

## Lab 05: Interactive Mapping in R

In the lab, you will demonstrate your skills in creating interactive maps using the leaflet package in R. Your task is to create an interactive map using either a sample layer (DSAG\_POLY.shp) or your own data.

This lab is worth a total of **65 points** and contributes **6.5%** toward the final grade

Submit this word document by midnight (11:29 PM) on October 6.

### Requirements:

Your interactive map should include the following functionalities:

1. **Basemaps** (10 points): Ensure your map contains at least one basemap option.
2. **Sample Layer or Your Data** (10 points): Include a sample layer ([Data Source](#)) or your own dataset in the map.
3. **Colorization** (15 points): Colorize your data based on a layer attribute. If using a sample layer, please utilize the **'Class'** column for colorization.
4. **Pop-ups or Labels** (10 points): Add pop-ups or labels to display information about the layer.
5. **Layer Control** (10 points): Implement layer control for both basemaps and layers, allowing users to switch between options.
6. **Legend** (10 points): Include a legend that clearly explains the color coding of your map.

### Extra Credit (10 points):

1. Add **highlightOptions** to your map based on the provided documentation:  
<https://rstudio.github.io/leaflet/articles/shapes.html>

### Submission:

1. Please submit the link to your interactive map.

### Example:

1. <https://gisynw.github.io/DSGA/>

Notice: if your file is larger than 25 MiB. You need to use command line to upload it.