Compulsory Task 2
Read up on any innovative technology using NLP (by companies such as Google or IBM, for instance) and write a brief summary about the technology, what it achieves/does, and an overview of how it works (250 - 500 words).

Amazon - Real-time analysis of customer sentiment
Amazon Web Services (AWS), a subsidiary of Amazon, provides a wide range of products and services predominantly within cloud computing. One such service is Amazon Comprehend which is a Natural Language Processing (NLP) service that uses Machine Learning (ML) to analyse text aimed at uncovering valuable insights. Amazon Comprehend is able to be applied to many use cases because of its ability to analyse a large number of insights including entities, keyphrases, personally identifiable information (PII), language, targeted sentiment and syntax.

One application of this service is to use it for analysing customer sentiment, which is a metric that can be used to measure how customers think about a business's brand or product. The user of the service would input the documents, webpages or any other text they would like to study and the service is able to output the insights depending on what the user requests. If the user wants to know about feedback with regards to one of their particular products, Amazon Comprehend will look through all the texts and identify key phrases and words to determine if the sentiment is either mixed, positive, neutral or negative. Amazon does not share the details of the dataset their base Amazon Comprehend service is trained on, it can however be assumed that within the dataset Amazon has trained the model which includes many examples of sentiments that allows the program to rate the phrases and words as mixed, positive, neutral and negative.

All the information can be displayed on a live dashboard which updates as the inputs, which could be live web pages, update over time. If a customer posts a review on a target webpage then this information can be updated instantly. This poses a huge benefit overall to a business analysing customer feedback which otherwise could take days or weeks if done manually.

Sources
https://aws.amazon.com/blogs/machine-learning/real-time-analysis-of-customer-sentiment-using-aws/

https://docs.aws.amazon.com/comprehend/latest/dg/what-is.html

https://aws.amazon.com/blogs/machine-learning/extract-granular-sentiment-in-text-with-amazon-comprehend-targeted-sentiment/