Opinion Mining Social Web for Calculating Desirable Specifications for Products

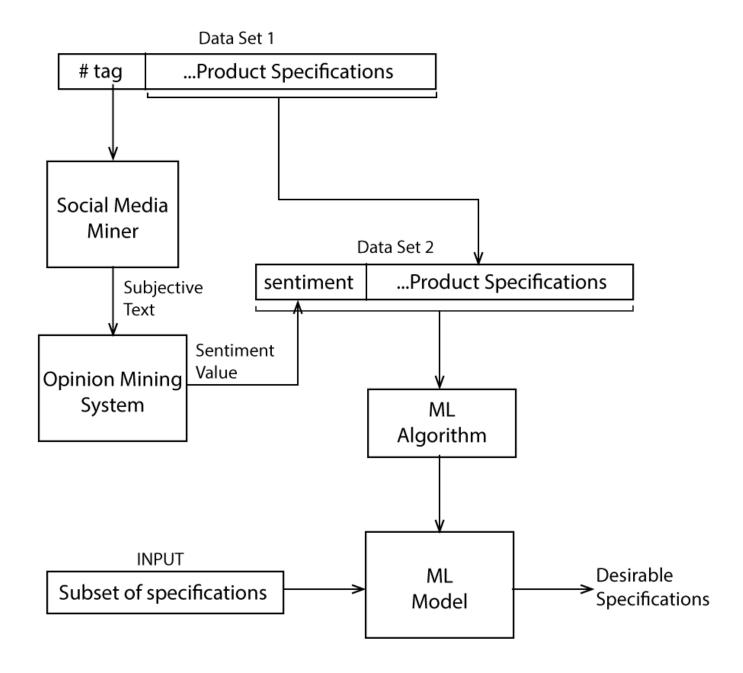
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PROPOSED MODEL

- Our proposed model consist of 3 key components:
 - A Social Web Miner to extract subjective texts about a product from twitter using hashtags.
 - An **Opinion Mining System** to compute polarity and sentiment value using NLP.
 - A Machine Learning Model to calculate desirable specification based on the output from Opinion Mining and some input constraints.

3



SYSTEM DESIGN

Social Web Miner

- o Uses **Twitter API** to query tweets using hashtag.
- Extracts the text from tweet and preprocess it for sentiment analysis.

Opinion Mining System

- o Uses **TextBlob** python library for sentiment analysis.
- Creates a TextBlob from preprocessed tweet and finds subjectivity and sentiment value.
- Finds the average sentiment value of all the tweets that has a minimum subjectivity.

SYSTEM DESIGN

Machine Learning Model

- Uses Pandas to handle datasets.
- o Uses **SciKit** learn for building machine learning models.
- o Combines average sentiment polarity and product specification to build a dataset for training the model.
- Uses Multivariate Multiple Regression to calculate desirable specification for a new product.

THANK YOU