Emotion Analysis on text

Problem or idea description – The aim of the project to understand sentiment of the sentence in terms of the positivity/negativity and neutrality.

Background information – Analysis of emotion on text is the process of determining the overall mood of a passage of text. Sentiment analysis is one of those domains where several algorithms and tools have been developed and are now widely utilized. There are some examples as analysis of social media interaction (often to update fresh material on social media), support (depending on how irritated people are, certain help requests may be more robust than others), product launch (it may be vital to respond swiftly following the launch of a new product in the event of dissatisfied consumers, bloggers, journalists, etc. In such cases, sentiment analysis can be useful).

Available solutions with links - https://github.com/Bhagya4347/Emotion-Analysis-On-Text

https://github.com/huggingface

How to get data – product reviews, personal blogs/journals, social network websites, forums, fiction excerpts, analyses, criticisms, and other forms of emotionally rich language can all be found. Although many databases focus on product or service evaluations, text sources may originate from news stories, stock market assessments, or political arguments; anyplace that people openly discuss and share their opinions might be a source.

Brief description of a solution - Natural language processing (NLP) is used by ML tools to evaluate text and discover elements and themes that appear to occur with a given frequency. The technology recognizes them as essential textual parts and consumes them for sentiment analysis.

To interpret recurrent elements, NLP tasks assess language, phrase structure, intonation, adjectives, and so on. Semantic classification groups semantically comparable content to avoid redundant emotion detection in text.

Finally, sentiment analysis computes and assigns sentiment for aspect-based sentiment analysis as well as a total sentiment score. This provides you with a highly fine-grained picture of positive, negative, and neutral sentiment from all of the critical aspects discovered in your data by the text analytics API.

Tech stack – LSTM - cell state serves as a conduit for relative information to be sent all the way down the sequence chain.

Tokenization - process of breaking down a phrase, sentence, paragraph, or an entire text document into smaller parts, such as individual words or phrases. Tokens are the names given to these smaller units.

Data preprocessing - string package to convert the data to lower case and remove punctuation, which proved to be faster than what I had read in the reference literature.

Necessary information – Emotion Detection and Recognition from text is closely connected to Sentiment Analysis