

RECOMMENDATION OF INDIAN CUISINE RECIPIES BASED ON INGREDIENTS

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Abstract— The Recipe Recommendation Program for Indian Cuisines is a program that learns from the past tastes of a user's favorite recipes to recommend a fresh, untested cuisine. The basis of the recommendation is the ingredients that the user has already liked in the recipes India's traditional cuisine has been largely refreshing owing to its impressive use of herbs and tastes. Indian cuisine is renowned for its broad variety of dishes. The cooking style moves from the city to the district and is usually divided into South Indian and North Indian cuisine. India is very much praised for its variety of multi-foods accessible in various and inn resorts, suggestive of unity in a number of ways. The staple food in India involves maize, rice, and chana (Bengal Gram) heartbeats that are the most important. At present, there has been a great deal of improvement in the Indian sense of taste. Bengali cuisine is exciting because of its excellent usage of panch phoron, a word used to apply to the five essential flavor's, to be a common mustard. Fenugreek seed, cumin seed, aniseed seed, and black cumin crop. Likewise, other dishes from all over the world are a mix of flavors that nourish taste buds.

I. INTRODUCTION

There are many varieties of Indian cuisine available with the same ingredients. Traditional cuisine in India consists of a wide variety of locally available spices, herbs, vegetables and fruit. In this article, we set forth a system that proposes Indian cuisine recipes based on the ingredients available and the taste of the cuisine. For this job, we did web scraping to create a list of the varieties of the recipes and then to implement the content-based method of machine learning to suggest the recipes. This

system is based on the recommendation of Indian Cuisines. India's traditional cuisine has been largely refreshing owing to its impressive use of herbs and tastes. Indian cuisine is renowned for its broad variety of dishes. In this article, we proposed a suggestion system for Indian cuisine using ingredients that suit the cuisine and the taste of food. To do this, we've done site scraping to create a database of Indian cuisine and gather details regarding all the recipes and ingredients used in the kitchen. The issues mentioned above, such as the cold start, need to be addressed. One of the ways we can do this is by linking each user to their social network profiles and suggesting recipes that their friends like. Heterogeneity can be addressed by building better, more dynamic creepers. In the future, therefore, it will be possible to enhance the food recommendation by using hybrid approach [12] and web crawling methods where the extracted meta-data is more important. [13] Future changes may involve allowing recommendations on the basis of the regional area where the food originated, or on the basis of a chef whose dishes the customer enjoys. The program may also use the proximity of the consumer to recommend specialty dishes served in nearby restaurants.

II RELATED WORK

1. Toward the next generation of recommender systems: A survey of the state- of-the-art and possible extensions.
2. AUTHORS: G. Adomavicius and A. Tuzhilin.

This paper presents an overview of the field of recommender systems and describes the current generation of recommendation methods that are usually classified into the following three main categories:

content-based, collaborative, and hybrid recommendation approaches.

II. EXISTING SYSTEM

Web Scraping (Scraping or Web Data Extraction or Web Harvesting) is a system utilized to fetch a lot of information from sites whereby the information is extricated and spared to a nearby record in your PC or to a database in the table (spreadsheet) design. Web scraping is the way toward fetching information from sites. All the activity is completed by a bit of code which is known as a "spider". In the first place, it sends a "GET" question to a particular site. At that point, it parses a HTML record dependent on the got outcome. After it's done, the scrubber looks for the information you need inside the report, and, at long last, changes over it into the predefined format.

DISADVANTAGES:

Data cleansing or data cleaning is the way toward distinguishing and adjusting (or expelling) degenerate or off base records from a record set, table.

The bag-of-words model is a way of representing text data when modeling text with machine learning algorithms.

III. PROPOSED SYSTEM

In this step, we crawl various websites that provide Indian cuisines. Web scraping is done. Since the collected dataset is not well formatted hence we applied data preprocessing techniques in the collected dataset. Content based recommendation system recommends based on contents of the matching profile. Our collected dataset has a lot of features like ingredient, steps, time to prepare etc. but we need only a few features to recommend similar recipes. In this step we select the column based on which we will perform the recommendation and drop the other features.

ADVANTAGES:

Our recommendation system recommends based on ingredients of a specific recipe. So we select the ingredient column of our dataset and create bags of word for each recipe. Bags of word contain the keywords for each recipe and based

on the similarity of those keywords we rank other recipes in decreasing order of their similarity.

In the recommender part we took recipe name as input and

output similar recipes. First, we find the index of the recipe which is imputed by user and then we create a series with similarity score using cosine similarity matrix. Then we get the index of the top 2 most similar recipes and recommend those recipes to the user

RESULTS

Fig.1: Login Page

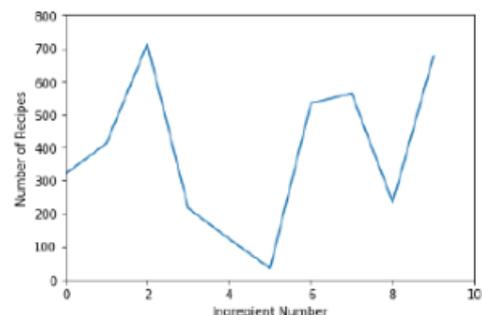


Fig.2: performance Graph

CONCLUSION AND FUTUREWORK

The conventional food of India has been broadly refreshing for its remarkable utilization of herbs and flavors. Indian food is known for its substantial arrangement of dishes. In this paper, we presented a method for Indian cuisine recommendation using ingredients matching of cuisine and liked food. For this, we did web scraping to make the database of Indian cuisine and collect information all about the all cuisine recipes and used ingredients. The above issues such as cold start need to be addressed. One of the ways in which we can do this is by linking each user to their social network profiles and suggest recipes liked by their friends. Heterogeneity can be addressed by building better, more dynamic crawlers. So, it will be possible in future that enhance the food recommendation by using hybrid approach and web crawling methods where the

extracted meta-data is more. Future improvements could include making suggestions based on the geographical location where the cuisine originated, or based on the particular chef whose dishes the user likes. The system could also leverage the user's location to suggest specialty dishes found in nearby restaurants.

It will be possible in future that enhance the food recommendation by using collaborative filtering, hybrid approach and web crawling methods where the extracted meta-data is more. Future improvements could include making suggestions based on the geographical location where the cuisine originated, or based on the particular chef whose dishes the user likes. The system could also leverage the user's location to suggest specialty dishes found in nearby restaurants. Furthermore, the approach could be comparable with more advanced algorithms.

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