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**Sentiment Analysis rules through chatting: An Analysis Under Sentiment Content Theory**

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**INTRODUCTION:** Sentiment Analysis has been a very challenging field for AI. There have been many attempts to analyse the emotion through text or a chat, but till date it has never been possible to get it correct to 100% accuracy. In this project an attempt is being made to understand the mood of the user who has been typing or chatting with the system. After which the person would be provided with some feeds on the mode, he/she is, so that it becomes a comfortable or comforting session chatting with the system. Also, it will help the person in boosting the positive emotion if he/she is depressed.

**The Problems of the System:**

To Analyse the sentiment thorough sentence is tough and then to identify and provide supporting feedback is a difficult task.

It might happen the user is not expressing the sentiments properly or giving some wrong input of the emotion which, he/she is not currently feeling (1).

The user might use a very complex sentence which expresses the emotion indirectly, in that case the AI agent won’t be able to pick up the emotion as it doesn’t have that extra intelligence (2).

So, it is needed to follow some ways to interact with the application.

**Solution to Systems Problem:**

There are various ways of solution to this problem, but Natural Language Processing can be a good approach towards it.

Natural Language Processing (NLP) is the way to analyse or processing the human language through sentences by the breaking the down into parts.

NLP takes into consideration only the subject and verb part of a sentence to get the emotion out of it.

Therefore, we can use the NLP to easily get the emotion out of the sentence.

**Limitation of the Solution:**

The Effectiveness of the Natural Language Processing is in database it is working with to get the emotion. Bigger and Better the database more accurate will be the result.

If the Emotions are expressed indirectly then it will not be able to get the emotion.

**Conclusion:**

**Conclusion**- Sentiment is a very complex thing and needs to taken care of especially in case of a depression. So, developing an agent can help to reach many people easily and provide a support to deal with this situation. Therefore, sentiment analysis should be considered.

**Summary**-In this paper we have tried to analyse the sentiments through chats and provide constructive feedback to support the user emotionally and to help the user if he/she is feeling sad or not satisfied with something.

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