

**MLFlow “In-Class” Assignment**  
**Due Friday, September 26<sup>th</sup>, at 11:59:59 pm**

This work will involve model registries and versioning in MLFlow. It will use the dataset `reg2`, which a target `y` and 2 potential predictor variables `x1` and `x2`. Use `scikit-learn` for the linear regression (for MLFlow, this is the model flavor) (so you will have to split up the data).

1. Read through the quickstart and model registry tutorials linked in this directory.
2. Build 3 models:
  - a. Try a linear regression model using `x1` only to predict `y`. Look at how well it does. Call this model `model_1`.
  - b. Try a linear regression model using `x2` only to predict `y`. Look at how well it does. Call this model `model_2`.
  - c. Finally, use `x1` and `x2` to predict `y`. Compare the errors and  $R^2$  values to the previous model. How do they compare?
3. To do the version control with MLFlow, follow these steps
  - a. Create a repository in your Git for the models
  - b. Put the models there.
  - c. Register the models in MLFlow (you can use the above names or
4. Start and view the tracking server for the models.

Turn in a pdf of your notebook, along with a screen shot of the tracking server and the `requirements.txt` file.