Review Analyser on Music Apps

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Abstract

Music application industry is growing really fast. With everyone in the competition offering almost the same feature list without much room to compete on the price, the uniqueness, quality of the product and giving the customer a good experience are the facts that give a competitive advantage to one application developer a competitive advantage over another. That is where user comment come handy because they are the reflection of how the users have accepted the application. But when the comments grow in numbers, it is quite difficult to manually analyse them. That is why application developers need an accurate comment analyser to help understand how the customers have accepted their music application.

A research was carried out in both quantitative and qualitative approaches to find the best solution for this problem. The main focus of the research was to identify the most suitable technical approach to address the problem. Then as the final result of the qualitative research done, the five natural language processing techniques sentiment analysis, topic modelling, term frequency, named entity recognition and event extraction were found. Moreover, considering the requirement for machine learning algorithms and the availability of the massive amount of user comment data, Native Bayes machine learning algorithm is also selected to gain a higher accuracy to the system. After the parameter training was done, the built machine learning model was trained using 1,500 comment data to gain the best possible accuracy level.

A music application user comment analysing system was developed using natural language processing and machine learning algorithms as the final product of the research project carried out over a span of approximately one year. The built system is capable of analysing user comments of a music application and provide the strengths, weaknesses, opportunities and threats of the application.

Keywords: *Artificial Intelligence, Machine Learning, Natural Language Processing, Comment Analysing, SWOT Analysis*