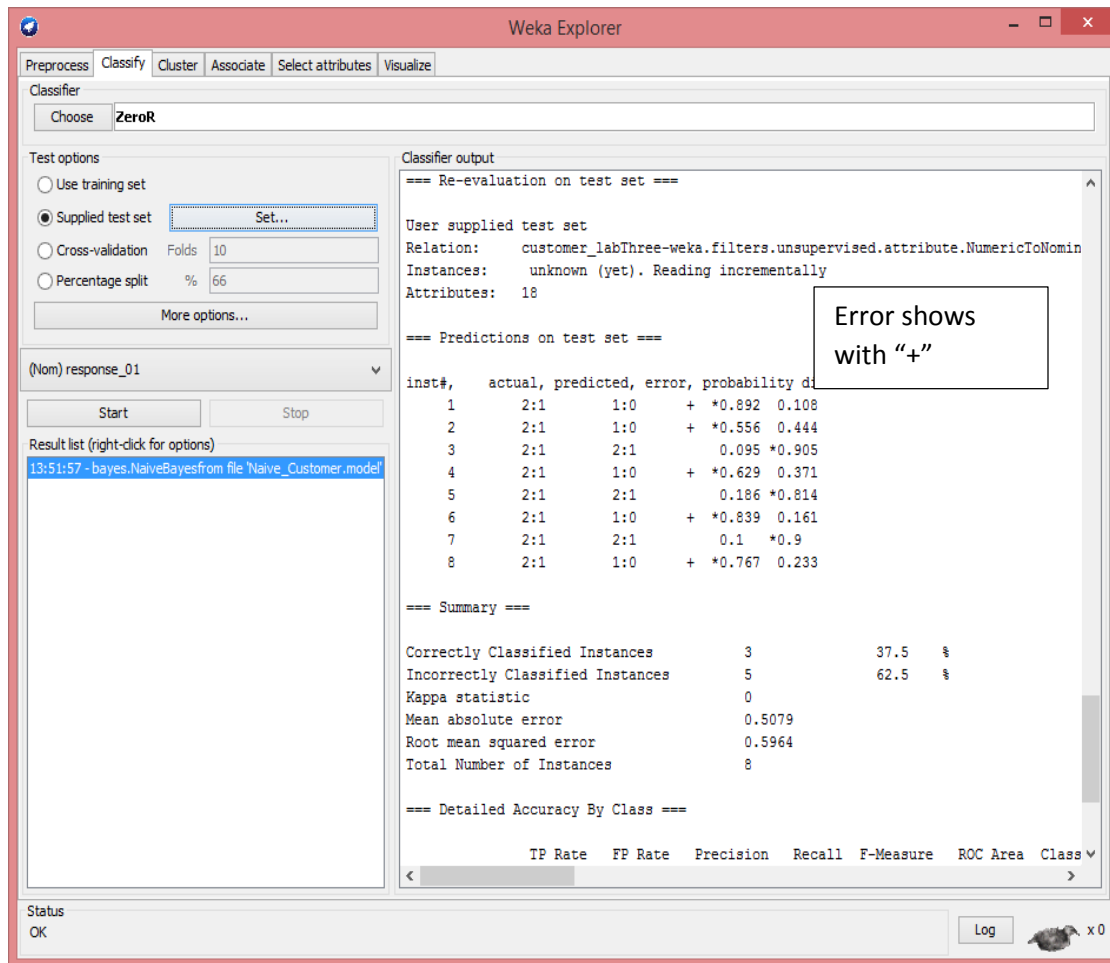


Perform Prediction with Trained Model

In order to perform prediction on new data set with trained model, you should process your new data set the same way as you have processed your training data set (filtering and feature selection). The new data set should have the same number of attributes as the training data set and it also should have the last column as the class label - “?” should be saved as class label.

Open **Explorer** window of Weka, load the training data set and click **Classify** tab, load the saved model by right-clicking the **Result list** area. You supply the new data set via **Supplied test set** item in **Test options** part – **futureCustomer.arff**. Also you need to check the **Output predictions** options in the **More options** dialog. Right-clicking on the respective results history item and selecting **Re-evaluate model on current test set** will output the predictions as well. The output is shown in the right window.

The prediction result is shown in the format of “class no.: value”, when the prediction is different than the actual label, “+” is marked in error column.



The screenshot shows the Weka Explorer interface with the **Classify** tab selected. The **Classifier** dropdown is set to **ZeroR**. In the **Test options** section, the **Supplied test set** radio button is selected, and the **Set...** button is highlighted. The **Result list** on the left shows a file named **13:51:57 - bayes.NaiveBayesfrom file 'Naive_Customer.model'**. The **Classifier output** window on the right displays the results of the re-evaluation on the test set.

Classifier output

```
=== Re-evaluation on test set ===

User supplied test set
Relation: customer_labThree-weka.filters.unsupervised.attribute.NumericToNominal
Instances: unknown (yet). Reading incrementally
Attributes: 18

=== Predictions on test set ===

inst#, actual, predicted, error, probability
1 2:1 1:0 + *0.892 0.108
2 2:1 1:0 + *0.556 0.444
3 2:1 2:1 0.095 *0.905
4 2:1 1:0 + *0.629 0.371
5 2:1 2:1 0.186 *0.814
6 2:1 1:0 + *0.839 0.161
7 2:1 2:1 0.1 *0.9
8 2:1 1:0 + *0.767 0.233

=== Summary ===

Correctly Classified Instances      3      37.5 %
Incorrectly Classified Instances    5      62.5 %
Kappa statistic                    0
Mean absolute error                 0.5079
Root mean squared error             0.5964
Total Number of Instances          8

=== Detailed Accuracy By Class ===
```

A callout box points to the error column in the predictions table, stating: "Error shows with '+'".

The bottom status bar shows "Status OK" and a "Log" button.

To save the prediction result, you could right-click the **Result list** and select **Visualize Classifier errors** and click **Save** to save the result in .arff file. Then open it in notepad and copy to excel file. To save the prediction result in .csv file directly, you need to have Weka 3.7 or above, which allows you to select .csv as the output format while checking the **Output predictions** options in the **More options** dialog.

