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Food Recipe Recommendation System

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Abstract - *In today's world, everyone is busy in their day-to-day life, and that sometimes people tend to eat unhealthy fast food or food that has less nutritional value. Food is essential for all human beings. Last year's pandemic of covid-19 has shown us eating healthy food is a must to keep ourselves fit. There is no food that can cure the virus of course but eating a nutritious diet can boost your immune system and helps you keep fit and active. Proper food can give you some long-term life benefits and protect you from any disease. Eating a healthy diet is not limiting your food, or staying away, or depriving yourself of the food that you love. Rather, it about enjoying what you eat, having more energy and boosting your mood. Our idea is to make you aware of what you are eating and what your body is getting from that. By using these simple tips, you can cut through the confusion and learn how to create and stick to a tasty, varied, and nutritious diet that is as good for your mind as it is for your body. Few changes towards a healthy food diet in our routine can do wonders. Our model focuses on providing the best possible recipes to the user to fulfill their needs of eating a tasting, healthy and nutritious diet.*

Key Words: **Food, Recipe recommendation, healthy food, Food Recipe Recommendation System**

1. INTRODUCTION

Most common domestic issue raised by every chef at home is, "What should I cook tonight or today." to overcome this issue we are introducing Food Recipe Recommendation System. Solution to problem is in shape of our model which will ease the way of cooking. Initially user will able to see a attractive home page in which a short videos will appear that user can scroll to watch different if user is willing to watch full video of recipe that one has to tap on the short video. Now if user wants to post picture, videos or wants scan or enter the ingredient available with them then over proposed system which will show as many as possible recipes related to ingredients entered then user needs to create an account to do so. Post can be images or videos of food cooked or recipe which they can share in public, other users can like share and comment on that post which can help in increasing followers of the user who posts the recipes. The user is given choice to add a recipe to his favorites, remove them from favorites they can search recipes which are going in trend or of their favorite chef. The interface made it handy to use.

1.1 Problem definition

People always worry about what to cook, they always keep thinking every day and night about it after that they search ingredients of meal that they have thought of but unfortunately, they haven't some ingredient which create a problem which is that they have to restart again that what to cook. And another problem is there any future scope for master chef of house this project will help to over this problem.

1.2 Objectives

Objective is to overcome this entire problem which is to recognize food ingredients to suggest you delicious and different recipes for your daily meal or breakfast. Another objective is to give our chefs a new social media platform in which they can interact with people of their ledge.

1.3 Scope of the Project

Work suggests recommending recipes by some ingredients by which cooking is ease to everyone.

2. Methodology

2.1 Proposed Methodology

The Methodology used in our system for front end and back end-Data preprocessing which includes data cleaning, data integration, data transformation, data reduction, and data discretization which help us out in screening the corrupted data which may lead us to misleading results. Thus, the representation and quality of data is first and foremost before running an analysis. PHP is used for server scripting. Cosine similarity measures the similarity between two vectors of an inner

product space. It is measured by the cosine of the angle between two vectors and determines whether two vectors are pointing in roughly the same direction. It is often used to measure document similarity in text analysis.

2.2 Proposed System

The proposed system consists of recipe database, suggesting recipes according to user's interest. The database is classified into different categories.

The database is classified into different types such as starter, lunch and main-course.

There are two ways of searching recipes as mentioned below:

1. Based on state or cuisine: If the user can search recipes based on states or cuisine. The user can select any state such as Gujarat, South Indian or Rajasthani. Based on the selection the user will be directed to next page where the website will show recipes based on their selection. The page will consist of images of the recipes, user has to select whatever he likes, after selection user will be directed to a page which shows all the details which includes steps, cook time, ingredients required for making the dish, type of cuisine, video and its category. Based on the search other recipes that has same ingredients and cook-time will be suggested to the user. The suggestion will be based on what user selects as ingredient, cook time, type of cuisine, etc.

2. Based on ingredients: The user can select ingredients shown on screen based on the selection the user will be directed to a page where all the dishes will be shown that has the selected ingredients as main. The user then can select whatever recipe is preferred by them from the list displayed. They will be directed to the page which shows all the details which includes steps, cook time, ingredients required for making the dish, type of cuisine, video and its category (veg or non veg). Users will also be suggested recipes similar to selected recipe. The suggestion will be based on what user selects as ingredient, cook time, type of cuisine, etc.

Apart from this, the user can also select food from trending recipes: When the user login into the website, the home page will show all the trending recipes from which user can select any recipe.

3. CONCLUSION

In this paper, we advent a Food Recipe Recommendation System which helps us to search for cooking recipes once an ingredient list is entered or built-in camera is pointed to food ingredients and that too instantly. For now, the recipes are classified on the basis that the recipe involving recognized ingredient will be put on top and the ones including addition of ingredients at the bottom of the menu list. Moreover, user can search recipes by their states or by their meal i.e. Breakfast, lunch, dinner, etc.

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