Predict Pokémon’s type

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Modeling Rationale:

* Build two models over the remaining feature (Six stats, Generation, Legendary or not)
* Model 1 predicts how many type a Pokémon has (Classification: 1 or 2)
* Use threshold to decide the final type of a Pokémon (If a Pokémon has 2 types exceeding the threshold, keep 2 classes; If a Pokémon has 1 type exceeding the threshold, keep 1 class)
* Model 2 predicts two most possible classes of a Pokémon
* Use results of two models to decide the final type of a Pokémon (If a Pokémon has 2 types, keep both classes; If a Pokémon has 1 type, keep the most possible class)

2. <Hao>

Modeling Rationale:

* Y-label (prediction) treat all double type as new type (like <grass, Poisson>)
* Build tree models over the remaining feature (Six stats, Generation, Legendary or not)
* Tree model decide which one is the deciding feature

Model Selection

* Model
  + Logistic regression
  + LDA
  + QDA
  + Tree
* Regularization
  + Ridge
  + LASSO
* Model Selection
  + Forward
  + Backward
  + Best model
* Cross Validation
  + K fold
  + Test error