**Pre-processing**

K-fold cross validation with 5 folds to avoid the dreaded overfitting scenario.

**Naive Bayes**

We modeled our features using on a Gaussian Distribution. As per the “naïve” assumption, the product of these probabilities and the prior classes probabilities formed our likelihood function. The training of this model required learning the parameters of the gaussian function i.e. the means and the standard deviations.   
  
*Maybe add the following part to the icons?*

-High Accuracy  
-Low Computational Time

-Simple yet Effective

**Logistic Regression**

We implemented one-vs-all logistic regression for 95 classes of fruits. In the first stage of the project, we implemented batch gradient descent to learn weights which later progressed to a mini-batch gradient descent algorithm with a batch-size of 64 and thus reducing computation time and increasing accuracy. Eventually, elapsed time was drastically reduced to around 500 seconds for the raw data with 1600 features and 500 epochs.