CS564: Foundations to Machine Learning
End Semester Assignment

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Documents Submitted:

i. Codes with appropriate documentation;

1. Please find the notebook <u>implementation of this assignment</u> **endsem.ipynb**.
2. Also find the <u>BBC News Dataset file</u>, **bbc.csv**. It is necessary for *endsem.ipynb* to work.

ii. Outputs of all the three models on the 20% test data;

Please find the following CSV files:

3. **ff_nn_initial_preds.csv**: Output of **Feedforward NN from Assignment-4**
4. **ff_nn_new_preds.csv**: Output of newly created **Pre-trained Feedforward NN** using weights of Feedforward NN of Assignment-4
5. **rnn_preds.csv**: Output of **Vanilla RNN**

iii. Output from the Ensemble model on the test data (20%);

Please find the following CSV files:

6. **ensemble_majority_preds.csv**: Output of **Ensemble Model formed by Majority Voting**
7. **ensemble_weight_preds.csv**: Output of **Ensemble Model formed by Weighted Voting**

iv. Overall Accuracy and Class-wise Accuracy of the three individual models as well as the ensemble model on the test data (20%);

8. Please find the text file **accuracies.txt** containing the accuracies of all specified models

v. Mention how many instances were misclassified by any of the three models, but correctly classified in the ensemble model; how many were wrongly classified by all three individual models, but were correctly classified by the ensemble;

9. Please find the text file **misclassified.txt** containing the mentioned values

10. **Report.pdf**: Current file

Total: **10 files**