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Recommending Restaurants Serving Authentic Iconic Cuisine

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ABSTRACT

While many travelers enjoy trying unfamiliar local cuisines, it is not straightforward to find a restaurant that serves popular and unique local cuisine in the authentic original form. Moreover, determining whether a given iconic dish or drink meets dietary constraints and preferences is difficult. This disclosure describes techniques to aggregate relevant data from various available information sources and offer personalized suggestions for restaurants that serve authentic iconic local cuisine that satisfies dietary constraints and preferences. With user permission, cuisine and restaurant suggestions can be shown proactively based on the user's upcoming travel plans and schedule. Features are provided to enable the user to filter or sort the information. The techniques can also make recommendations for a group of people traveling together.

KEYWORDS

- Digital map
- Restaurant recommendation
- Restaurant suggestion
- Local cuisine
- Regional dish
- Authentic cuisine
- Dietary preference
- Dietary restriction
- Virtual assistant

BACKGROUND

When traveling, many people enjoy trying local cuisine and regional iconic dishes and/or drinks. When traveling to an unfamiliar destination, people may not know the popular and unique local cuisine. While some applications, such as digital maps, indicate menu items that are popular at a given restaurant, these items may not necessarily be iconic regional ones since popularity is not always determined by whether the food is local. Moreover, simply knowing about the iconic regional cuisine is typically not sufficient because people need to find an authentic traditional restaurant reputed for serving the items. Since many restaurants might serve an item as a variation of the original, it is not always straightforward to find a restaurant that serves a given iconic dish or drink in its authentic original form.

Further, a given iconic dish or drink might not be suitable for some individuals because of allergies or variations in dietary preferences. For instance, someone with a nut allergy would want to avoid dishes that contain nuts, and someone who does not like spicy food would like to avoid dishes that are overly spicy. However, knowing whether a given iconic dish or drink violates such constraints or preferences is often difficult, especially if the information is available only in the local language that the person does not understand.

Various pieces of information relevant for travel and restaurants are currently available in a fragmented form across different applications. For instance, emails often contain information about a user's travel plans. Digital map applications can provide information and images of food served at a restaurant along with indicators of popularity of a dish and reviews of the restaurant. Photo, social media, and/or messaging apps typically include images of everyday activities related to food, such as food eaten by locals along with corresponding comments. Travel planning applications provide details of places that travelers tend to visit. Tourist guide websites

and apps provide information and reviews of regional and iconic cuisine for a given place along with a list of authentic places that serve the cuisine. However, the fragmented and non-personalized nature of such information makes it difficult and inefficient to identify specific local items suitable for a given person's constraints and preferences, and to identify authentic restaurants that serve them in a particular geographic area.

DESCRIPTION

This disclosure describes techniques to offer personalized suggestions for restaurants that serve authentic iconic local cuisine that satisfies dietary constraints and preferences of a user. The suggestions are based on aggregating data obtained from a variety of user-permitted information sources, such as maps, menus, photos of food posted by users in a specific locale or patrons of a specific restaurant, restaurant reviews from patrons, etc. If users permit, the suggestions can be further personalized based on the user's context, such as travel plans, companions, etc. The suggestions can be displayed at appropriate times in relevant applications, such as applications pertaining to navigation, travel, cuisine, etc. The described techniques are implemented with user permission and make use of such user data only for the purpose of generating suggestions and in accordance with user preferences.

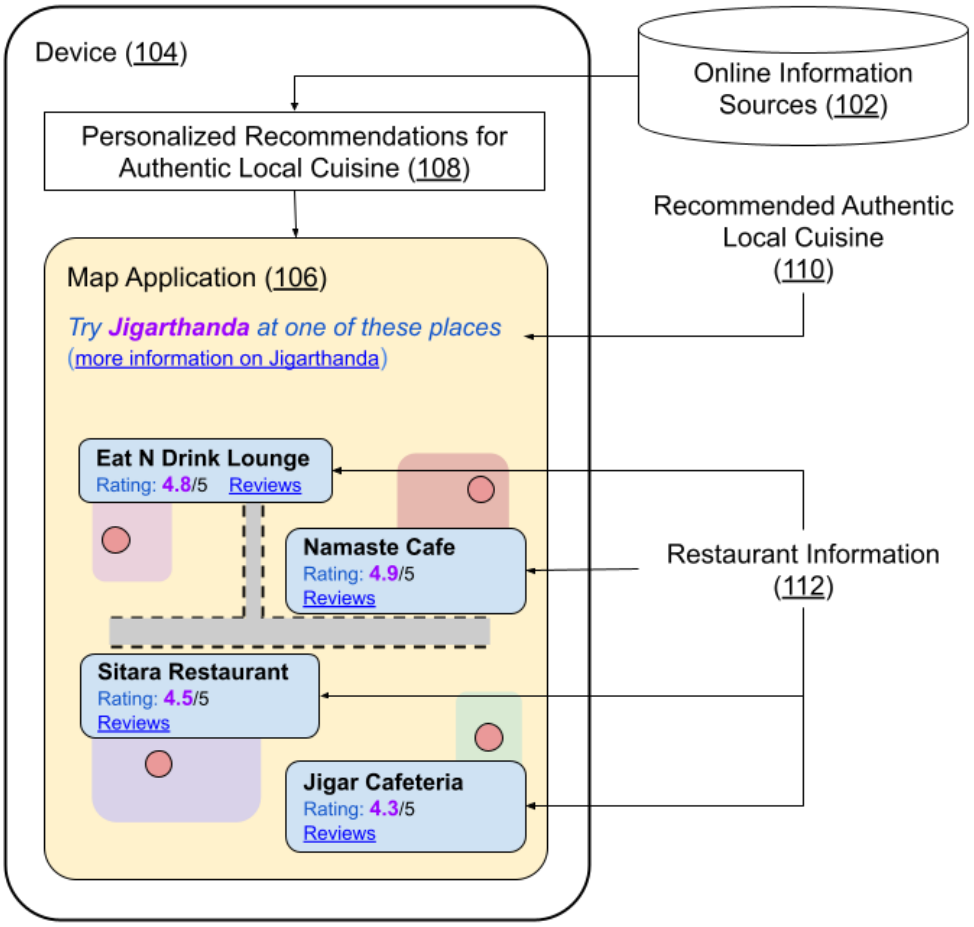

Fig. 1: Showing recommended nearby restaurants serving authentic local cuisine

Fig. 1 shows an example of operational implementation of the techniques described in this disclosure. A user traveling to an unfamiliar region uses a device (104) to seek information about restaurants that serve authentic local cuisine suitable for the user's dietary preferences and restrictions. With appropriate user permissions, suitable establishments (108) can be determined based on various online information sources (102) as mentioned above. Information about the recommended local cuisine (110) and the restaurants that serve it (112) can be shown within a map application (106) on the device. For example, Fig. 1 shows a recommendation for the drink "Jigarthanda" that is famous in the city of Madurai in Southern India. Such information can include nutritional information about the dish or drink, and ratings and reviews for the restaurant.

The cuisine and restaurant recommendations can be shown proactively based on the user's upcoming travel plans and schedule obtained via relevant sources such as calendar, travel applications, etc. Such suggestions shown automatically and/or sought by the user prior to commencing travel can facilitate better planning of activities during the travel days.

The information about the recommended cuisine and restaurants can be derived from data obtained from various online sources. Such information can include any suitable type and source of data, such as ratings, tags, text reviews, photos, videos, menus, blog posts, etc. A snippet of information derived from the data can be shown directly within the application. Alternatively, or in addition, such information can be provided as links to the original information source.

The user can be provided appropriate mechanisms for filtering the information to seek the most relevant content. For example, a European user traveling to a destination outside Europe can be shown ratings and reviews from other European travelers to the destination. Similarly, if the user permits, the shown content can indicate the information relevant for the user's dietary preferences and restrictions, if such preferences are known (obtained with user permission). For instance, nutritional information can be highlighted for a user allergic to specific ingredients such as nuts, spices, gluten, etc. Users can additionally consult the shown and/or linked information for the cuisine to ensure that a particular choice is acceptable. Similarly, if there are multiple recommended cuisine or restaurant choices, users can rank or filter the recommendations based on the shown and/or linked information.

The techniques described in this disclosure can also support a group of people, such as friends or work colleagues, traveling together. In such cases, the recommendation for authentic local cuisine and restaurants are derived to satisfy, to the extent feasible, the dietary constraints and preferences of all users taken together. For example, if Alice, Charlie, and Eve are traveling

from Europe to Southern India, the recommended southern Indian cuisine can avoid spicy dishes that Alice cannot digest and give preference for sweet flavors that Eve enjoys.

Implementation of the techniques described in this disclosure can help users set the right dietary expectations and make informed decisions about travel plans before and during a trip to an unfamiliar destination. The techniques can be implemented to integrate with any relevant information sources. The personalized recommendations as described in this disclosure can be shown within any suitable application such as digital maps, travel apps, web search engines, restaurant reviews, etc. or as suggestions provided by a virtual assistant. The recommendations can be delivered to users using appropriate mechanisms such as in-app display, device notifications, etc. The features described in this disclosure can make digital maps and other applications more useful to users traveling to unfamiliar destinations and facilitate better travel and meal planning, thus enhancing the user experience (UX).

Further to the descriptions above, a user may be provided with controls allowing the user to make an election as to both if and when systems, programs or features described herein may enable collection of user information (e.g., information about a user's calendar, email or other communications, social network, social actions or activities, profession, a user's preferences such as dietary preferences or restrictions, a user's planned travel, or a user's current location), and if the user is sent content or communications from a server. In addition, certain data may be treated in one or more ways before it is stored or used, so that personally identifiable information is removed. For example, a user's identity may be treated so that no personally identifiable information can be determined for the user, or a user's geographic location may be generalized where location information is obtained (such as to a city, ZIP code, or state level), so that a particular location of a user cannot be determined. Thus, the user may have control over what

information is collected about the user, how that information is used, and what information is provided to the user.

CONCLUSION

This disclosure describes techniques to aggregate relevant data from various available information sources and offer personalized suggestions for restaurants that serve authentic iconic local cuisine that satisfies dietary constraints and preferences. With user permission, cuisine and restaurant suggestions can be shown proactively based on the user's upcoming travel plans and schedule. Features are provided to enable the user to filter or sort the information. The techniques can also make recommendations for a group of people traveling together.