The types of NLP applications that apply to each of the mentioned use cases are as follows:

- a. For a model that allocates which mail folder emails should be sent to (work, friends, promotions, important), like Gmail's inbox tabs, the relevant NLP application would be email categorization or email routing. This application uses natural language processing techniques to analyze the content of emails and determine the appropriate category or folder for them.
- b. For a model that helps decide what grade to award to an essay question, the relevant NLP application would be automated essay scoring. This application involves analyzing the content, structure, and language of essays to assign them a score or grade. It can be used by university professors or essay competitions to assess a large number of essays efficiently.
- c. For a model that provides assistive technology for doctors to provide their diagnosis, the relevant NLP application would be clinical decision support. This application involves processing patient data, including their answers to questions, and using NLP techniques to assist doctors in making diagnoses or treatment decisions. It can help doctors analyze symptoms, medical history, and other relevant information to provide probable diagnoses.