

**a. NLP Application: Text Classification**

This use-case involves classifying emails into different categories or folders based on their content. The model analyzes the text of the email and assigns it to the appropriate category, such as work, friends, promotions, or important. Text classification is a common NLP application used for tasks like sentiment analysis, spam detection, and topic classification.

**b. NLP Application: Automated Essay Scoring**

This use-case involves evaluating and assigning grades to essay questions automatically. The model analyzes the content, structure, and language of the essay and provides a score or grade based on predefined criteria. Automated essay scoring is an NLP application commonly used in educational settings to assist teachers or professors in grading large volumes of essays efficiently.

**c. NLP Application: Clinical Decision Support System**

This use-case involves using NLP to support doctors in diagnosing medical conditions. The model takes into account the questions asked by the doctor and the answers provided by the patients. It analyzes the patient's symptoms, medical history, and other relevant information to generate probable diagnoses or suggestions for the doctor to consider when making decisions. Clinical decision support systems assist healthcare professionals in making informed decisions by leveraging NLP techniques for information extraction, natural language understanding, and knowledge representation.