

- a) **Email Organization:** In this use case, an NLP model is employed to allocate incoming emails to specific folders based on their content or purpose. Similar to Gmail's inbox tabs, the model analyzes the text and metadata of the emails and categorizes them into folders such as work, friends, promotions, or important. By automatically sorting and organizing emails, this NLP application helps users efficiently manage their inbox and prioritize their email interactions.
- b) **Automated Essay Grading:** With this NLP application, a model assists in evaluating and assigning grades to essay questions. This can be particularly beneficial for educators or organizations that handle a large volume of essay assessments, such as universities or competitions. The model utilizes NLP techniques to analyze the content, structure, coherence, and other linguistic aspects of the essays. It compares the essays against pre-established grading criteria and provides automated feedback or assigns a grade based on the quality of the written response. By automating the grading process, this application saves time for educators and ensures more consistent and objective evaluations.
- c) **Clinical Decision Support Systems:** This NLP application aims to provide assistive technology for doctors in diagnosing medical conditions. The model analyzes patient information, which may include medical histories, symptoms, lab results, and imaging reports, using NLP techniques. It leverages machine learning algorithms and medical knowledge bases to process and interpret this information, generating probable diagnoses or suggesting further diagnostic tests or treatments. By integrating NLP into clinical decision support systems, doctors can benefit from additional insights and recommendations to aid their decision-making process, leading to more accurate and timely diagnosis.