Compulsory Task 1

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

Category: Text Classification and Email Sorting

Explanation: This use-case falls under text classification. It involves analyzing the content of emails and categorizing them into predefined folders (work, friends, promotions, important) based on the text content. It also relates to email sorting, as it involves organizing and prioritizing emails in a user's inbox.

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.

Category: Automated Grading and Educational NLP

Explanation: This use-case belongs to automated grading and educational NLP. It involves analyzing and evaluating essay questions and assigning grades based on predefined criteria. It is particularly useful for educators, professors, and institutions to automate and streamline the grading process.

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 diagnoses for the doctor to weigh and make decisions on.

Category: Clinical NLP and Medical Diagnosis Support

Explanation: This use-case falls under clinical NLP and medical diagnosis support. It involves processing and analyzing patient responses to questions posed by doctors and generating probable diagnoses or suggestions for further examination. This technology assists healthcare professionals in making informed decisions during the diagnosis process.