For the last two days of camp, you will work on one of the following projects with a group, and give a presentation on your results. You will fill out a form to tell us your topic preferences, and we will use the results of this form to create groups.

For the following datasets, the data requires little or no conversion, so you should be able to dive into machine learning more quickly:

**League of Legends**: use data taken from the first ten minutes of a league of legends game to train a model to predict which team will win.

**Handwriting Recognition:** use pixel data from images of handwritten digits to train a model to identify the digit.

For the following projects, the data will probably require some conversion or transformation before you can apply machine learning algorithms. This makes these projects more challenging.

**Pokemon:** use the attributes of pokemon to train a model to predict if the pokemon is legendary or not.

**Titanic:** use the characteristics of passengers on the titanic to train a model to predict whether or not a passenger will survive.

**Police Stops:** use data about police stops in Minneapolis to predict whether or not a search will be conducted.

**Mushrooms:** use the characteristics of mushrooms to train a model to predict whether the mushroom is poisonous or not.

**Baseball:** use data from an at-bat to predict the outcome (home run, single, double, etc.).

For the following project, the data is particularly difficult and you may have to explore topics we only briefly mentioned in lecture. This topic is very challenging.

**Music:** use numerical music measures to classify a song’s genre. (Multiclass classification)