## Assessment 1

Title

**RECOMMENDATION OF WEBSITES BASED ON REVIEWS**

### Description

Reviews are the prior resources to provide information about the products or services based on users experience to consumers, sellers, and retailers. Most of the customer rely on reviews to make any decision related to purchases or any service utilization provided. Some of the reviews are given by non-users to influence the customer’s decisions. We would like to address the problem by classifying the reviews into most preferable and least preferable based on purchased and non-purchased respectively. In this, we will proceed by doing sentimental analysis (Natural Language Processing) on most and least preferable to get the positive, negative and the neutral feedback. We would like to create recommendation engine with the combinational aspects of user based (purchaser or non-purchaser), review content based (positive, negative, and neutral), and popularity based (ratings and views). Our main consideration is to remove reviews of non-purchasers and concentrate on purchased user reviews as the most focusing aspect of this project. To tackle this idea, technically we would like to use the SVM, KNN baseline, Latent Dirichlet allocation (LDA) and other models.

Outcomes Assessed

The outcome will be beneficial to ecommerce industry and consumers as well by provide the most preferable products or services having genuine reviews. In the analysis we will filter out the reviews of non-buyers of any product to give genuine information written by customers as a result of search engine. The categorization of the reviews by using any classifier we can get most preferable by evaluating the performance of models with cross validation and confusion matrix