Project 2: *Topic Proposal*

*Research Topic:* To analyze if a rider is a registered member or a casual rider and also predict the duration of the ride.

*Introduction:* Capital Bikeshare is a bicycle-sharing system that serves Washington, D.C., and certain counties of the larger metropolitan area.

*Proposed SMART Questions:*

1. Analysing the distribution of Electric vs. Classic Bike Rentals?
2. What are the neighborhoods with Higher Trip Frequency?
3. Understanding the User Type Distribution for Registered Member and Casual Rider?

*Modelling Questions:*

1. To predict if a rider is a registered member or a casual rider based on trip characteristics.
2. To predict the duration of the ride based on trip characteristics and type of rider.
3. *Which stations are more likely to experience peak demand at specific times.*

*Data Source:* The data is from <https://capitalbikeshare.com/system-data> and is provided according to the [Capital Bikeshare Data License Agreement](https://www.capitalbikeshare.com/data-license-agreement).

The source dataset consists of about 700K observations over 13 attributes.

*GitHub repo:* https://github.com/Anusha-raju/Capital-Bikeshare.git

Team 8 members:

1. Anusha Umashankar - [anushau@gwmail.gwu.edu](mailto:anushau@gwmail.gwu.edu)
2. Rachel Thomas - [rachel.thomas1@gwmail.gwu.edu](mailto:rachel.thomas1@gwmail.gwu.edu)
3. Aidan Carlisle - [Aidan.carlisle@gwmail.gwu.edu](mailto:Aidan.carlisle@gwmail.gwu.edu)
4. Sayan Patra - [Sayan.patra@gwu.edu](mailto:Sayan.patra@gwu.edu)