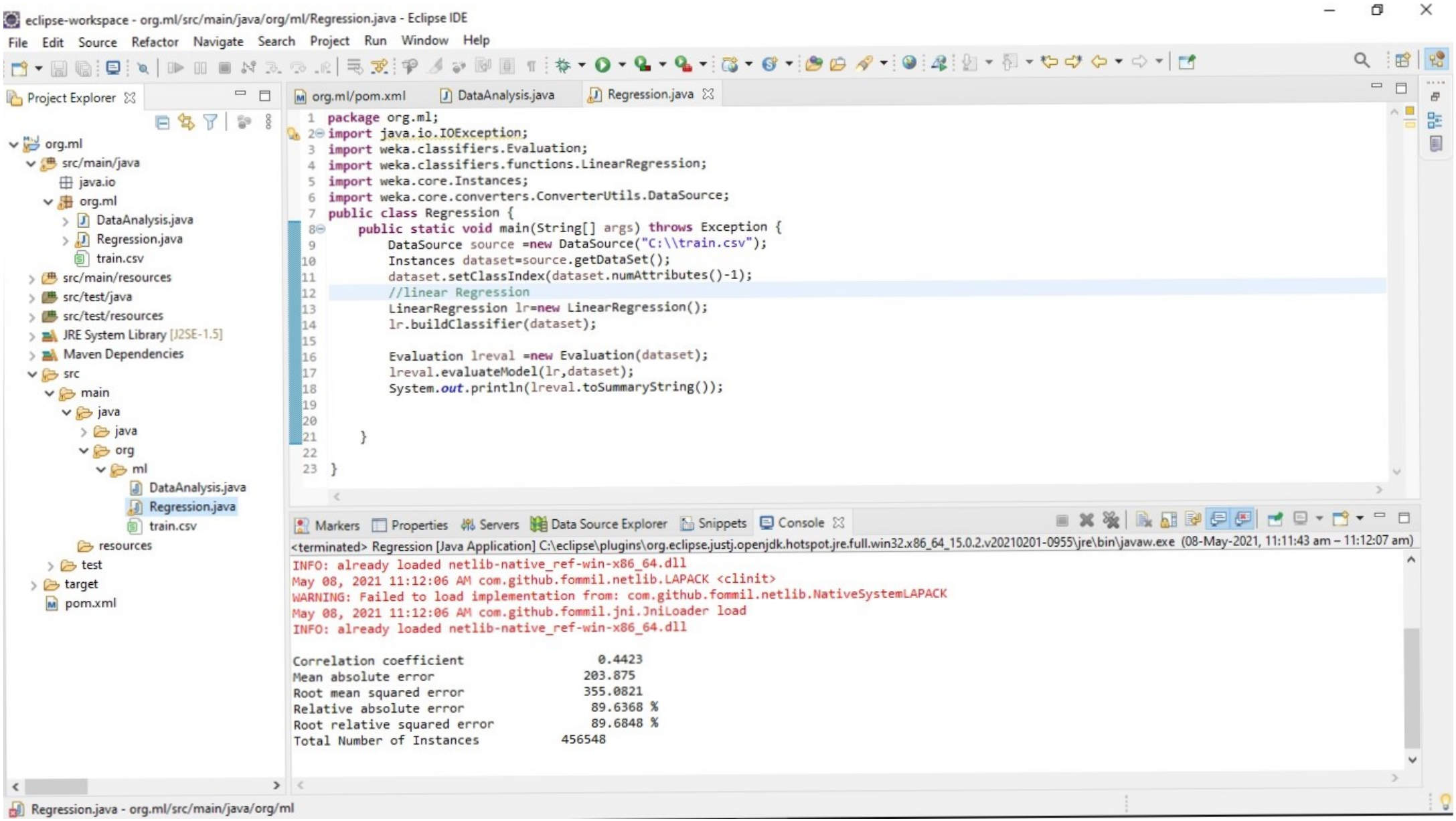

eclipse-workspace - org.ml/src/main/java/org/ml/Regression.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
org.ml
src/main/java
java.io
org.ml
DataAnalysis.java
Regression.java
train.csv
src/main/resources
src/test/java
src/test/resources
JRE System Library [J2SE-1.5]
Maven Dependencies
src
main
java
java
org
ml
DataAnalysis.java
Regression.java
train.csv
resources
test
target
pom.xml
org.ml/pom.xml
DataAnalysis.java
Regression.java
1 package org.ml;
2 import java.io.IOException;
3 import weka.classifiers.Evaluation;
4 import weka.classifiers.functions.LinearRegression;
5 import weka.core.Instances;
6 import weka.core.converters.ConverterUtils.DataSource;
7 public class Regression {
8 public static void main(String[] args) throws Exception {
9 DataSource source =new DataSource("C:\\train.csv");
10 Instances dataset=source.getDataSet();
11 dataset.setClassIndex(dataset.numAttributes()-1);
12 //linear Regression
13 LinearRegression lr=new LinearRegression();
14 lr.buildClassifier(dataset);
15
16 Evaluation lreval =new Evaluation(dataset);
17 lreval.evaluateModel(lr,dataset);
18 System.out.println(lreval.toSummaryString());
19
20
21 }
22
23 }
Markers Properties Servers Data Source Explorer Snippets Console
<terminated> Regression [Java Application] C:\eclipse\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_15.0.2.v20210201-0955\jre\bin\javaw.exe (08-May-2021, 11:11:43 am – 11:12:07 am)
INFO: already loaded netlib-native_ref-win-x86_64.dll
May 08, 2021 11:12:06 AM com.github.fommil.netlib.LAPACK <clinit>
WARNING: Failed to load implementation from: com.github.fommil.netlib.NativeSystemLAPACK
May 08, 2021 11:12:06 AM com.github.fommil.jni.JniLoader load
INFO: already loaded netlib-native_ref-win-x86_64.dll
Correlation coefficient 0.4423
Mean absolute error 203.875
Root mean squared error 355.0821
Relative absolute error 89.6368 %
Root relative squared error 89.6848 %
Total Number of Instances 456548
Regression.java - org.ml/src/main/java/org/ml

Weka Explorer

Preprocess | Classify | Cluster | Associate | Select attributes | Visualize

Classifier

Choose **LinearRegression** -S 0 -R 1.0E-8 -num-decimal-places 4

Test options

- Use training set
- Supplied test set — Set...
- Cross-validation — Folds 10
- Percentage split — % 66

More options...

(Num) num_orders

Start | Stop

Result list (right-click for options)

09:14:40 - functions.LinearRegression

Classifier output

```
=== Run information ===

Scheme:       weka.classifiers.functions.LinearRegression -S 0 -R 1.0E-8 -num-decimal-places 4
Relation:     train
Instances:    456548
Attributes:   9
              id
              week
              center_id
              meal_id
              checkout_price
              base_price
              emailer_for_promotion
              homepage_featured
              num_orders
Test mode:    10-fold cross-validation

=== Classifier model (full training set) ===


Linear Regression Model

num_orders =

     -0.0756 * week +
     -0.4724 * center_id +
      0.0048 * meal_id +
     -0.3308 * checkout_price +
     -0.3702 * base_price +
    323.0149 * emailer_for_promotion +
    264.4429 * homepage_featured +
```

Status

OK

Log | x 0

Weka Explorer

Preprocess | Classify | Cluster | Associate | Select attributes | Visualize

Classifier

Choose **LinearRegression** -S 0 -R 1.0E-8 -num-decimal-places 4

Test options

- Use training set
- Supplied test set — Set...
- Cross-validation — Folds 10
- Percentage split — % 66

More options...

(Num) num_orders

Start | Stop

Result list (right-click for options)

09:14:40 - functions.LinearRegression

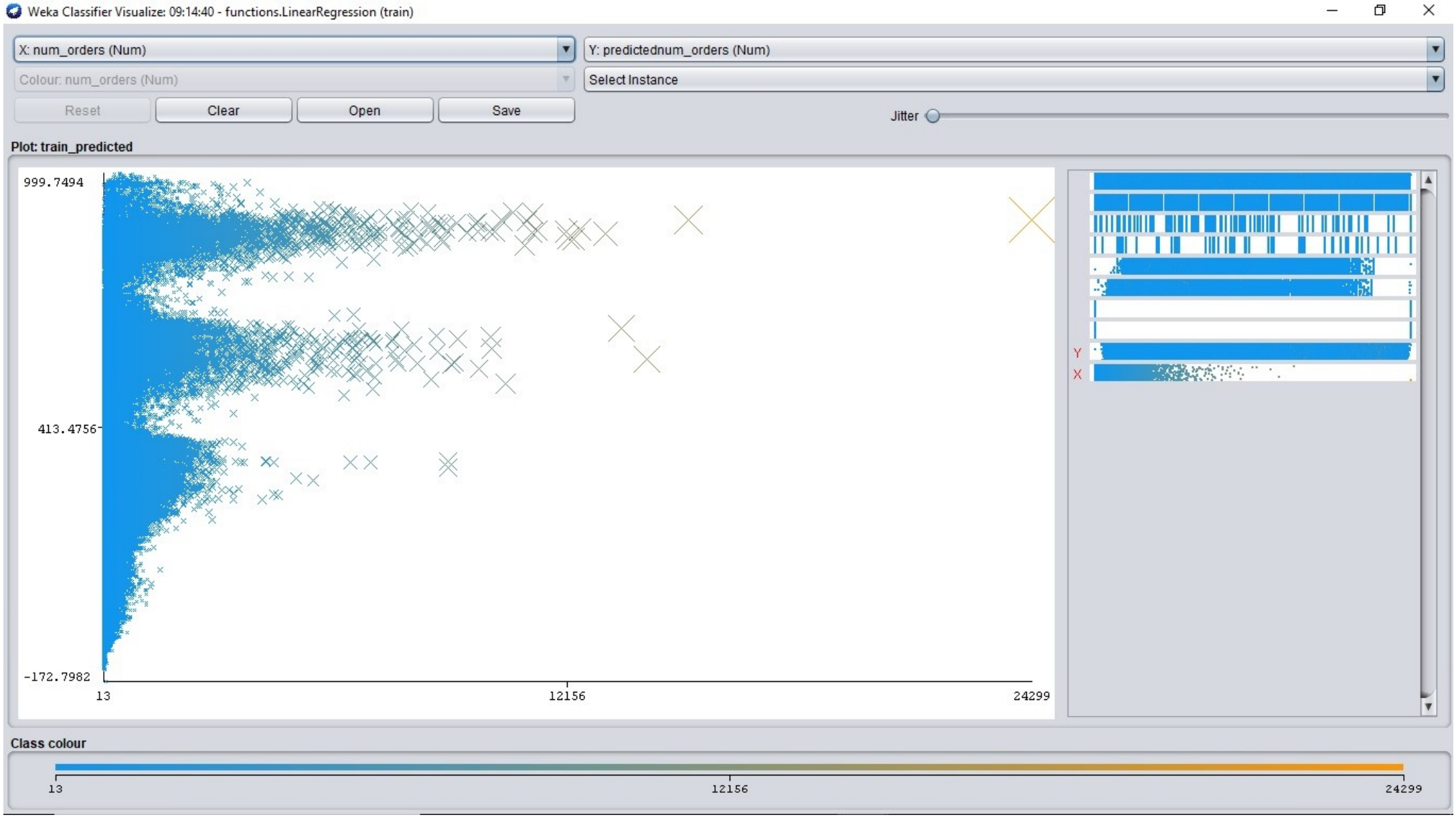
Classifier output

```
Test mode:    10-fold cross-validation

=== Classifier model (full training set) ===


Linear Regression Model

num_orders =

     -0.0756 * week +
     -0.4724 * center_id +
      0.0048 * meal_id +
     -0.3308 * checkout_price +
     -0.3702 * base_price +
    323.0149 * emailer_for_promotion +
    264.4429 * homepage_featured +
    482.4727

Time taken to build model: 2.14 seconds

=== Cross-validation ===
=== Summary ===

Correlation coefficient                  0.4423
Mean absolute error                    203.8796
Root mean squared error                355.093
Relative absolute error                 89.6388 %
Root relative squared error             89.6874 %
Total Number of Instances          456548
```

Status

OK

Log | x 0


Weka Classifier Visualize: 09:14:40 - functions.LinearRegression (train)
X: num_orders (Num)
Y: predictednum_orders (Num)
Colour: num_orders (Num)
Select Instance
Reset
Clear
Open
Save
Jitter
Plot: train_predicted
999.7494
413.4756
-172.7982
13
12156
24299
Y
X
Class colour
13
12156
24299