Treasure Map of DC – public art work in DC

This project is for those who love public art work and want to explore neighborhoods in DC where they can saturate themselves in the art atmosphere. The reason that this topic arouses my passion is because I am a big fan of art and a newer in DC. I think it is one of the most fantastic ways to know more deeply about DC through exploring its public art works. Regarding the art work as treasure in my life, I name this project "Treasure Map of DC"—visualization of all of the public art works in DC. Following are the guiding questions, their meanings and the ways that the application answers the questions:

1. Which DC **neighborhoods** have at least 5 public art works? What detailed information of those art works is (artist, title, medium, and type)? Which **artists** at least 5 public art works in DC? Which **art types** of public art works are there at least 5 in DC? Which **medium** are used on public art works in DC at least 5 times?

These series of questions lead users to know the summary information of the public art works in DC. By using the first drop-down menu, users can know the total number of art works categorized by the variables they choose. By choosing the neighborhoods where there are at least 5 public art works, the map will show the location of those art works in the selected neighborhood, and the table below will show the detailed information (artist, title, medium, and type) of them.

2. Categorized by the **artists**, where are all of the DC public art works made by the specific artist? Further Categorized by the neighborhoods, how many works made by this specific artist are there in the neighborhoods? What detailed information of those art works made by this specific artist is (neighborhood, title, medium, and type)?

These questions are for those who want to find the location of public art works by choosing the artist he likes. By switching to the "Artist Map" page and using the second drop-down menu to select one artist who have greater or more than 5 works in DC, the map will show the locations of that artist's public art works. The table below the map will show the number of works made by the artist in the DC neighborhoods. The last table will show the detail information of all the works.

- 3. Except for changing category to **art type** and switching to "Art Type Map", the questions, the meaning of them, and the way that the application answers them are the same as 2.
- 4. Selecting specific **artist and art type** that the artist ever used, where are all of the DC public art works based on the two condition? What detailed information of them?

These questions are for those who want to find the location of public art works by choosing the artist and the specific art type(s) that the artist uses. By choosing the artist who has greater or more than 5 works in DC, the drop-down menu will change the art type selection(s) that the artist uses. Then choose the art type. The map will show the locations of the artist's public art works of the specific art type. The table below will show the detail information of those works.

Workflow: **file** – Washington_DC_Public_Art.csv; **Image file** – treasure2.png, artist-icon.png, art-type2.png, total.png; **R file** – source.R (for clean the data), server.R, ui.R; **package** – shiny, leaflet, sqldf, dplyr, shinydashboard

Youtube Video Link: https://www.youtube.com/watch?v=IA8XWVbWWRk&feature=youtu.be