

AI Engineer Assignment: Hindi Conversation Analysis

Github: <https://github.com/AdityaAnj/Predixion-AI>

Summary

Recovery Agent (RA) and borrower (B) are having a conversation regarding loan repayment where RA from XYZ Finance contacts B regarding his outstanding loan and informs Borrower that last month's EMI hasn't been received. B explains his job loss and financial difficulties and requests additional time and proposes a partial payment for which RA emphasizes the importance of timely loan repayment and agrees to half payment by next week and discusses the remaining dues. B plans to find new work and clear the balance next month. RA suggests paying the rest by the 15th of next month to which B agrees, and RA promises to send payment details via SMS.

Key Actions

- Translation of key words to English
- Summary of Conversation
- Sentiment Analysis

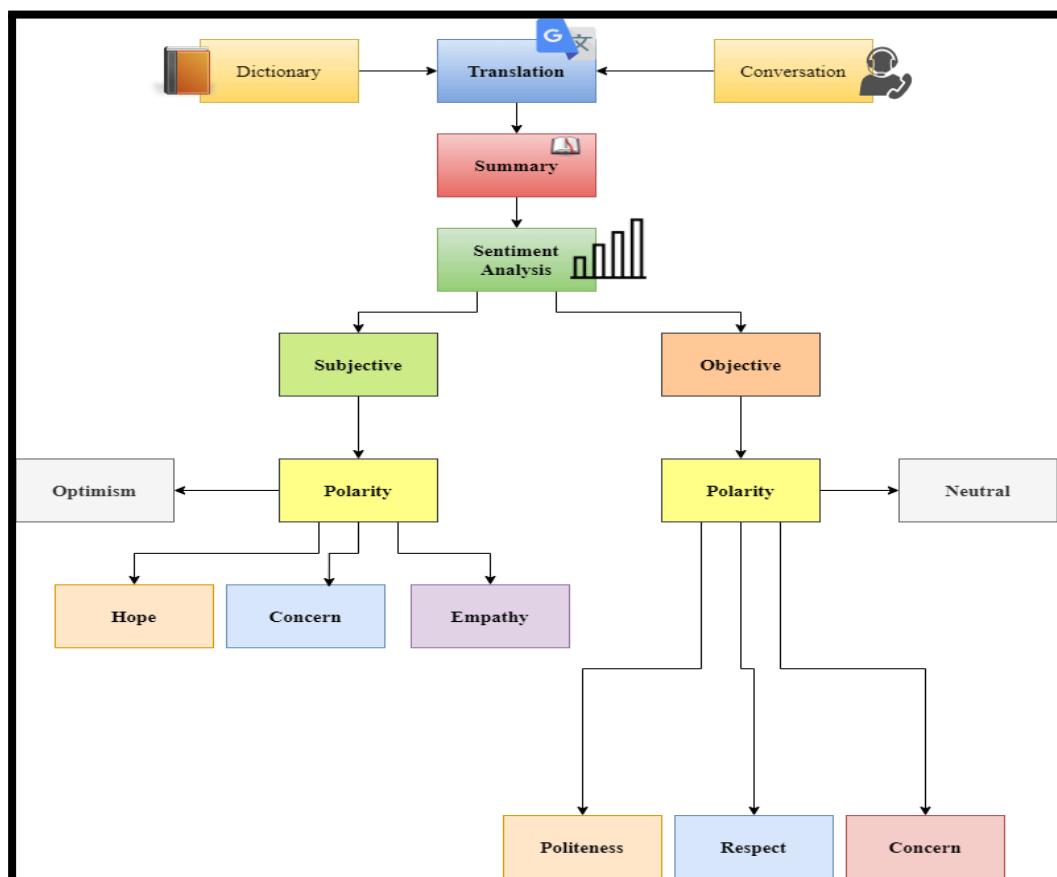


Figure 1: Flow Chart

In this Assignment as depicted in figure 1, for translation of the conversation, a dictionary with important key words is created then the complete Hindi conversation is passed and we can see the translation of conversation Summary for the conversation is created and then we apply Sentiment analysis.

Sentiment Analysis

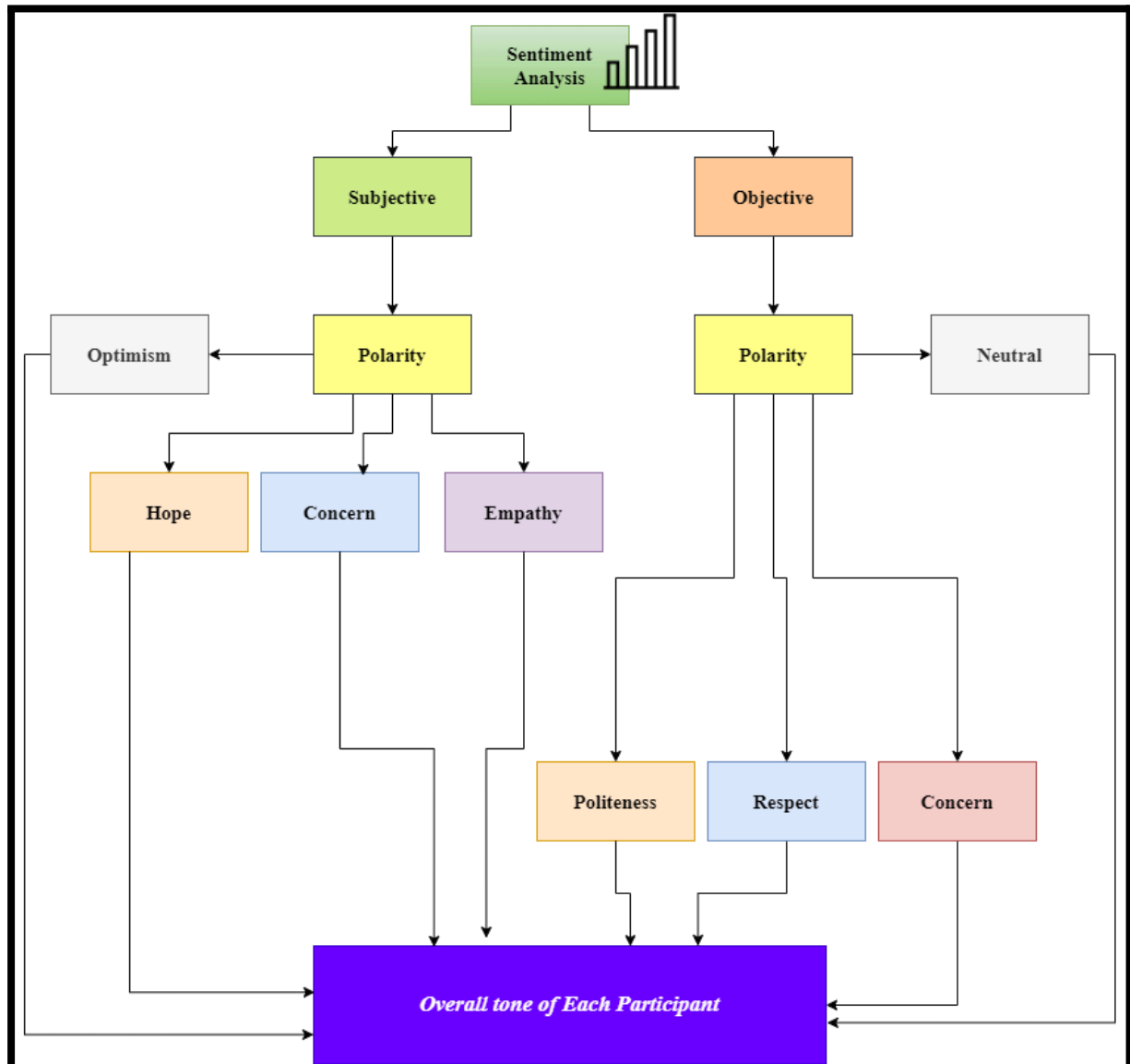


Figure 2: Sentiment Analysis

In this Assignment the tone each of the line of Recovery Agent and Borrower is analysed then it is classified as subjective or objective. The sentence is further classified based on the polarity and then maximum recurring sentiment is noted down.

- Subjective Sentences: Subjective sentences contain opinions and sentiments. People express their feelings, appraisals, or sentiments toward entities or events in subjective sentences. Subjectivity ranges from 0 to 1

- Objective Sentences: Objective sentences are those that do not exhibit any sentiment. They convey factual information without expressing opinions.
- Polarity: Polarity analysis involves identifying and categorizing opinions expressed in a piece of text. Polarity refers to whether a statement expresses a positive, negative, or neutral sentiment. Polarity will be 0,-1,1

In this assignment based on polarity score the tone of the participant is further classified as either optimistic, hopeful , concern or empathy if the subjectivity is greater than 0.5 and politeness , respect, concern and neutral if subjectivity is less than 0.5 which means the tone is objective.

Result of Analysis

The overall tone of ,

- Recovery Agent is Neutral
- Borrower is Respectful