

NLP application for each of the following use-cases:

(a) A model that allocates which mail folder an email should be sent to (work, friends, promotions, important), like Gmail's inbox tabs:

Type of NLP application: Text Classification:

The model needs to learn patterns and features in the email text to determine the appropriate folder, such as work, friends, promotions, or important. Text classification techniques, such as supervised machine learning algorithms or deep learning models, can be used to train a classifier to accurately assign emails to the correct folder based on their content.

(b) A model that helps decide what grade to award to an essay question. This can be used by a university professor who grades a lot of classes or essay competitions

Type of NLP application: Automated Essay Scoring (AES)

The model needs to assess various aspects of the essay, such as content, structure, coherence, grammar, vocabulary, and overall quality, to determine an appropriate grade. AES systems can utilize machine learning techniques, such as natural language processing and statistical modelling, to analyse the essay and assign a grade based on pre-defined criteria or by learning from human-graded essay examples

(c) A model that provides assistive technology for doctors to provide their diagnosis. Remember, doctors ask questions, so the model will use the patients' answers to provide probable diagnosis for the doctor to weigh and make decisions.

Type of NLP application: Question Answering and Medical Diagnosis Support

The model needs to understand the questions asked by the doctors and process the patients' answers to provide probable diagnoses or suggestions for further investigation. The model can help streamline the diagnostic process, enhance accuracy, and provide valuable insights for doctors to consider in their clinical judgments.