Microsoft

Multi Class Decision Forest with Azure ML

Contents

Goals and Requirements

Estimated time to complete lab is 15-20 minutes.

Goals

1. Develop and Predict IRIS Data class.

2. Develop the Model using Multiclass Decision Forest

Requirement:

1. Access to an Azure Machine Learning and the Dataset for IRIS

Multiclass Decision Forest

Problem Statement : Predict the class of a flower using MULTICLASS DECISION FOREST
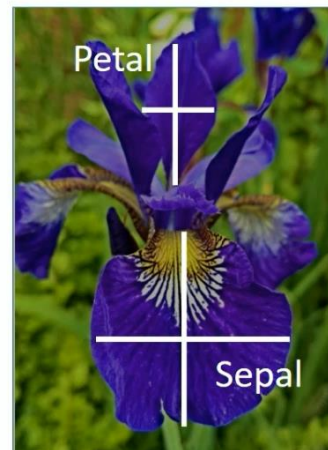

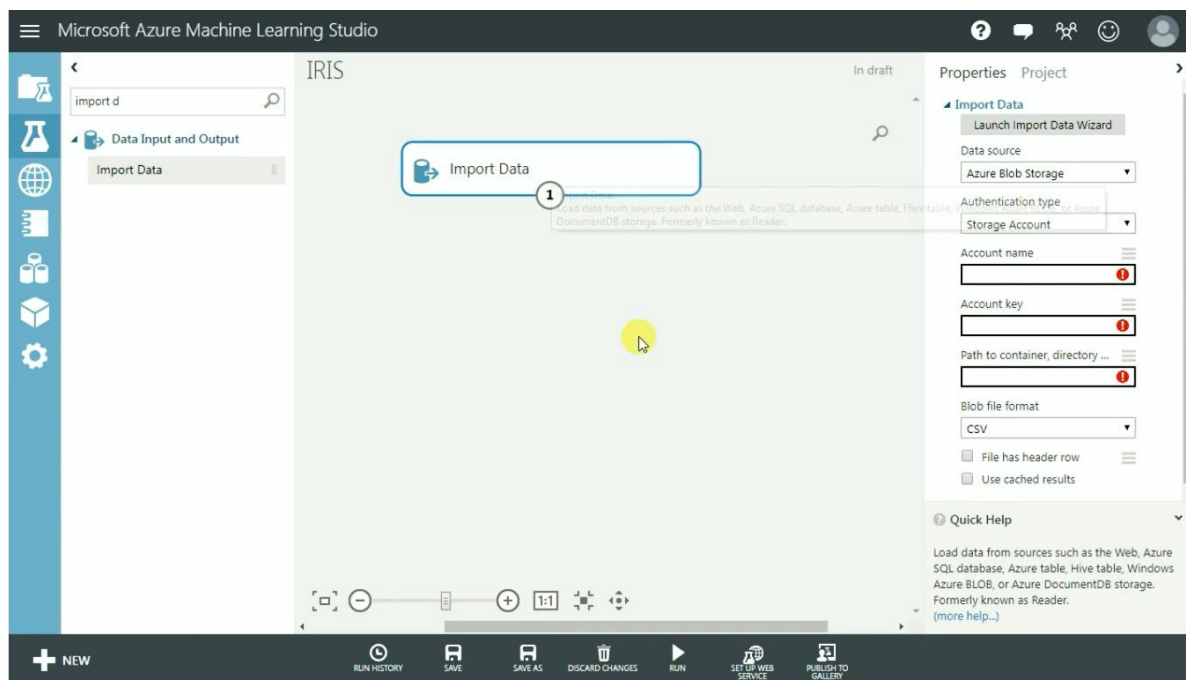
IRIS Dataset

Ronald Fisher

Dataset Attributes

1. Sepal length in cm
2. Sepal width in cm
3. Petal length in cm
4. Petal width in cm

5. Class:
   - Iris Setosa
   - Iris Versicolour
   - Iris Virginica

Predicted attribute: Class of iris plant.

Add Import data in the canvas

Click on data folder

Click on Iris data

Copy the link and back to studio

```
5.1,3.5,1.4,0.2,Iris-setosa
4.9,3.0,1.4,0.2,Iris-setosa
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4.8,3.0,1.4,0.1,Iris-setosa
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5.0,3.3,1.4,0.2,Iris-setosa
7.0,3.2,4.7,1.4,Iris-versicolor
```

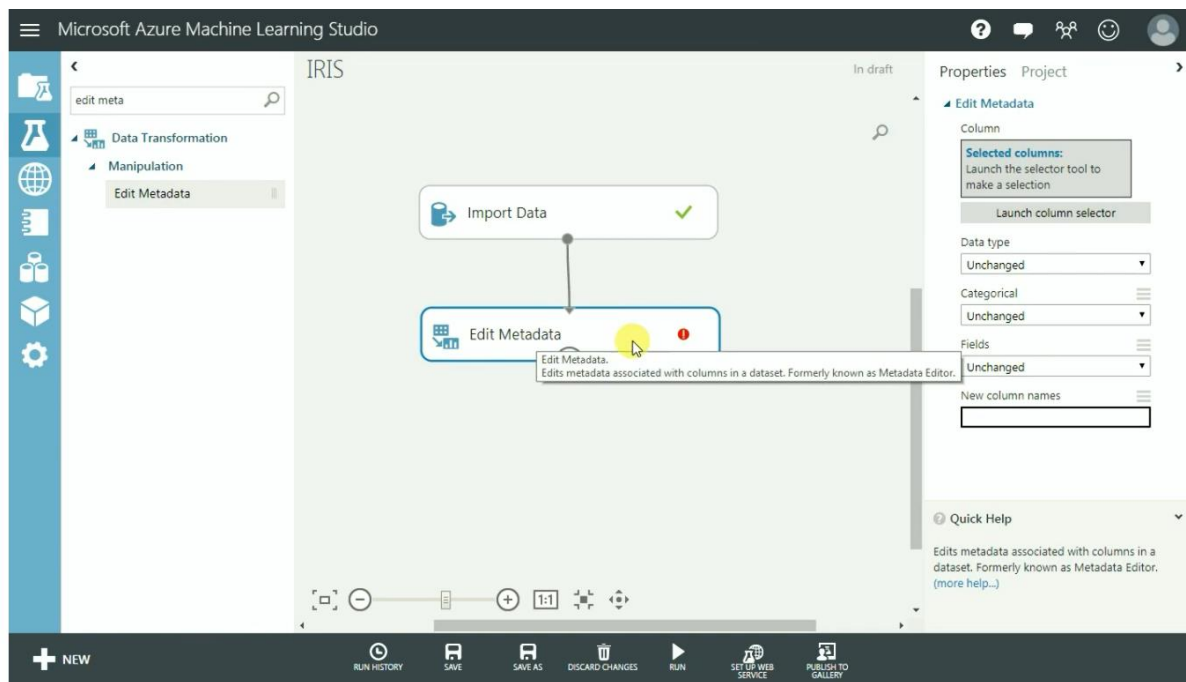## Change data source, mention URL and data format etc as shown
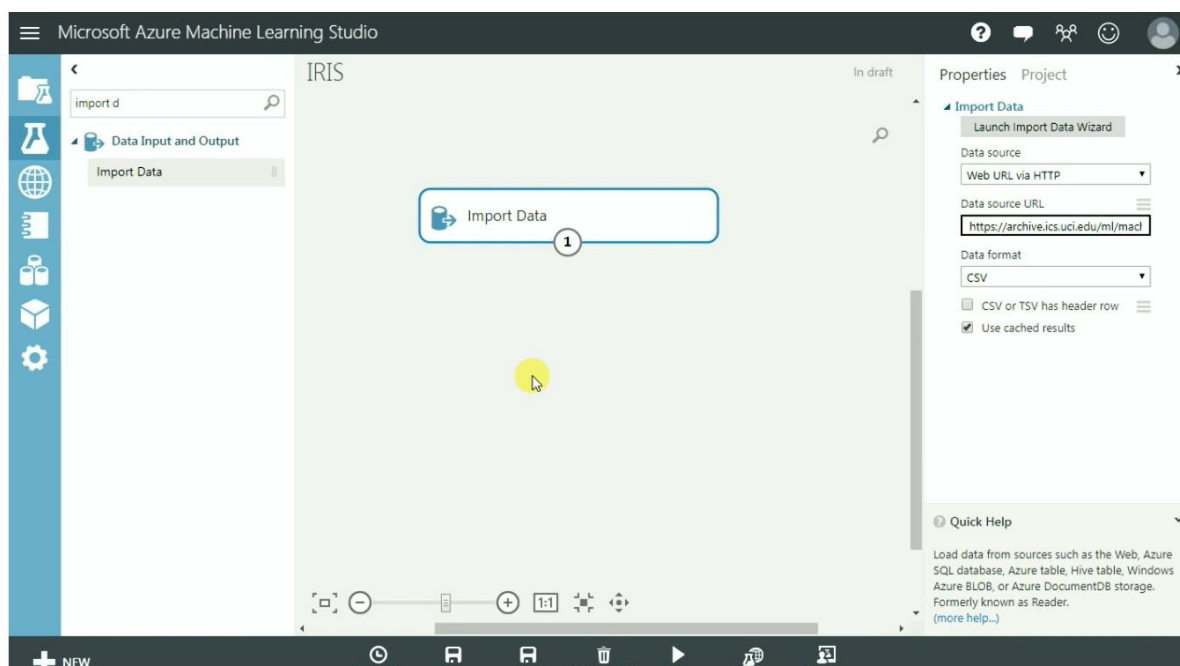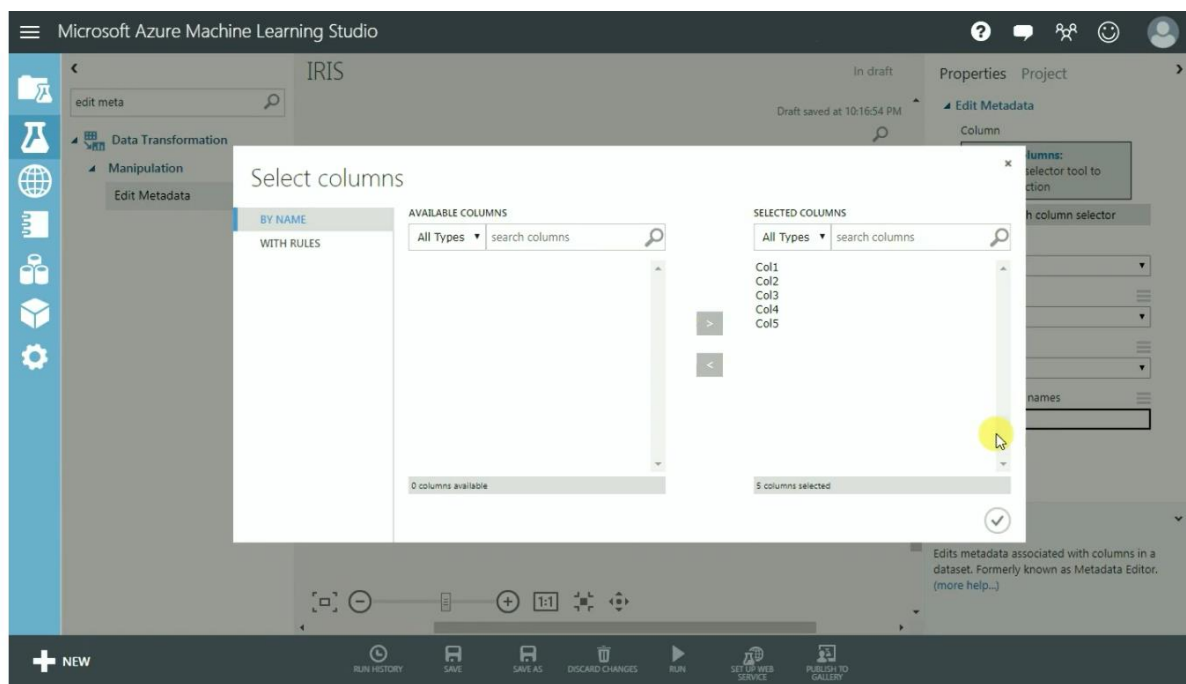
Run and visualize the dataset
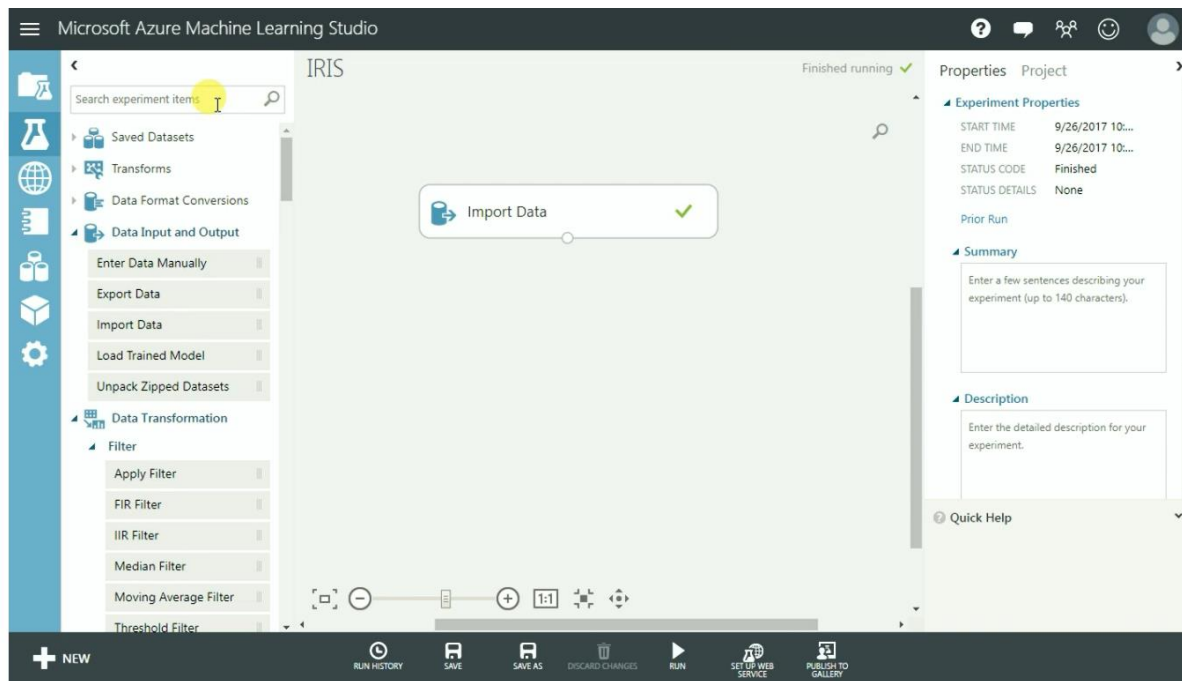
Edit Metadata

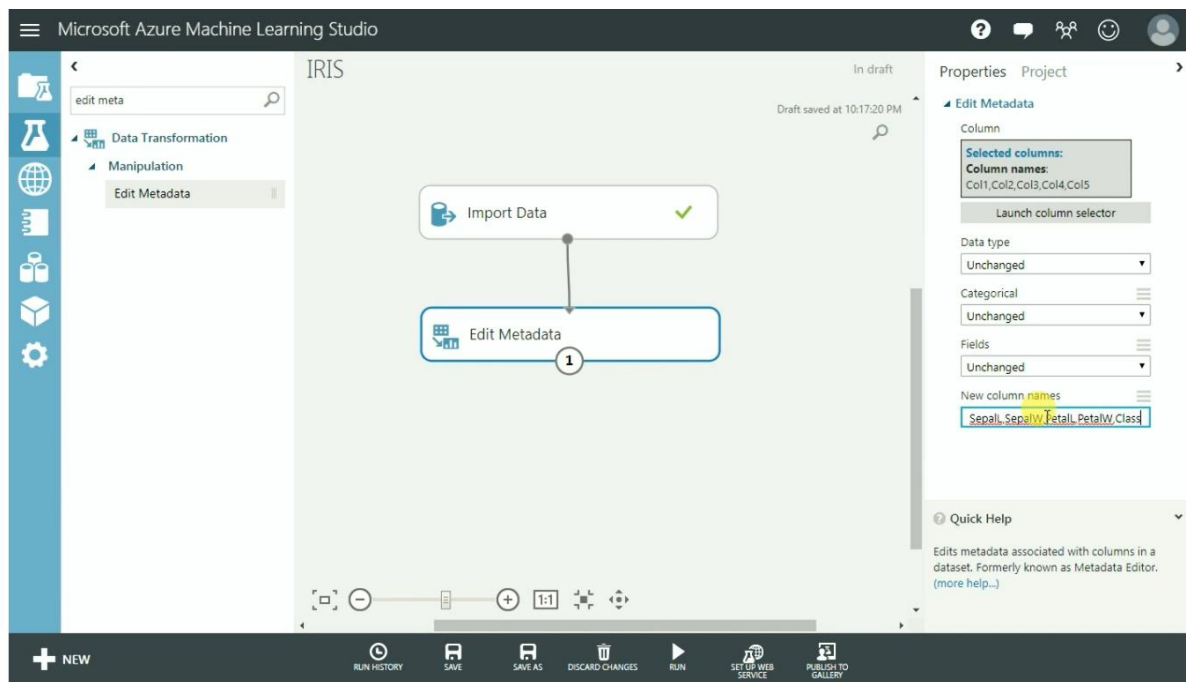Before visualizing add edit metadata into canvas and connect
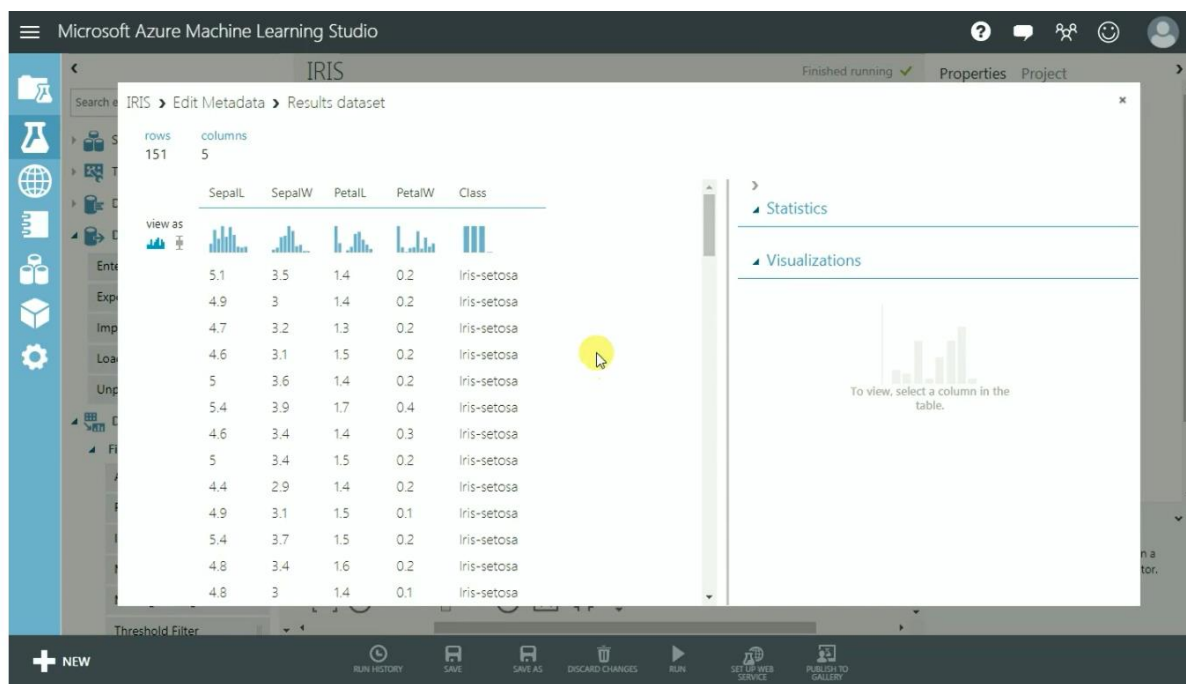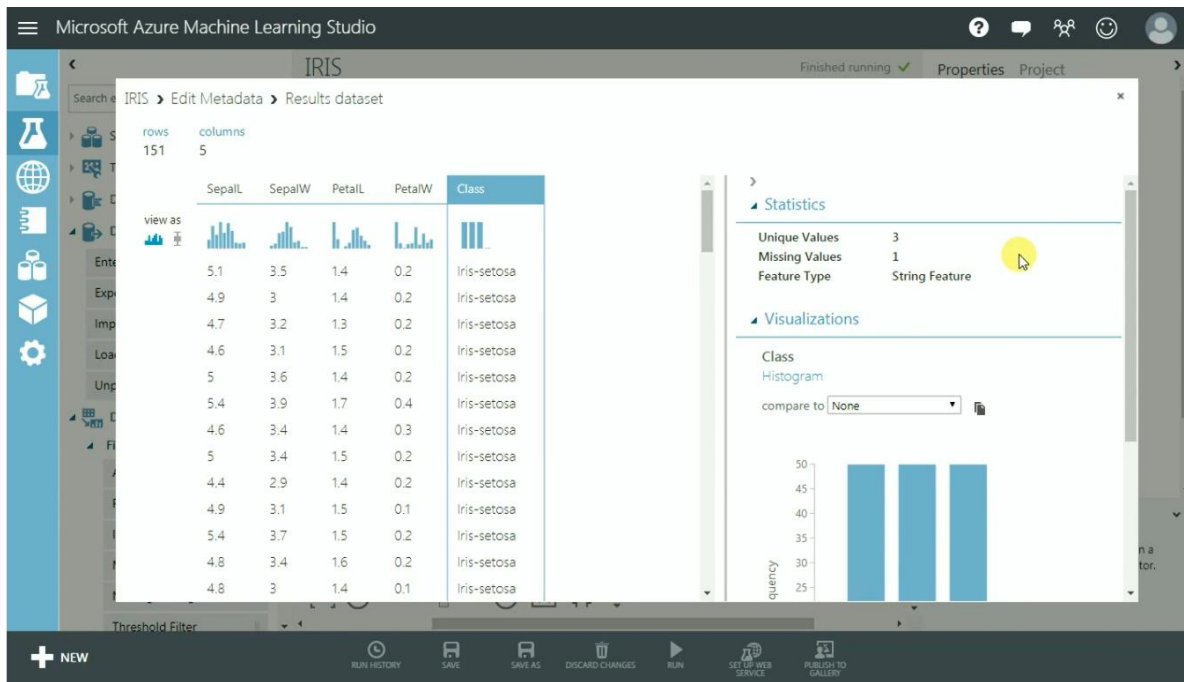
Launch column selector and click ok

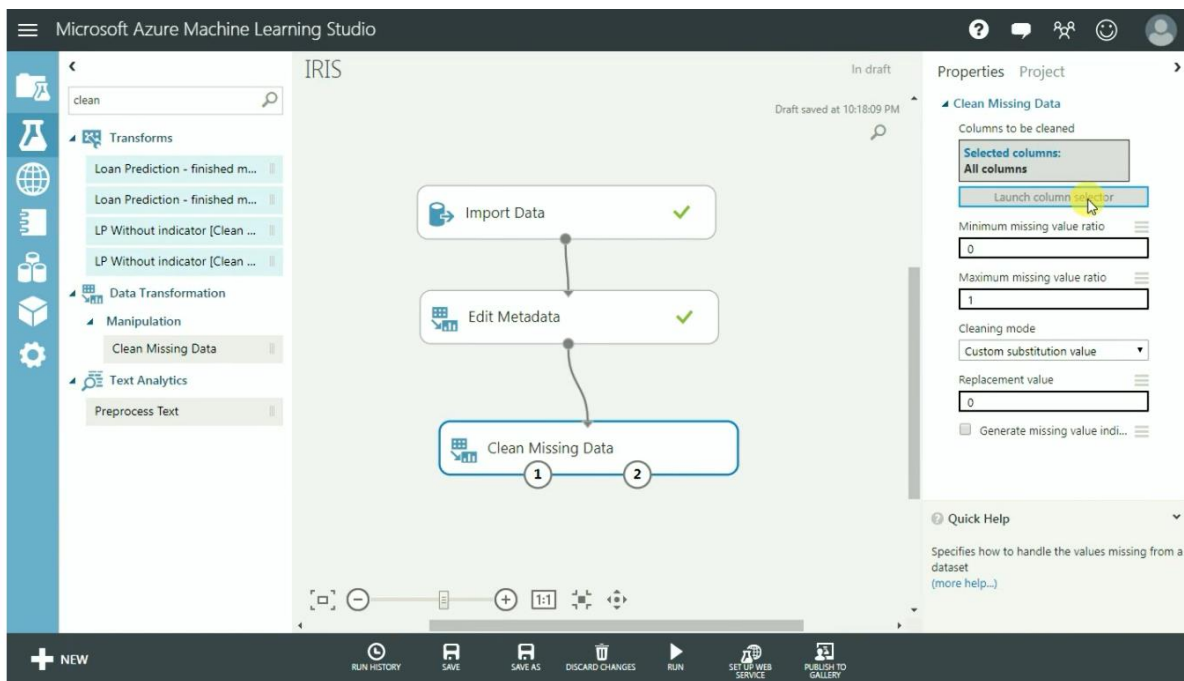

Mention names in the parameters as below
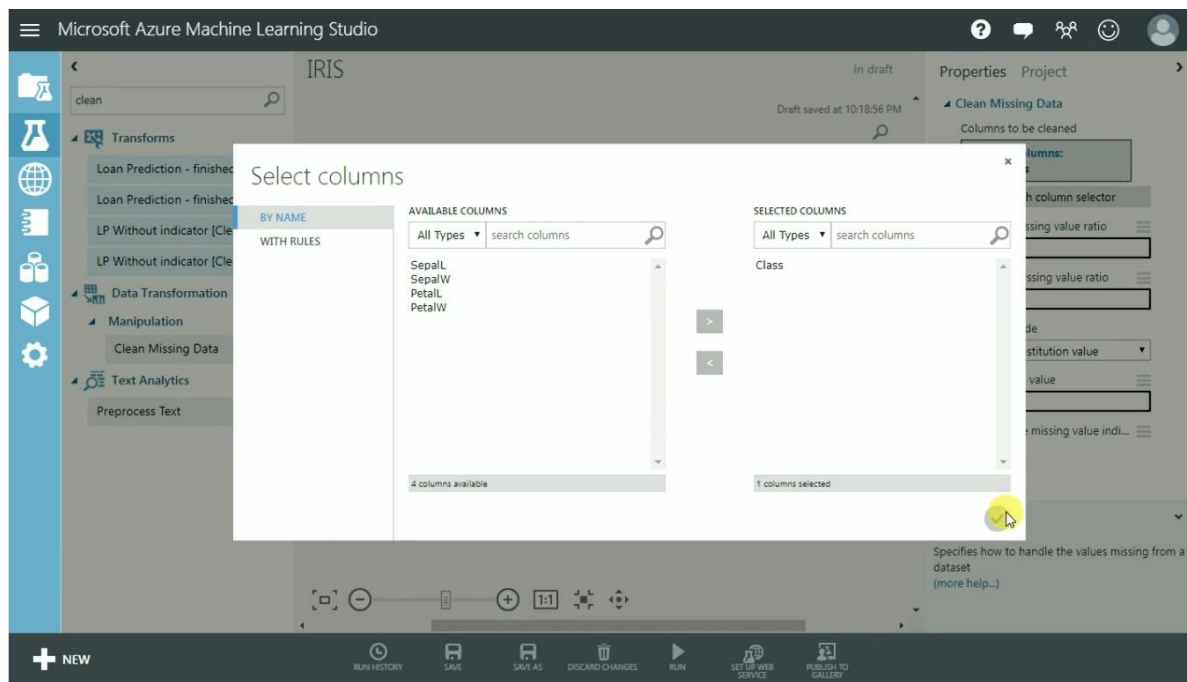
Run and visualize the metadata
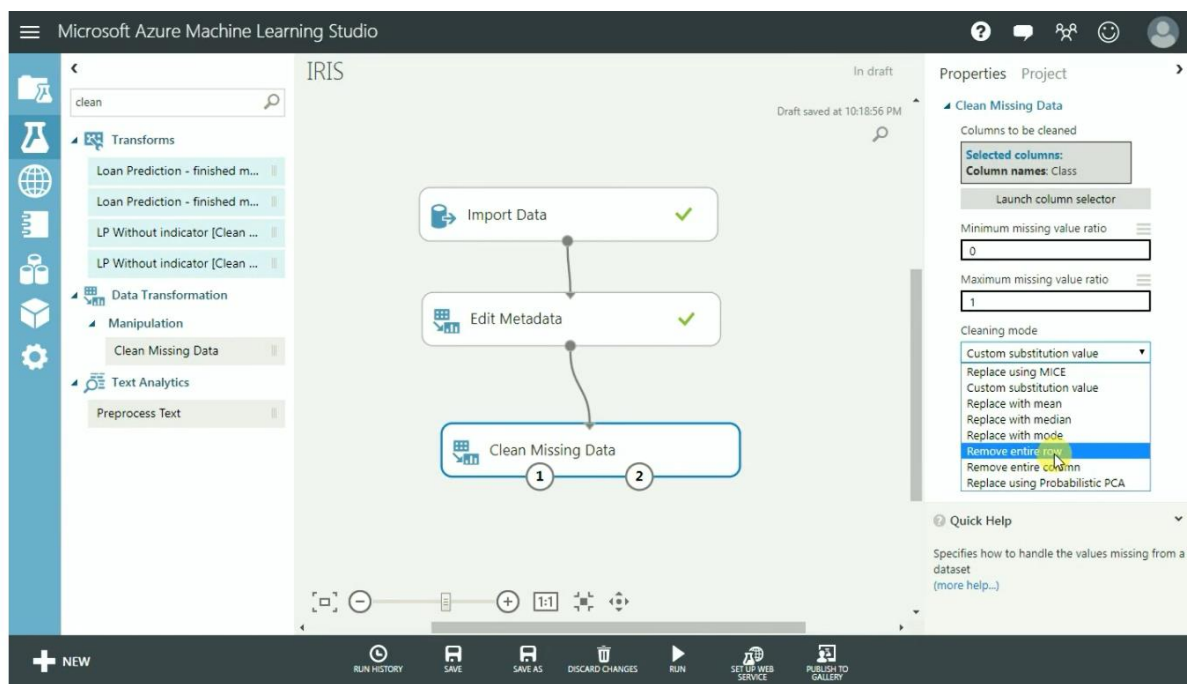

Can view 1 missing value in column class

Add clean missing data in canvas and launch column selector
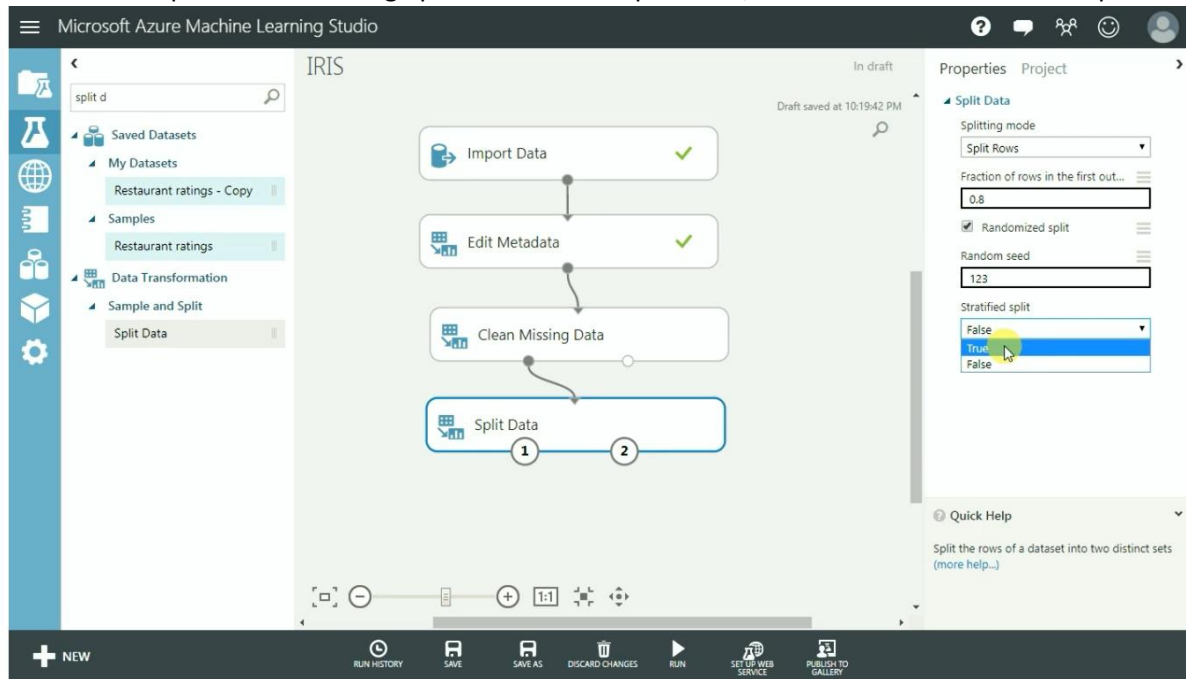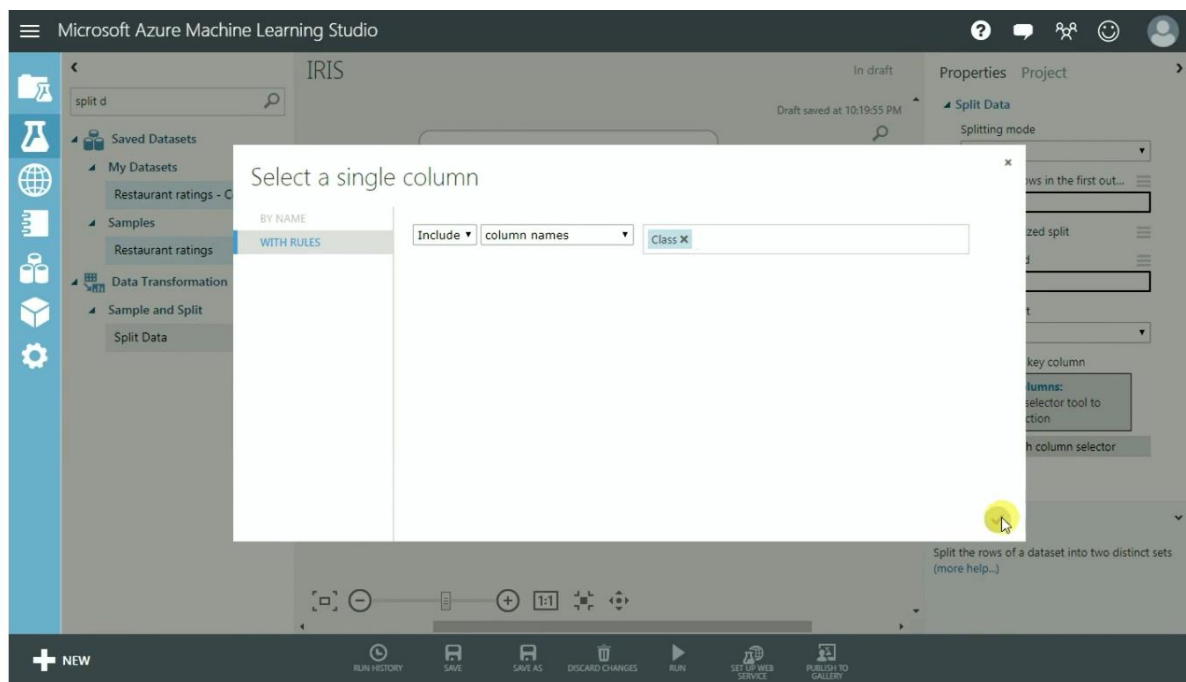

Select class and click ok
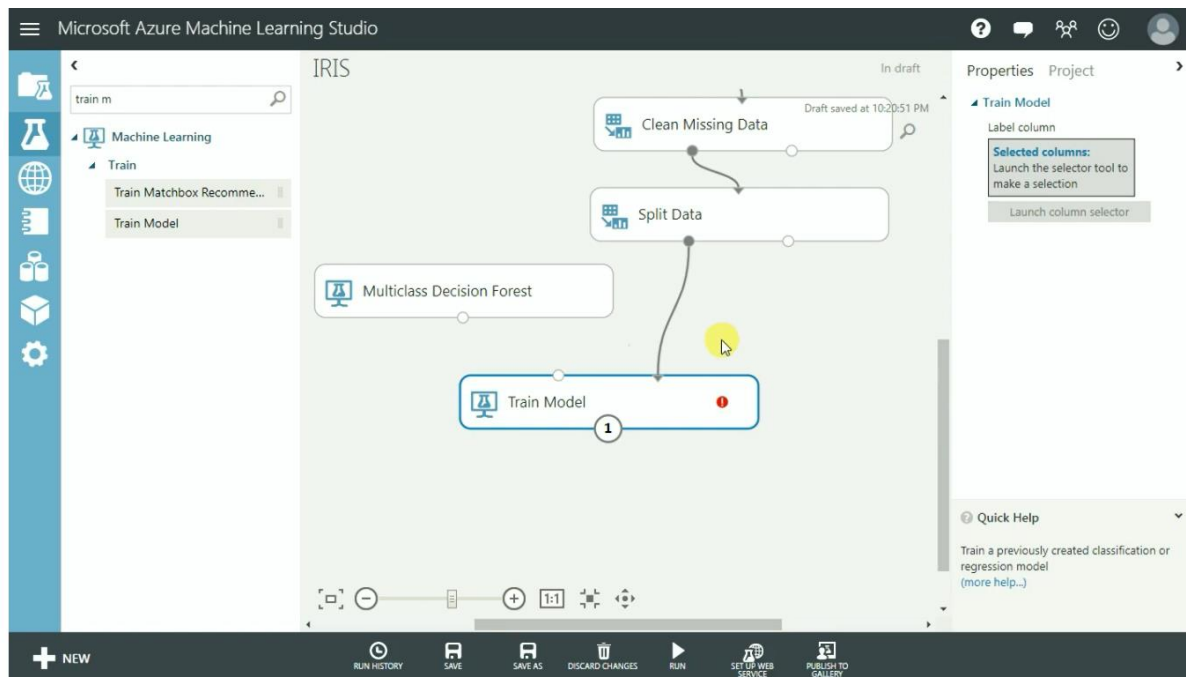
Select Remove entire row

Split Data

Next task is to split data and change parameters with split ratio , random seed and stratified split
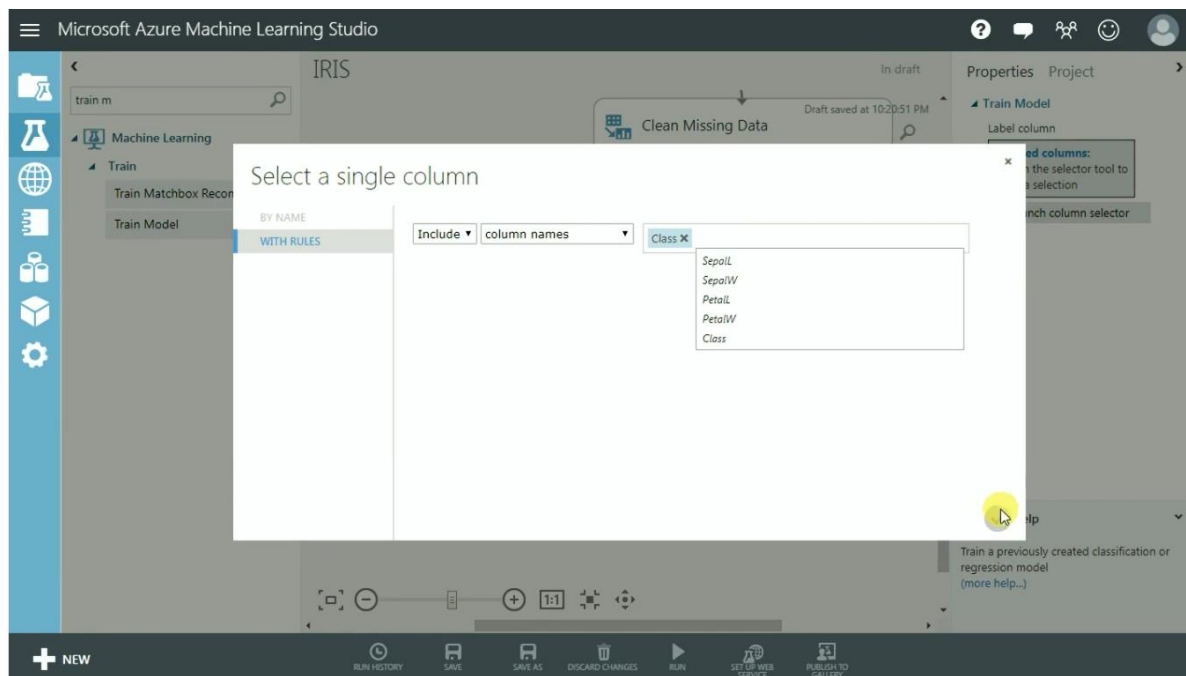

Launch column selector and select class and click ok

Add Multiclass decision forest and train model, connect split data with train model
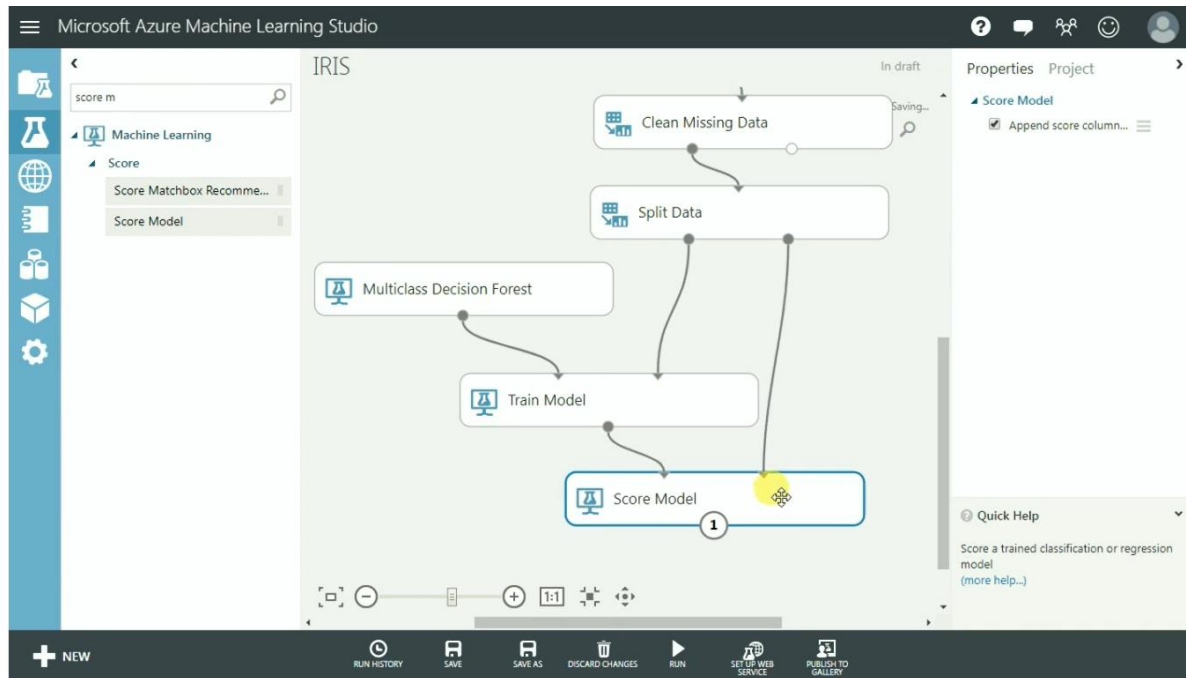

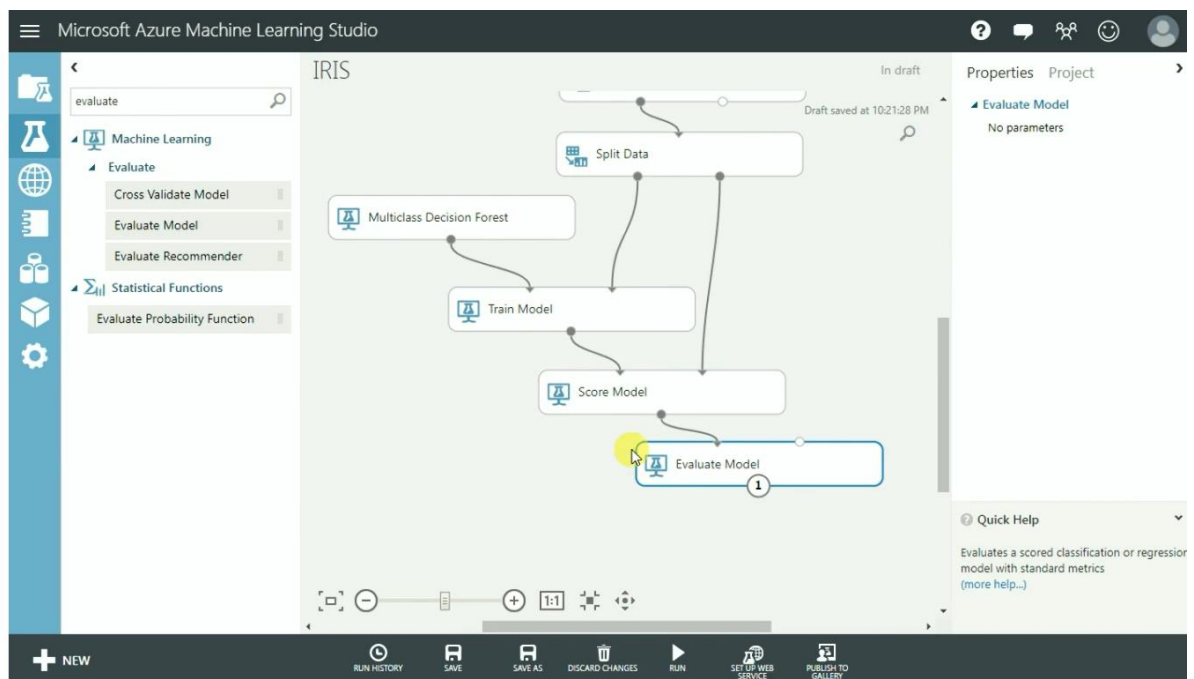Launch column selector, add class and click ok

Add score model

connect multiclass decision forest to train model input node1 and split data

To score model input node 2

Add evaluate model in canvas and connect with score model

Run and visualize the evaluate model and obtain below result