Table IV shows the results obtained when nine folds i.e., 4398 examples were used as the training set to build the

Classifier and the remaining fold 489 examples were used to test the classifier for accuracy. We use recall [25], precision [25] and F-measure [25] to verify the accuracy of our classification approach. F-measure is the harmonic mean of recall and precision. Recall, Precision and F-Measure are calculated as follows:

Using the three measures, we observe that the average precision is 89.09%, average recall is 89.04%, whereas the

F-Measure is 89.05%. Thus, classification of web sites is possible by examining the contents of their home pages.

*Number of Training Examples and Accuracy*

The classifier was subjected to training and testing in 9 steps each time increasing the input by 50 documents.

Graph 1 depicts the number of training examples versus the accuracy in terms of average F-measure. The accuracy of the classifier was very poor i.e., about 45%, when only 50 documents were supplied as training data. The accuracy increases each time when the classifier is supplied with additional learning data. The classifier achieved an accuracy of 89% when nearly 450 documents were supplied as input in each category.

Thus, the accuracy of the classifier depends on the number of training documents and in order to achieve high accuracy, the classifier should be supplied with sufficiently large training documents.