

## Finding Your Café

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**Workflow requirement:** shiny, shinydashboard, leaflet, sqldf

### **Guiding question and application description:**

I believe that everyone needs coffee shops in his life due to different reasons, such as business talk and meeting up with friends. But everyone may also have his own requirement or criteria for coffee shops under different situations. Therefore, how to find an appropriate coffee shop is a question worthy of discussion.

In order to solve this problem, I find a valuable data set named '[DDOT Sidewalk Cafe Inspections](#)' from open data DC. This data contains broad information of nearly 500 coffee shops in DC. Besides the geographical information, the data set also provide many useful attributes, such as neighborhood and operation time. Therefore, by analyzing and visualizing this data set, the problem could be solved based on these attributes.

Based on this objective, I develop a shiny application. It's for people who User can use this application to find appropriate coffee shops according to his personal requirement. To make the result more intuitionistic, this application includes map visualization, which allows user to see the coffee shops directly based on his choices.

The application consists of two parts: requirement selection and visualization. On the left side of this application, user can select his target location, including quadrant and neighborhood, and personal requirement. After selection, user can get result on the right part. The map will show the detailed location of coffee shops that satisfy user's requirement. The application is interactive from two aspects. First, the center of map will change to the neighborhood user choose by clicking on action buttons. Second, based on the selection, the application will make a subset of the original data set. Only coffee shops that satisfy user's requirement will appear on the map and those do not satisfy user's requirement will be removed automatically. In addition, user can get detailed information of the coffee shop he is interested in by clicking on the icon in map directly