"QSMS" - ENHANCED NATIVE SMS CLIENT WITH INTELLIGENT MESSAGE CLASSIFICATION AND NOTIFICATION

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Abstract

SMS is a popular communication method in mobile platform. Since it is based on the GSM technology, the messages are easily delivered to the recipients at anytime, anywhere the cellular network is available. Due to this reason, even with the increasing internet usage, SMS messaging is still being used for many purposes. With rapid improvements made to the infrastructures and technology, cost of SMS messages is getting much lower. Because of this low cost and higher rates of reachability, SMS platform became a popular platform for marketing and spamming.

Service providers, marketing campaigns and many more commercial institutes now use this platform to promote their brand and sales. Attending to each and every SMS message received to the mobile phone, is distracting and annoying. It will decrease the productivity of the user. SMS applications in mobile phones now provide features like contact blocking to stop receiving messages from unwanted contacts. Although this feature controls the situation, these blocked contact lists should be configured and maintained manually which takes more time and effort.

This project is focused on developing a solution that can classify SMS messages received to the mobile phone and only notify the important messages to the user. A trained machine learning model is used to perform this task. According to the tests and evaluations carried out, the solutions is capable of performing at 96% accuracy within five categories. Also, it is capable of classifying the SMS in less than a second in devices with the lowest hardware specifications.

Keywords: SMS, Messaging, Classification, Natural Language Processing, Machine Learning, Neural Networks, Multi-class Classification