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RECOMMENDATION OF INDIAN CUSINE RECIPIES BASED ON INGREDIENTS

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ABSTRACT

There are lots of varieties of Indian cuisine available with same ingredients. In India, Traditional cuisines consist of wide varieties due to locally available spices, herbs, vegetables, and fruits. In this paper, we purposed a method that recommends of Indian cuisine on the basis of available ingredients and liked cuisine. For this work, we did web scraping to make a collection of recipes' varieties and after that apply the content-based approach of machine learning to recommend the recipes. This system gives the recommendation of Indian Cuisines based on ingredients. Recipe Recommendation System for Indian cuisines is a system that learns from the past preferences of a user's preferred dishes to recommend him/her new, untested cuisines. The basis of recommendation are the ingredients in the recipes already liked by the user.

1.INTRODUCTION

Recipe Recommendation System for Indian cuisines is a system that learns from the past preferences of a user's preferred dishes to recommend him/her new, untested cuisines. The basis of recommendation are the ingredients in the recipes already liked by the user. 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. The cooking style shifts from locale to the district and is generally separated into South Indian and North Indian food. India is very acclaimed

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for its differing multi-food accessible in countless and inn resorts, which is reminiscent of solidarity in assorted variety. The staple nourishment in India incorporates wheat, rice, and heartbeats with chana (Bengal Gram) being the most vital one. In current occasions, the Indian sense of taste has experienced a great deal of progress. Bengali cooking is refreshing for its astounding utilization of panchphoron, a term used to allude to the five basic flavors, to be specific mustard, fenugreek seed, cumin seed, aniseed, and dark cumin seed. Conventional Gujarati food is essentially a veggie lover and has a high dietary benefit. The commonplace Gujarati thali comprises of shifted sorts of lip-smacking dishes. Gujarati food has such a great amount to offer and each dish has a totally unique cooking style. The cooking of Punjab has a colossal assortment of mouth-watering vegan just as nonveggie lover dishes. The flavor content reaches from negligible to charming to high. Punjabi nourishment is typically savored by individuals all things considered. In Punjab, home cooking varies from the eatery cooking style. The food of Rajasthan is principally veggie lover and offers an impressive assortment of divine dishes. The flavor content is very high in contrast with other Indian cooking styles, however the sustenance is completely tasty. Rajasthani use ghee for cooking the greater part of the dishes. Rajasthani nourishment is outstanding for its hot curries and delectable desserts.

2. 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 OF EXISTING SYSTEM:

- Data cleansing or data cleaning is the way toward distinguishing and adjusting

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(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

3. 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 OF PROPOSED SYSTEM:

- 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.

4.OUTPUTSCREENS

HOME PAGE

FOOD COURT REGISTRATION

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FOOD COURT LOGIN

F00D COURT HOME

AVAILABLE ITEMS:

CUSTOMER INGREDIENTS VIEW:

ADD ITEMS:

CUSTOMER REGISTRATION:

CUSTOMER LOGIN:

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CUSTOMER HOME:

SEND RECOMMENDS:

INGREDIENTS:

RECOMMENDED:

VIEW RECIPES:

FOODCOLOR DETECT:

DOWNLOAD ITEMS:

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MANAGER LOGIN:

MANAGER HOME:

VIEW CUSTOMER:

VIEW FOODCOURT DETAILS:

VIEW FOOD ITEMS:

5.CONCLUSION

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

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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.

6. FUTURE SCOPE

In future, we can also search recipe by voice reorganization. User sounds the ingredient's name and according to that ingredient name recipes will be display on the screen and in that recipe which ingredients we don't have user can be able to search it by name at near -by locations and place order of that ingredient.

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