

This class will form the basis for our tree. Clearly, we need to denote left and right children of each node in the tree, but we also need to keep track of which samples are "in" each node during the model's training so that we can form output labels and see what is going on during the debugging process. Further, we need to make sure during training we do not split on the same feature twice so we will keep track of un-split features as well as which feature we choose to split on. These properties will all be None upon the return of `DT_train_binarysave_for_feature_split` as the rest are only needed during training. In addition to this, the two node classes