

This program aims to simplify the process of discovering restaurants that align with individual preferences while people are on the move. This is particularly beneficial for tourists who are exploring new places and are uncertain about dining options that cater to their specific tastes and dietary requirements.

As a tourist preparing to embark on an excursion, the anticipation of discovering new places is often mingled with the curiosity of exploring local cuisines. However, finding restaurants that align with one's preferences can sometimes be challenging, especially in unfamiliar terrains. This is where your program comes into play, acting as a bridge between the tourists and the culinary delights awaiting them.

In the MVP of the program, the user experience begins with inputting the starting point and the end point of their journey. The end point can be left blank, offering flexibility to those who prefer a more spontaneous exploration. If the end point is not specified, the program swiftly pulls up all the restaurants in the vicinity of the starting point, ensuring that even those without a clear destination have ample dining options to choose from.

When an end point is specified, the program meticulously plans a path from the starting point to the destination. With the path established, it then scans the entire route, identifying restaurants that are conveniently located either along or in close proximity to the path. This ensures that the users don't need to make significant detours to enjoy a meal, making the dining experience a seamless part of their journey.

One of the program's pivotal features is its ability to tailor the restaurant suggestions based on the users' preferences. Users can input specific keywords that mirror their culinary inclinations, whether it be a particular cuisine, dish, or dietary restriction. The program then filters the retrieved restaurants, showcasing only those that match the specified criteria.

In essence, this program isn't just about locating restaurants; it's about curating a personalized dining experience for each user. It takes into account not just the geographical locations but intertwines it with the individual preferences of the users, ensuring that every dining option presented is in harmony with their tastes, preferences, and journey path. It transforms the often daunting task of finding a suitable restaurant in unfamiliar locales into an effortless, enjoyable, and personalized experience.

In this scenario, two distinct sets of tests are conducted to assess the efficiency and reliability of the program. These tests are essential to confirm the program's capability to provide tailored restaurant suggestions based on user input.

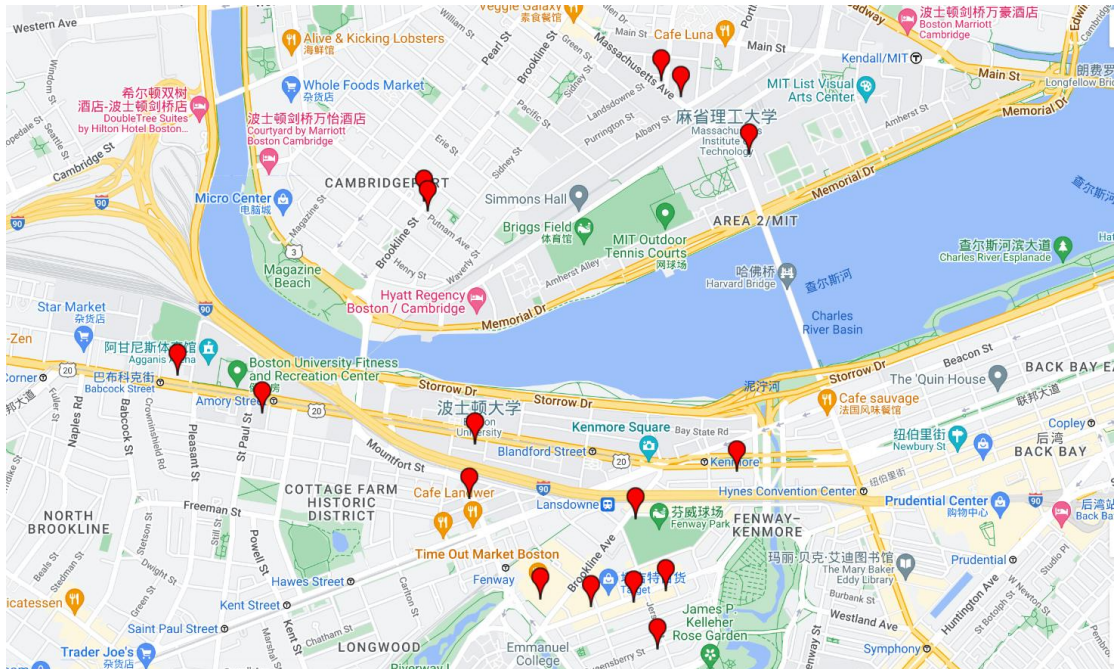
In the first test set, only the starting point is defined, set at BU. This allows us to evaluate the program's performance when the destination is undetermined, mirroring real-life situations where individuals might want to explore without a fixed endpoint. With the keyword "pizza" selected, the program is tasked to identify nearby pizza restaurants around BU, showcasing its ability to offer customized dining options even when the journey is open-ended.

The second test set involves a defined path from BC to BU, offering a concrete starting point and destination to evaluate the program's efficacy in a more structured journey scenario. With the same choice of the keyword "pizza," the program is expected to map out pizza restaurants that are conveniently located along or near the designated path. This test underscores the program's versatility in catering to users who have a clear, pre-determined route and are looking to discover dining options that won't deviate them from their course.

In both test sets, the program's proficiency in utilizing the keyword "pizza" is examined. This aspect is crucial, as it mirrors the program's capability to sift through numerous dining establishments and zero in on those that align with the users' specific culinary preferences. In this case, it effectively pinpoints pizza joints that not only satisfy the users' cravings but are also conveniently accessible based on their location or planned route.

These tests underscore the program's robustness and versatility, adeptly handling varying user inputs and journey scenarios. They reveal a program that is not just functional but is intuitively designed to adapt to the dynamic needs of users, whether they are wandering explorers or destination-bound travelers, all while maintaining a focus on their specific culinary preferences.

Enter the starting point: *boston University*
Enter the destination (leave blank if not applicable):
Enter keywords for restaurant search: *pizza*
Map has been created and saved as map.html



```
Enter the starting point: boston college  
Enter the destination (leave blank if not applicable): boston university central  
Enter keywords for restaurant search: pizza  
https://maps.googleapis.com/maps/api/staticmap?size=680x680&maptype=roadmap&markers=42,3401959,-71.16663539999999|42,3491957,-71.1629471|42,3493207,-71.1547302|42,34873229999999  
<IPython.core.display.Image object>  
  
Process finished with exit code 0
```

