1. Introduction

Welcome to the "TASTY FEAST" - your gateway to a world of culinary delights! This Food Recipe API is designed to empower developers, chefs, and food enthusiasts alike by providing seamless access to a rich repository of recipes, culinary details, and nutritional information.

Purpose and Vision

Our API is crafted with the vision of simplifying the integration of diverse and delicious recipes into your applications, platforms, or projects. Whether you're building a cooking app, a nutrition tracker, or a meal planning service, our Food Recipe API is here to add a dash of flavour to your development journey.

Key Features

Extensive Recipe Database:

Gain access to a vast collection of recipes spanning various cuisines, dietary preferences, and cooking styles.

Nutritional Information:

Get detailed nutritional data for each recipe, empowering users to make informed and health-conscious choices.

Flexible Search and Filtering:

Harness the power of advanced search and filtering options to find the perfect recipe based on ingredients, cuisine, dietary restrictions, and more.

User-Friendly Integration:

Seamless integration through clear and well-documented endpoints, ensuring a smooth developer experience.

Community and Social Elements:

Foster engagement and user interaction with community features, allowing users to share, rate, and discuss their favourite recipes.

Getting Started

Before you embark on your culinary coding adventure, take a moment to familiarize yourself with the essentials:

Authentication:

Learn how to authenticate your requests to ensure secure and authorized access to the API.

Endpoints:

Explore the main endpoints that serve as gateways to our extensive recipe library.

Request and Response Formats:

Understand the formats for crafting API requests and interpreting the responses.

Who Should Use This API?

Developers:

Enhance your applications with a diverse and dynamic collection of recipes.

Chefs and Culinary Enthusiasts:

Dive into our database for inspiration, experimentation, and culinary exploration.

Nutritionists:

Leverage nutritional data to support your clients in making healthy and informed dietary choices.

Ready to Get Started?

Whether you're dreaming up the next cooking app or adding a touch of culinary magic to your existing project, [Your API Name] is here to fuel your creativity. Let the culinary journey begin! for detailed information on API usage, authentication, and endpoints, proceed to the Getting Started section of this documentation.

AIMS AND OBJECTIVES

The main aim of our application is to provide recipes to the consumers based on the ingredients already available with them,

unlike other recipe providing applications where the ingredients available with the consumer is not taken into consideration.

The objectives of our project are as follows:

- To help the user decide a recipe to cook from the ingredients available with him/her.
- To guide the user to the recipe based on the user's choices and needs.
- To help save the user money and time by tediously referencing cook books and buying ingredients he/she does not need.

Problem Statement:

We all have those times when we don't know what we could make for ourselves to eat from what we have available with us. Even

if we do, we may not know about a new recipe that can be made from the same ingredients or an old recipe that can be made in a

different way.

Today there are innumerable applications that provide consumers with recipes ranging from quick to healthy and from beginner to

expert; all intending to save time. But, none of these applications take into account whether he recipes ingredients are available

with the consumer at the point of time or not. They fail to provide recipes containing only the ingredients that are available, thus

proving to be inefficient and wasting time rather than saving it. These contemporary applications also do not evaluate and learn

from the user's choices thus further increasing the user's task of repeating already fed information again.

We plan on using a content-based recommendation system that will learn from user's inputs and provide the user with refined

recommended recipes which suit the user's needs

unlike other recipe providing applications where the ingredients available with the consumer is not taken into consideration.

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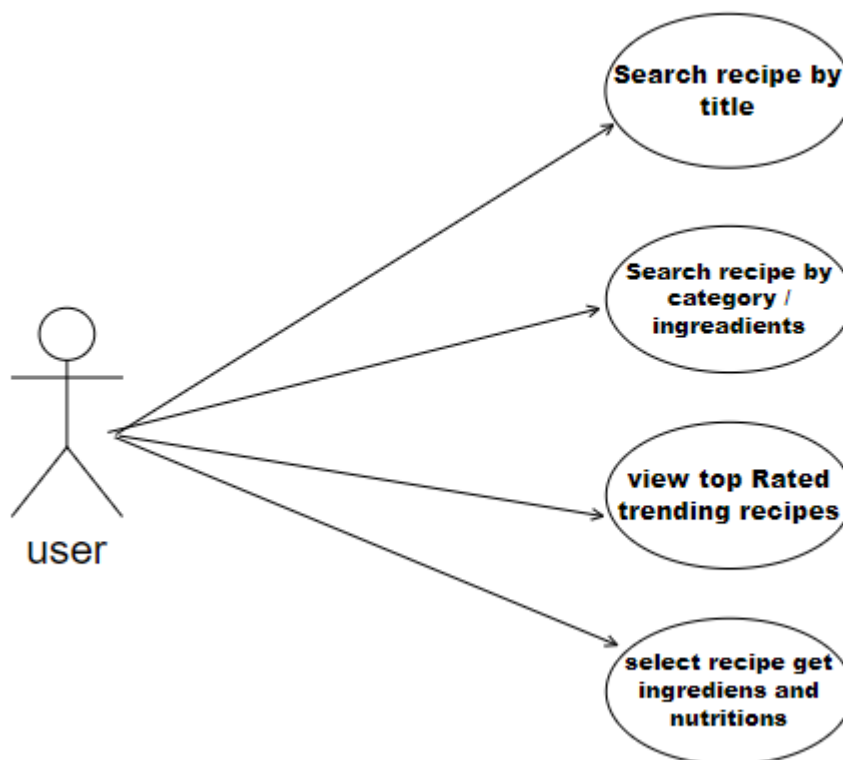# 2. Application Requirements:

User Options

Figure 1 – Use case Diagram

Users of "Tasty Feast" application have following options as shown in Figure 1:

- User can search recipes from cloud. Search can be performed based on rating, trend, categories, ingredient and title.

- User can view selected recipe from list of recipes.

- User has option to save recipe as favourite.

- User can share recipes on Facebook, Twitter, Gmail and Google+.

- User can manage cookbook by creating recipes, viewing recipe and deleting recipe.

"Tasty Feast" application provides home icon on each screen for easy navigation. User can navigate to home screen by clicking on home icon located at top right corner from other screens. The following section describes each part in detail.

Recipe Search:

User can perform search for recipes based on title, rating, trending, categories and ingredients.

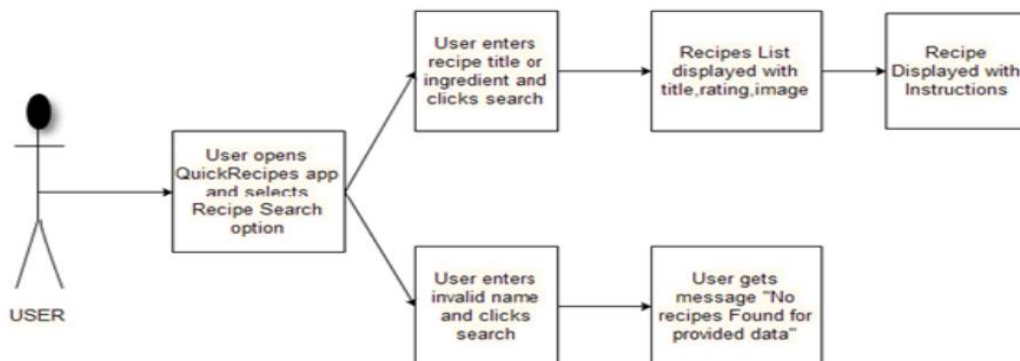# Search by Title and Ingredients

Figure 2- Search by Title And Ingredients Flow Diagram

User is provided with search image icon on home screen to search recipe. Clicking the search image icon on home page user is navigated to new page where user can either type 4 title or ingredient. Figure 2 depicts flow diagram for title, ingredients search option. On search button click, list of recipes is displayed with image, recipe title. When user enters invalid data, user gets message no recipes found for provided data.

Search Top Rated Recipes:

Figure 3- Top Rated Recipe Search Flow Diagram

Searching recipes based on rating. This rating depends on social media scores which determines best recipes. User is provided with top rated image button on home screen as illustrated in Figure 3. Clicking top rated image button user is navigated to new page where list of recipes is displayed with social rating of 100. User can select single recipe from list and can view recipe.

Searching recipes based on trend. The most recent recipes from publishers have trend score depending on recipes gaining popularity. User is provided with trending recipes image button on home screen. Figure 4 shows searching trending recipes flow diagram. Clicking on trending image button user is navigated to new page where popular recipes list are displayed. User can select single recipe from list and can view recipe.