* <https://stackoverflow.com/questions/34389624/what-does-sample-weight-do-to-the-way-a-decisiontreeclassifier-works-in-skle>
* https://scikit-learn.org/stable/modules/tree.html#regression-criteria

For DecisionTreeRegressor criteria by default is ”squared\_error”.

Q\_m – data at node m of size n\_m

H(Q\_m) - criteria

Shape

Description automatically generated with medium confidence

i.e.  MSE set the predicted value of terminal nodes to the learned mean value y¯m of the node.

Sample weights – adds “counts” for each sample (**w** – sample weights vector, *w* sample weight of one datapoint):

Shape

Description automatically generated with medium confidence