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A framework for Arabic sentiment analysis using supervised classification

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Abstract: Sentiment analysis aims to determine the polarity that is embedded in people comments and reviews. Sentiment analysis is important for companies and organisations which are interested in evaluating their products or services. The current paper deals with sentiment analysis in Arabic reviews. Three classifiers were applied on an in-house developed dataset of tweets/comments. In particular, the Na?ve Bayes, SVM and K-nearest neighbour classifiers were employed. This paper also addresses the effects of term weighting schemes on the accuracy of the results. The binary model, term frequency and term frequency inverse document frequency were used to assign weights to the tokens of tweets/comments. The results show that alternating between the three weighting schemes slightly affects the accuracies. The results also clarify that the classifiers were able to remove false examples (high precision) but were not that successful in identifying all correct examples (low recall).