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| Name Of The Student | Aman Rai |
| Internship Project Topic | Automate Detection of different emotions from textual comments and feedback |
| Name of the Organization | TCS iON |
| Name of the Industry Mentor | Mr. Debashis Roy |
| Name of the Institute | Institute of Engineering & Management Kolkata |

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| Date | Day # | Hours Spent |
| 5 Aug 2020 | 1 | 3 |
| On Day1 I have done some self-learning and go through some youtube video to know emotion detection in brief, I am going to mention the reference links in the last part of report.  Activities done during the day: Emotion Detection and Recognition from text is a recent field of research that is closely related to Sentiment Analysis. Sentiment Analysis aims to detect positive, neutral, or negative feelings from text, whereas Emotion Analysis aims to detect and recognize types of feelings through the expression of texts, such as anger, disgust, fear, happiness, sadness, and surprise. Emotion detection may have useful applications, such as:  Gauging how happy our citizens are. Different indexes have different definitions; most evolve around economic, environmental, health, and social factors. Since the mid-2000s, Government and organizations around the world are paying increasing attention to the [happiness index](https://en.wikipedia.org/wiki/Happiness_economics).   * The [Happy Planet Index (HPI)](http://happyplanetindex.org/) ([news](http://www.dailymail.co.uk/health/article-2842403/Revealed-happiest-countries-world-contented-life-head-Costa-Rica-Vietnam-Norway-UK-fares-better-Spain-Australia.html), [TED talk](http://www.ted.com/talks/nic_marks_the_happy_planet_index)). This metric is defined as the overall index scores that rank countries based on their efficiency, as well as how many long and happy lives each country produces per unit of environmental output. This is unusual because the majority of indexes are based upon economic measures. * Societal Wellbeing metrics. The [UK](http://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/bulletins/measuringnationalwellbeing/2015-09-23) government measures people’s wellbeing; their statistics can be found [here](http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Societal+Wellbeing). Other countries and cities such as Seattle, Dubai, and South Korea, have similar measures. * Pervasive computing, to serve the individual better. This may include suggesting help when anxiety is detected through speech, or to check the tone of an email before sending it out. * Understanding the consumer. Improving perception of a customer with the ultimate goal to increase brand reputation and sales.   Introduction  Detecting emotional state of a person by analysing a text document written by him/her appear challenging but also essential many times due to the fact that most of the times textual expressions are not only direct using emotion words but also result from the interpretation of the meaning of concepts and interaction of concepts which are described in the text document.  There are 6 emotion categories that are widely used to describe humans’ basic emotions, based on facial expression [1]: *anger, disgust, fear, happiness, sadness* and *surprise*. These are mainly associated with negative sentiment, with “Surprise” being the most ambiguous, as it can be associated with either positive or negative feelings. Interestingly, the number of basic human emotions has been recently “reduced”, or rather re-categorized, to just 4; *happiness, sadness, fear/surprise*, and *anger/disgust* [2]. It is surprising to many that we only have 4 basic emotions. For the sake of simplicity for this code story, we will use the more widely-used 6 emotions. The question remains, however, how much of an emotion we can convey via text? This is especially interesting since facial expression and voice intonation convey over 70% of the intended feelings in spoken language.  In any recognition task, the 3 most common approaches are rule-based, statistic-based and hybrid , and their use depends on factors such as availability of data, domain expertise, and domain specificity.  Reference Links: <https://www.youtube.com/watch?v=DzAZ2Bq_dgU&t=307s>  <https://towardsdatascience.com/>  <https://ieeexplore.ieee.org/Xplore/home.jsp> | | |