COOKING RECIPE RECOMMENDATION SYSTEM BASED ON AVAILABLE RAW INGREDIENTS USING WEB-BASED CONTENT-BASED FILTERING

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ABSTRACT

Cooking is an effort to fulfill daily nutrition. Delivery services that are easily accessible nowadays may not necessarily be able to meet a person's daily nutritional needs, plus delivery costs are quite expensive. Everyone is obliged to make cooking a basic skill that must be possessed to survive. A problem that often occurs in cooking activities is choosing the menu that will be made based only on the available ingredients. Based on this problem, a solution emerged to create a website that could recommend cooking recipes using available ingredients. The data used comes from a website that provides a collection of cooking recipes using web-scrapping techniques and is used as the basis for a content-based algorithm. TF-IDF is used to weight each word. Cosine similarity is used to measure the similarity of the input material data with existing data. Of the 30 experiments carried out with six different amounts of materials. The system can display five cooking recipe sequences in one trial. The highest similarity value obtained was 0.94 with a conformity value between the input material and data of one. Even though we are able to recommend recipes well, in some cases the first order does not always have ingredients according to the number of ingredients entered due to the limited amount of data used in the training process.

Keywords: Recipes, Cosine Similarity, Recommendations, Content-based algorithm, Website.