

Model Prediction Test Documentation

Avner Freiburger

About the App

Model Prediction Test

Model prediction test is a simple tool to visualise and test prediction models

What can you define?

in order to test the various models you can:

- select a dataset to test
- define a training and testing set subsets
- select a model to test
- select the argument that will be participating
- review prediction results in a plot, confusion matrix or summary

Datasets available

the datasets available in the app are R

- **spam:** A dataset collected at Hewlett-Packard Labs, that classifies 4601 e-mails as spam or non-spam.
- **mtcars:** A dataset extracted from the 1974 Motor Trend US magazine, and comprises fuel consumption and 10 aspects of automobile
- **iris:** A famous (Fisher's or Anderson's) iris dataset which gives the measurements in centimeters of the variables sepal length and width and petal length and width
- **OrchardSprays:** An experiment which was conducted to assess the potency of various constituents of orchard sprays in repelling honeybees
- **swiss:** Standardized fertility measure and socio-economic indicators for each of 47 French-speaking provinces of Switzerland at about 1888

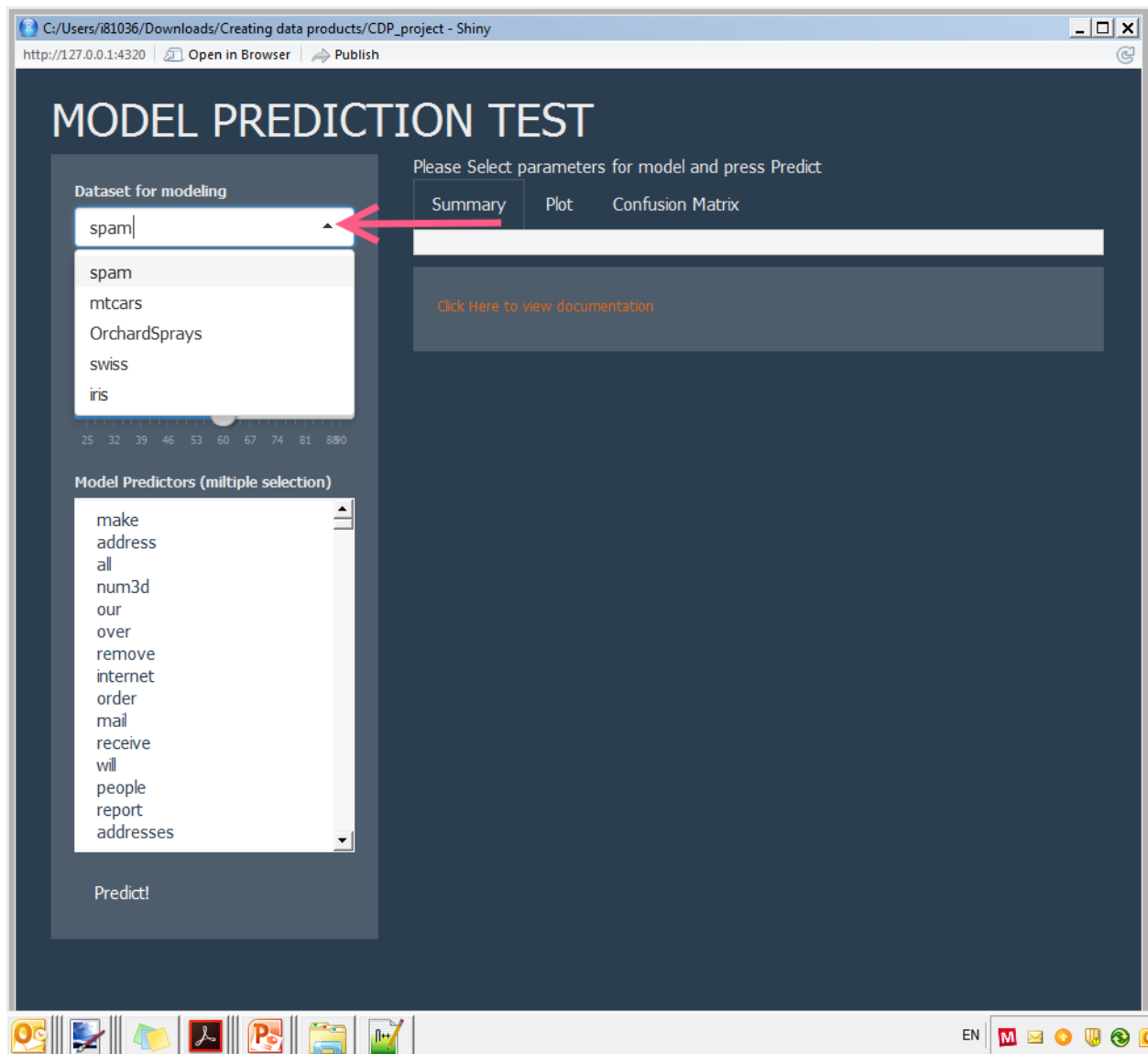
Models available

The following models are available for testing

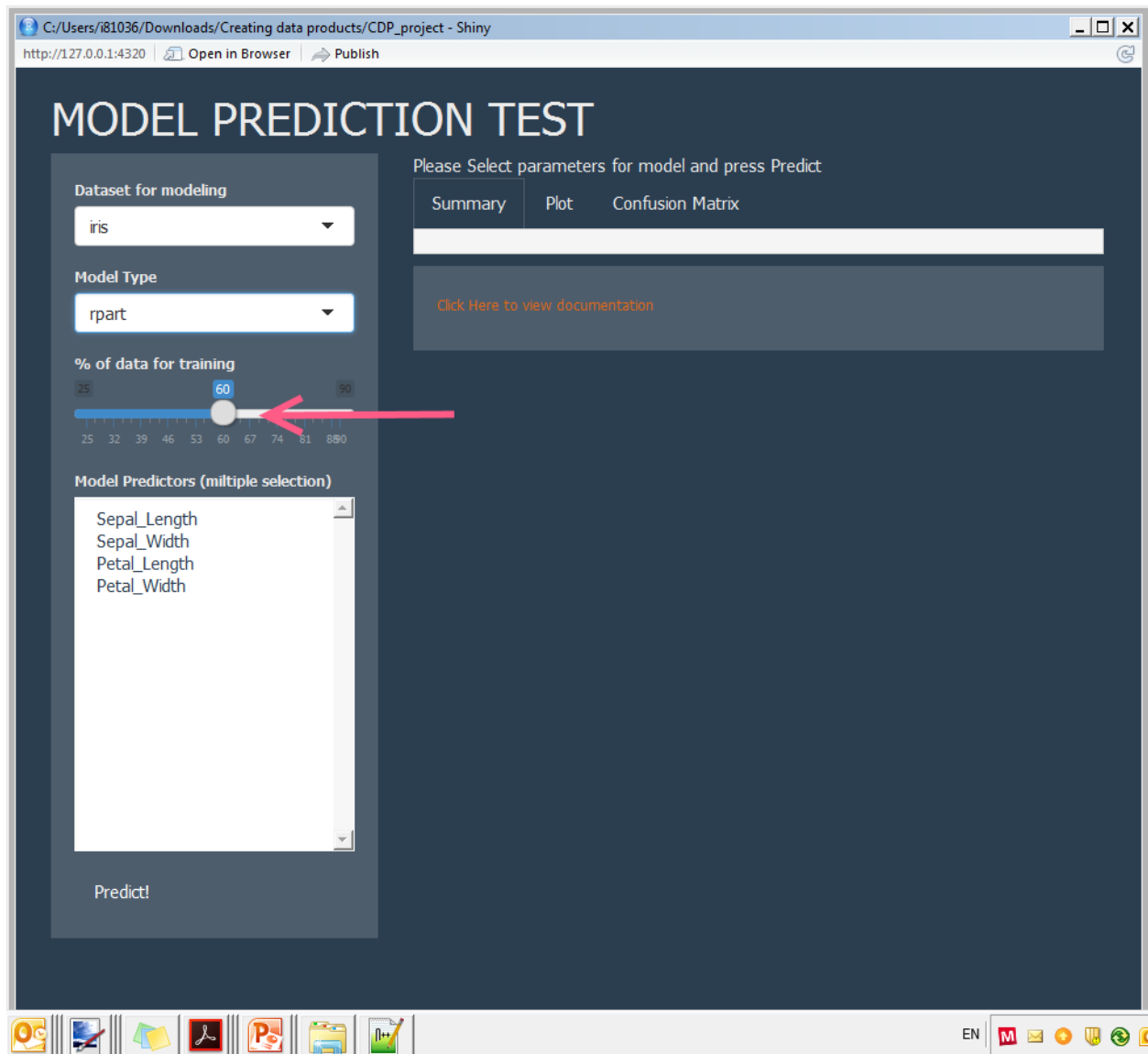
- **glm:** generalized linear model
- **k Nearest Neighbours**
- **Neural Network**
- **lm:** linear model
- **rpart:** recursive partitioning and regression trees

Usage

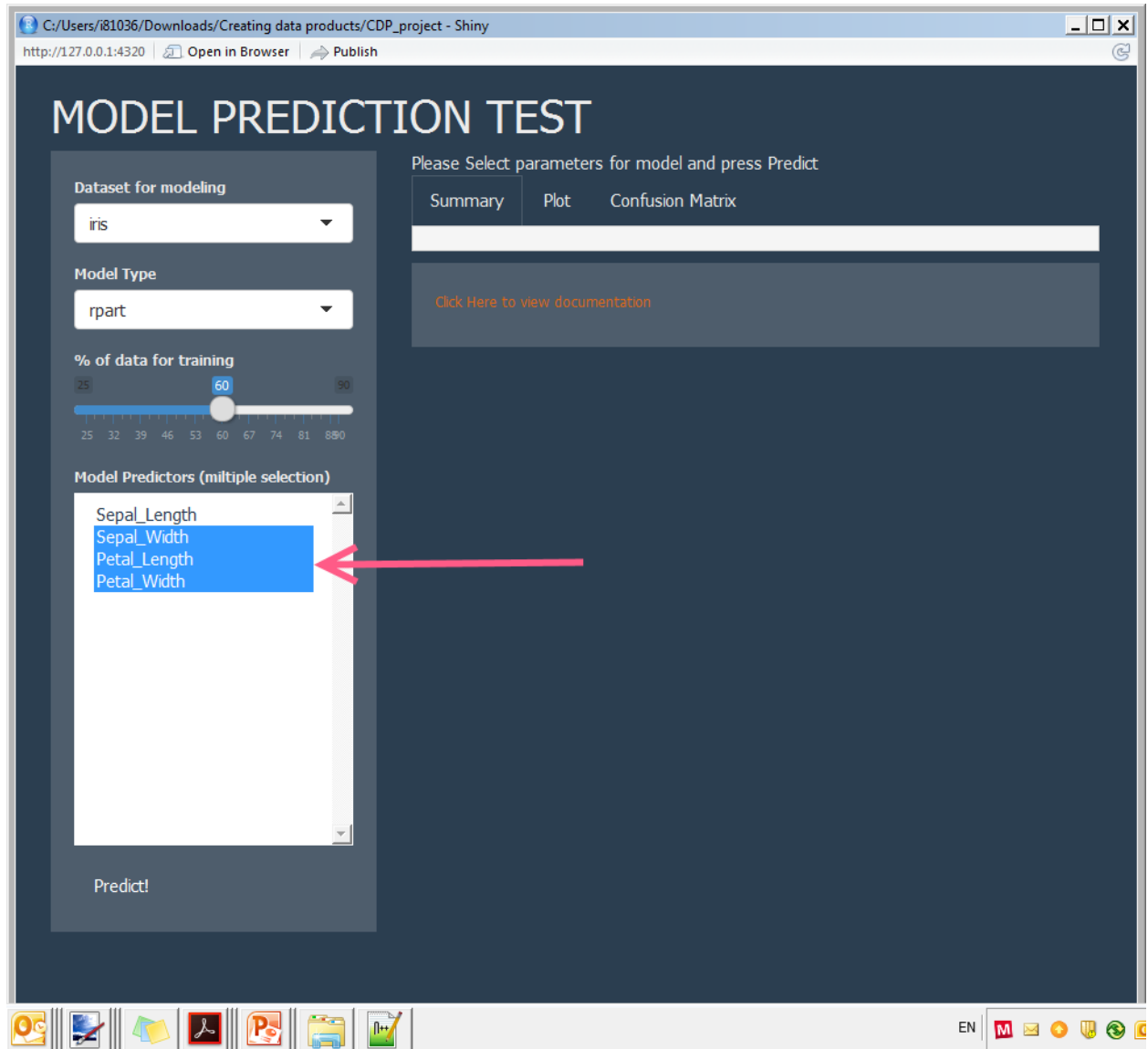
1. Select a dataset:



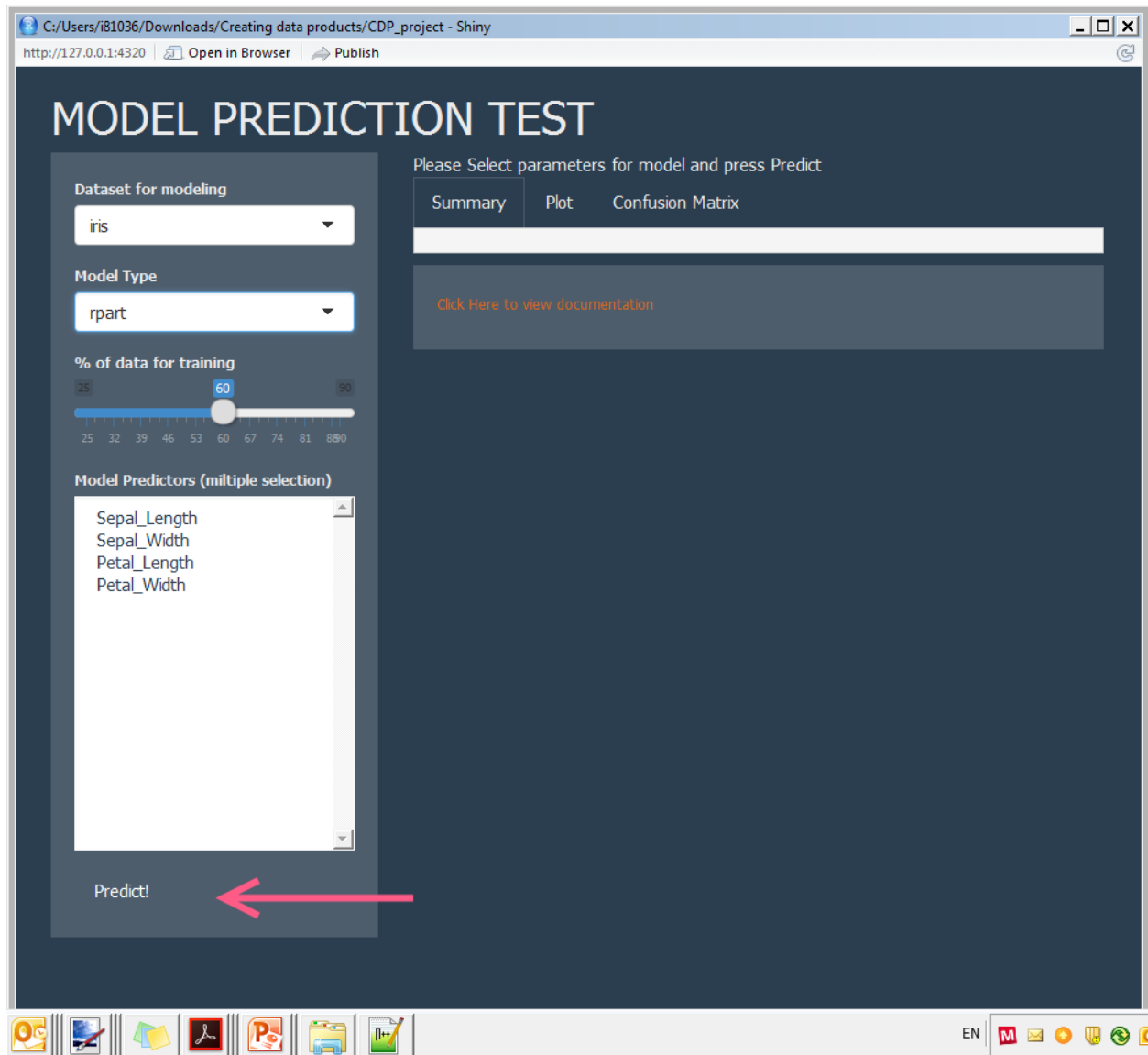
2. Select a classification algorithm
3. Set the percentage of training set (the rest will be set as a testing set)



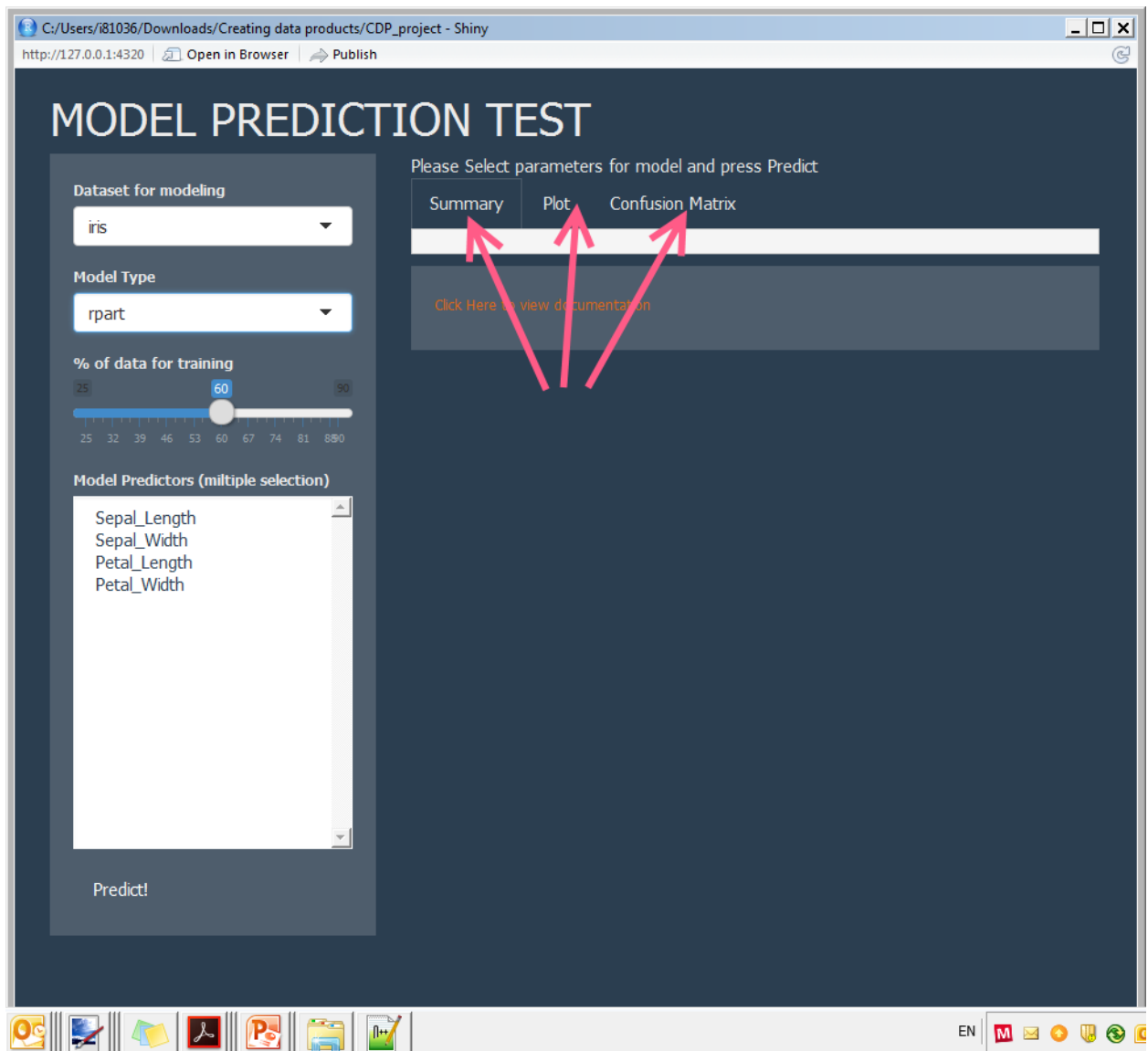
4. Select the predictors that you want to include in your model (use Ctrl or Shift to select multiple predictors)



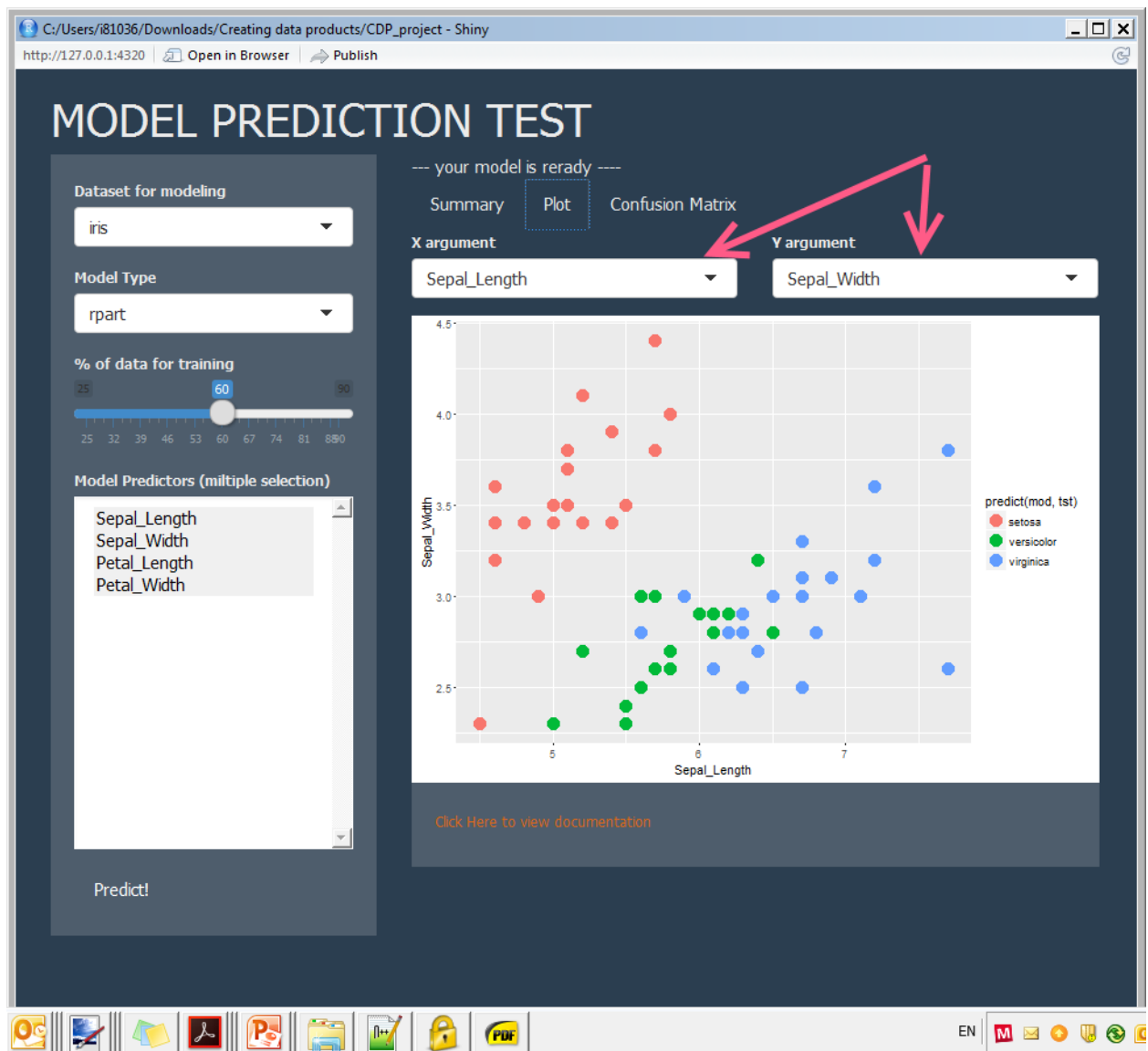
5. press “Predict!” keep in mind that some models will take a while. in addition not all models are applicable for all of the data sets



6. review results, you can see



you can change plot X and Y predictor to further estimate the prediction



enjoy!