Automating Text Generation

Automating text generation for kitchen descriptions involves a methodical approach aimed at providing detailed and informative content for various kitchens registered on Cookr. This process is designed to cater to data scientists, developers, and engineers working on enhancing the user experience and consistency of descriptions across kitchens.

Data Collection for Kitchen Descriptions

Gathering Information

The process begins by collecting comprehensive data on kitchens registered on Cookr like

- menu items
- optional photos
- customer reviews
- names and locations.

Preprocessing and Cleaning

After data collection, the information is preprocessed and cleaned to standardize the text format. This involves tasks such as converting text to lowercase, removing punctuation, and identifying and tokenizing relevant keywords.

Feature Engineering for Kitchen Descriptions

Ingredient-based Features

The extraction of ingredient-based features involves analyzing the frequency of specific ingredients and identifying the presence of dietary tags, such as vegan or gluten-free options.

Cuisine-based Features

This step focuses on identifying keywords associated with specific cuisines, for example, "tandoor" or "South Indian“, to enrich the understanding of kitchen specialties.

Dish Type Features

Considering the proportion of different dish types, such as appetizers, main courses, and desserts, provides valuable insights for generating comprehensive descriptions.

Model Training and Implementation

1

Choosing a Model

Selection of a suitable machine learning model, whether classification-based or text generation-focused, is a critical decision that impacts the accuracy and relevance of the resulting descriptions.

2

Training the Model

The model is trained on the extracted features and corresponding kitchen descriptions, ensuring that it can accurately interpret and generate meaningful content based on the input data.

Refinement, User Customization, and Additional Considerations

1

2

Refinement based on Feedback

Evaluating the generated descriptions through human assessment and A/B testing on the Cookr app leads to iterative refinements, enhancing the overall performance of the system.

Integrating User Customization

Providing options for user customization, such as preferred level of detail or specific keyword highlighting, enhances the flexibility and personalization of the descriptive content.

Menu and Content Optimization

Analyze Textual Data

Uncover valuable insights from restaurant descriptions, user reviews, and ratings to identify popular keywords, trends, and user sentiment.

Understanding User Sentiment

Gain insights into user satisfaction and areas for improvement by analyzing textual data, improving the overall user experience and satisfaction.

Dish Attribute Analysis

Extract meaningful information from dish attributes, offering an enhanced search experience and highlighting sought-after ingredients, cuisines, and dishes.

Utilizing Sentiment Analysis and Visual Features

Sentiment Analysis Integration

Implementing sentiment analysis allows the identification of positive and negative keywords in menu descriptions and reviews, enabling the adjustment of the generated text's tone to resonate with the audience.

Visual Features Integration

Integrating available photo data to extract visual features enriches the descriptive content and provides a more comprehensive portrayal of the kitchen's offerings.

Benefits of Automated Text Generation

Time and Effort Savings

Automated text generation saves time and effort for kitchen owners by streamlining the creation of descriptive content for their offerings.

Consistency and Informativeness

It ensures a consistent and informative presentation of kitchen details across all listings, enhancing user experience and accessibility of relevant information.

QUESTIONS?