International Journal of Scientific Research in Engineering and Management (IJSREM)
Volume: 08 Issue: 04 | April - 2024 SJIF Rating: 8.448 ISSN: 2582-3930

INDIAN CUISINE RECIPES BASED ON INGRIDIENTS

Y.GOPIKA , Y.SRI LAKSHMI,
P. VENKATCHANDU , V.PUSHPA LAKSHMI

Under The Esteemed Guidance Of Dr.R.Lalu Naik M.Tech, Ph.D Professor
Department of Computer Science and Engineering
BACHELOR OF TECHNOLOGY

TIRUMALA ENGINEERING COLLEGE
Jonnalagadda, Narasaraopet, GUNTUR (Dt.),A.P.

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 recipes 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 Using Navibayes Ml- Algorithm .

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 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. LITERATURE SURVEY

1.A Stock Recommendation System Using with Distributed Graph Computation and Trust Model-Collaborative Filtering Algorithm AUTHORS: Wang, Haoyu

Using a recommender systems is an effective way to solve the problem of information overload and help users to discover valuable information. This paper builds a dichotomy model of shareholder-stock relationship based on the distributed graph computing framework Spark GraphX, and using a certain financial theory, transforms the investment behavior of users (shareholders) into the ratings and trust of the invested stock. Then we calculate the shareholder similarity graph and the trust graph of shareholders through the parallel graph calculation, and use the improved collaborative filtering algorithm based on trust model to make a recommendation analysis of the stock of A-shares and SME stocks in the stock market. Finally, the comparison of common collaborative filtering algorithm in the experimental environment shows that the system has better algorithm scalability and accuracy

2. Combining User-Based and Item-Based Collaborative Filtering Using Machine Learning

AUTHORS: **Thakkar, Priyank**

Collaborative filtering (CF) is typically used for recommending those items to a user which other like-minded users preferred in the past. User-based collaborative filtering (UbCF) and item-based collaborative filtering (IbCF) are two types of CF with a common objective of estimating target user's rating for the target item. This paper explores different ways of combining predictions from UbCF and IbCF with an aim of minimizing overall prediction error. In this paper, we propose an approach for combining predictions from UbCF and IbCF through multiple linear regression (MLR) and support vector regression (SVR). Results of the proposed approach are compared with the results of other fusion approaches. The comparison demonstrates the superiority of the proposed approach. All the tests are performed on a large publically available dataset**.**

3. Financial Planning Recommendation System Using Content-Based Collaborative and Demographic Filtering

AUTHORS: Pereira, Nymphia, and Satishkumar L. Varm

The one stop to all problems is the Internet. But finding relevant information is difficult. The interest of the user lies in different forms of information content such as images, text, audio, or videos. The recommendation system is a process of information filtering that helps users to find better products, financial plans, and other related information by personalizing the suggestions. There are different recommendations techniques su

 DOI: 10.55041/IJSREM31970

3. SOFTWARE ENVIRONMENT

PYTHON

Python is a general-purpose interpreted, interactive, object-oriented, and high-level programming language. An interpreted language, Python has a design philosophy that emphasizes code readability (notably using whitespace indentation to delimit code blocks rather than curly brackets or keywords), and a syntax that allows programmers to express concepts in fewer lines of code than might be used in languages such as C++or Java. It provides constructs that enable clear programming on both small and large scales. Python interpreters are available for many operating systems. CPython, the reference implementation of Python, is open source software and has a community-based development model, as do nearly all of its variant implementations. CPython is managed by the non- profit Python Software Foundation. Python features a dynamic type system and automatic memory management. It supports multiple programming paradigms, including object-oriented, imperative, functional and procedural, and has a large and comprehensive standard library.

Interactive Mode Programming

Invoking the interpreter without passing a script file as a parameter brings up the following prompt −

$ python

Python 2.4.3 (#1, Nov 11 2010, 13:34:43)

[GCC 4.1.2 20080704 (Red Hat 4.1.2-48)] on linux2

Type "help", "copyright", "credits" or "license" for more information.

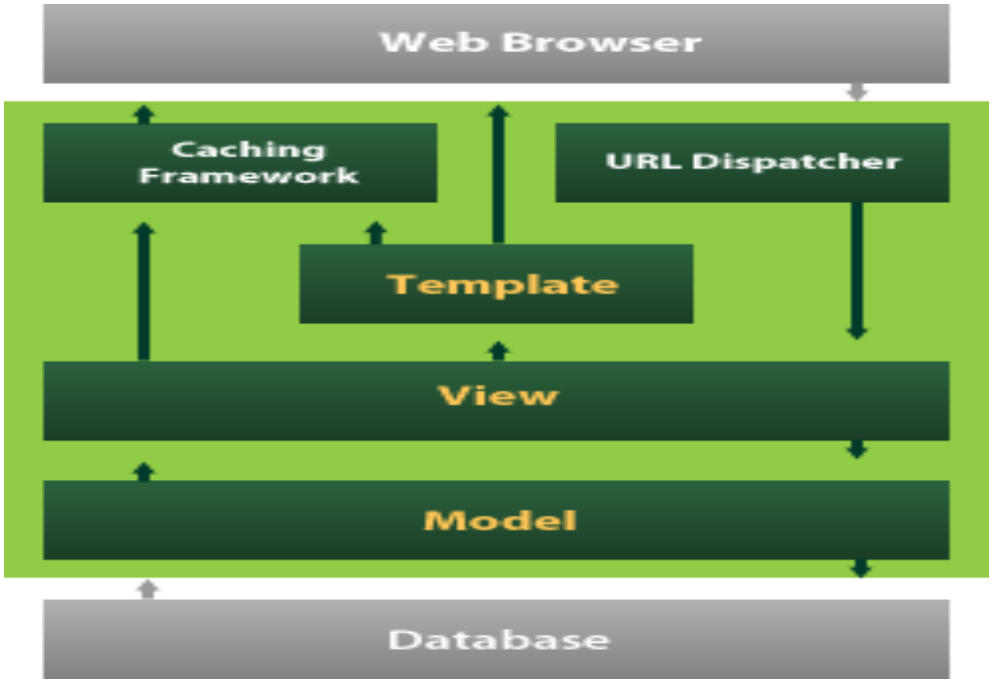
After deleting tup :

Traceback (most recent call last): File "test.py", line 9, in <module>
print tup;

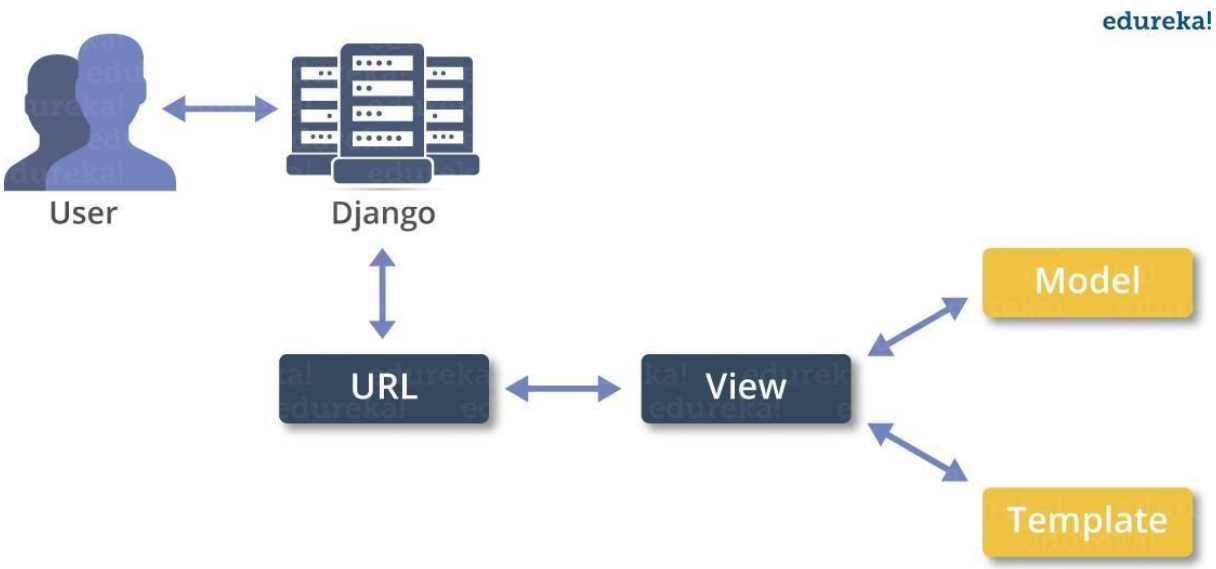
NameError: name 'tup' is not defined

DJANGO

Django is a high-level Python Web framework that encourages rapid development and clean, pragmatic design. Built by experienced developers, it takes care of much of the hassle of Web development, so you can focus on writing your app without needing to reinvent the wheel. It's free and open source.
Django's primary goal is to ease the creation of complex, database-driven websites. Django emphasizes reusabilityand "pluggability" of components, rapid development, and the principle of don't repeat yourself. Python is used throughout, even for settings files and data models.



Django also provides an optional administrative create, read, update and delete interface that is generated dynamically through introspection and configured via admin models



Create a Project

Whether you are on Windows or Linux, just get a terminal or a cmd prompt and navigate to the place you want your project to be created, then use this code −

$ django-admin startproject myproject

This will create a "myproject" folder with the following structure −

myproject/ manage.py myproject/
_____init___.py settings.py urls.py wsgi.py
The Project Structure

The “myproject” folder is just your project container, it actually contains two elements −

manage.py − This file is kind of your project local django-admin for interacting with your project via command line (start the development server, sync db...). To get a full list of command accessible via manage.py you can use the code −

$ python manage.py help

The “myproject” subfolder − This folder is the actual python package of your project. It contains four files −

__init__.py − Just for python, treat this folder as package.

settings.py − As the name indicates, your project settings.

urls.py − All links of your project and the function to call. A kind of ToC of your project. wsgi.py − If you need to deploy your project over WSGI.

Setting Up Your Project

Your project is set up in the subfolder myproject/settings.py. Following are some important options you might need to set −

DEBUG = True

This option lets you set if your project is in debug mode or not. Debug mode lets you get more information about your project's error. Never set it to ‘True’ for a live project. However, this has to be set to ‘True’ if you want the Django light server to serve static files. Do it only in the development mode.

DATABASES = {

 DOI: 10.55041/IJSREM31970

SYSTEM ANALYSIS :

SYSTEM DESIGN

4.1 INPUT AND OUTPUT DESIGN

INPUT DESIGN :

The input design is the link between the information system and the user. It comprises the developing specification and procedures for data preparation and those steps are necessary to put transaction data in to a usable form for processing can be achieved by inspecting the computer to read data from a written or printed document or it can occur by having people keying the data directly into the system. The design of input focuses on controlling the amount of input required, controlling the errors, avoiding delay, avoiding extra steps and keeping the process simple. The input is designed in such a way so that it provides security and ease of use with retaining the privacy. Input Design considered the following things:

- What data should be given as input?
- How the data should be arranged or coded?
- The dialog to guide the operating personnel in providing input.
- Methods for preparing input validations and steps to follow when error occur.

OBJECTIVES

1. Input Design is the process of converting a user-oriented description of the input into a computer-based system. This design is important to avoid errors in the data input process and show the correct direction to the management for getting correct information from the computerized system.
2. It is achieved by creating user-friendly screens for the data entry to handle large volume of data. The goal of designing input is to make data entry easier and to be free from errors. The data entry screen is designed in such a way that all the data manipulates can be performed. It also provides record viewing facilities.
3. When the data is entered it will check for its validity. Data can be entered with the help of screens. Appropriate messages are provided as when needed so that the user will not be in maize of instant. Thus the objective of input design is to create an input layout that is easy to follow

OUTPUT DESIGN

A quality output is one, which meets the requirements of the end user and presents the information clearly. In any system results of processing are communicated to the users and to other system through outputs. In output design it is determined how the information is to be displaced for immediate need and also the hard copy output. It is the most important and direct source information to the user. Efficient and intelligent output design improves the system's relationship to help user decision-making.

 DOI: 10.55041/IJSREM31970

1. Designing computer output should proceed in an organized, well thought out manner; the right output must be developed while ensuring that each output element is designed so that people will find the system can use easily and effectively. When analysis design computer output, they should Identify the specific output that is needed to meet the requirements.
2. Select methods for presenting information.
3. Create document, report, or other formats that contain information produced by the system.

The output form of an information system should accomplish one or more of the following objectives.

- Convey information about past activities, current status or projections of the
- Future.
- Signal important events, opportunities, problems, or warnings.
- Trigger an action.
- Confirm an action

4.2 SYSTEM ARCHITECTURE :

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 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

6. BIBLOGRAPHY

[1] Wang, Haoyu, et al. (2018) "A Stock Secommendation System Using with Distributed Graph Computation and Trust Model-Collaborative Filtering Algorithm." 2018 2nd IEEE Advanced Information Management, Communicates, Electronic and Automation Control Conference (IMCEC). IEEE)

[2] Thakkar, Priyank, et al. "Combining User-Based and Item-Based Collaborative Filtering Using Machine Learning." Information and Communication Technology for Intelligent Systems. Springer, Singapore, 2019. 173-180.

[3] Pereira, Nymphia, and Satishkumar L. Varma. "Financial Planning Recommendation System Using Content-Based Collaborative and Demographic Filtering." Smart Innovations in Communication and Computational Sciences. Springer, Singapore, 2019. 141-151.

[4] Pereira, Nymphia, and Satishkumar L. Varma. "Financial Planning Recommendation System Using Content-Based Collaborative and Demographic Filtering."Smart Innovations in Communication and Computational Sciences. Springer, Singapore, 2019. 141-151.