**Assignment 6**

**Submission:**

* Submit a .html file with the code. **Do not** submit python notebooks
* Make your code easily readable and interactive for an outside user
* Explain your thought process at each step

**Dataset:**

Titanic

**Problem**

* Problem type: **Supervised Learning**
* Predict if a passenger survived or not. Use “Survived” column as your target variable
* You can use the remaining columns as your feature set. Feel free to not include any columns if you don’t think it provides value for your model

**Instructions to get full credit:**

* Understand the problem (2-3 lines)
* Check the completeness of the data
* **Show any data cleaning that needs to be done prior to analysis**
* Exploratory data analysis (EDA)
* **Feature engineering**
* Train-Test split (Feel free to choose the split)
* Apply 3 supervised learning algorithms (You can apply more if you’re not satisfied with results)
* Make sure you standardize the features before fitting the models
* Calculate 3 metrics to evaluate each of the classification algorithms
* Which is your best performing model. Explain
* Approach for deploying the model into production (Theoretical)