Database Management Systems
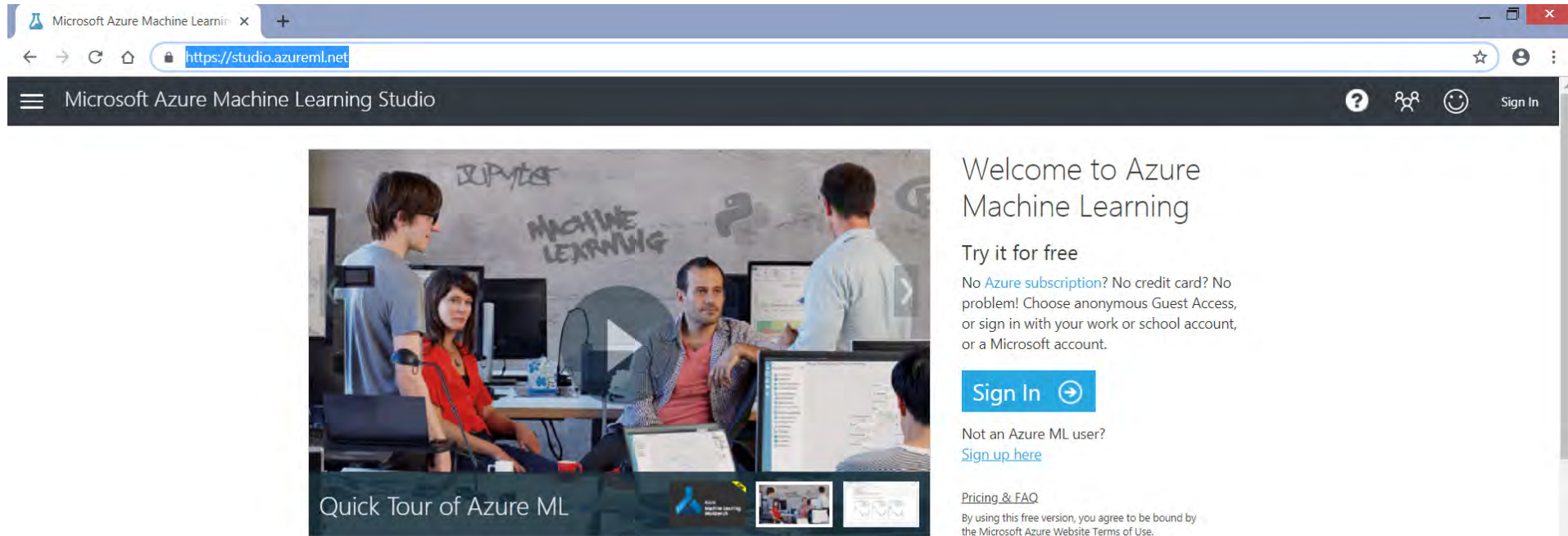
Azure Machine Learning*

Azure Machine Learning

- build / train / deploy machine learning models
- Machine Learning Studio

* Machine Learning Studio

- create the model
  - obtain the data, prepare the data, define the features
- training
  - choose the algorithm, apply the algorithm
- testing the model
  - predict car prices for other vehicles
  - test the quality of the results

Data science Experiment – Car Price Prediction
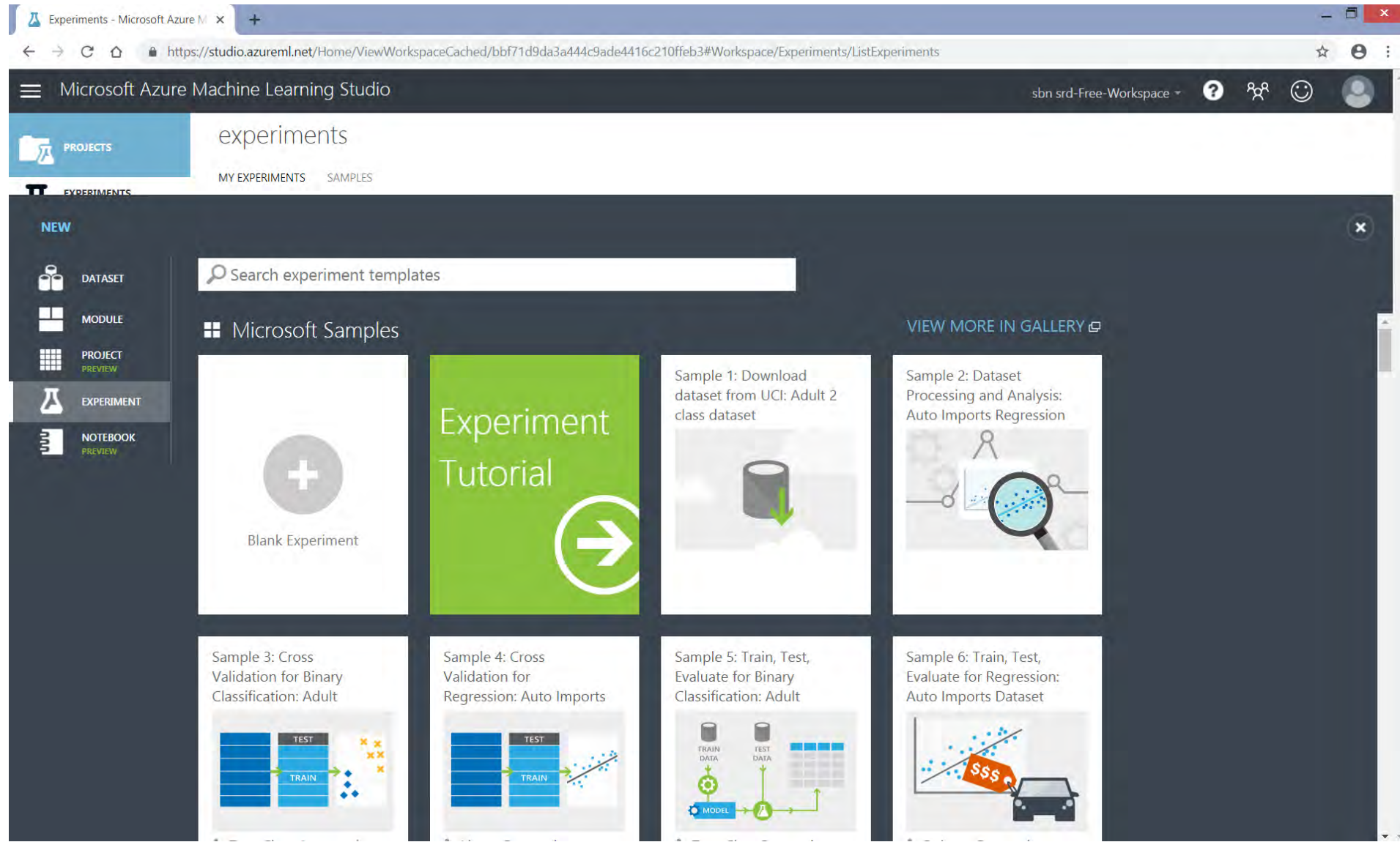
- https://studio.azureml.net/ -> Sign in

Car Price Prediction

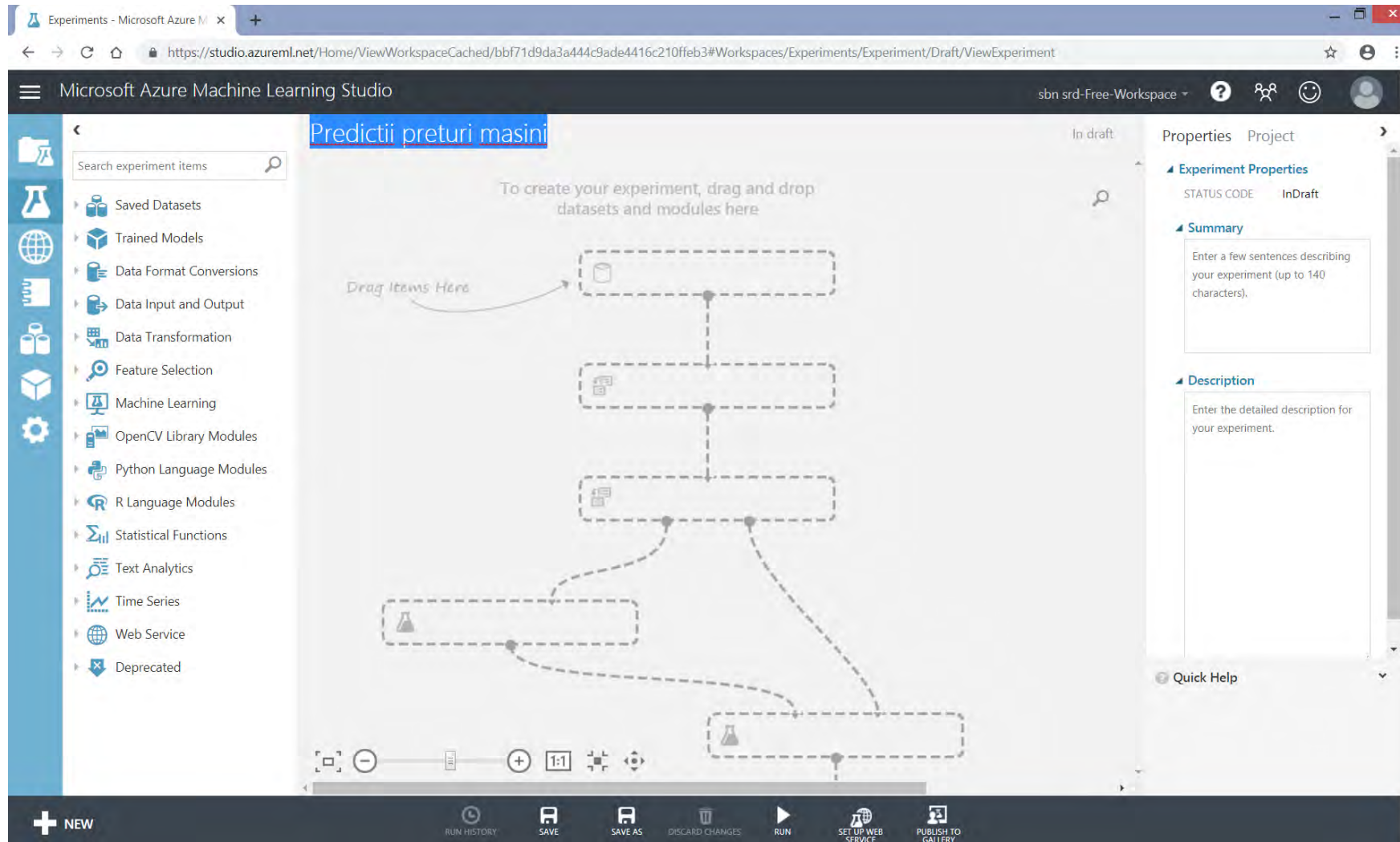## * create an experiment: + New

Car Price Prediction

* create an experiment: Blank Experiment

Car Price Prediction

* create an experiment

- experiment name

Car Price Prediction

* selecting the data source

- dataset *Automobile price data (raw)*

Car Price Prediction

* selecting the data source

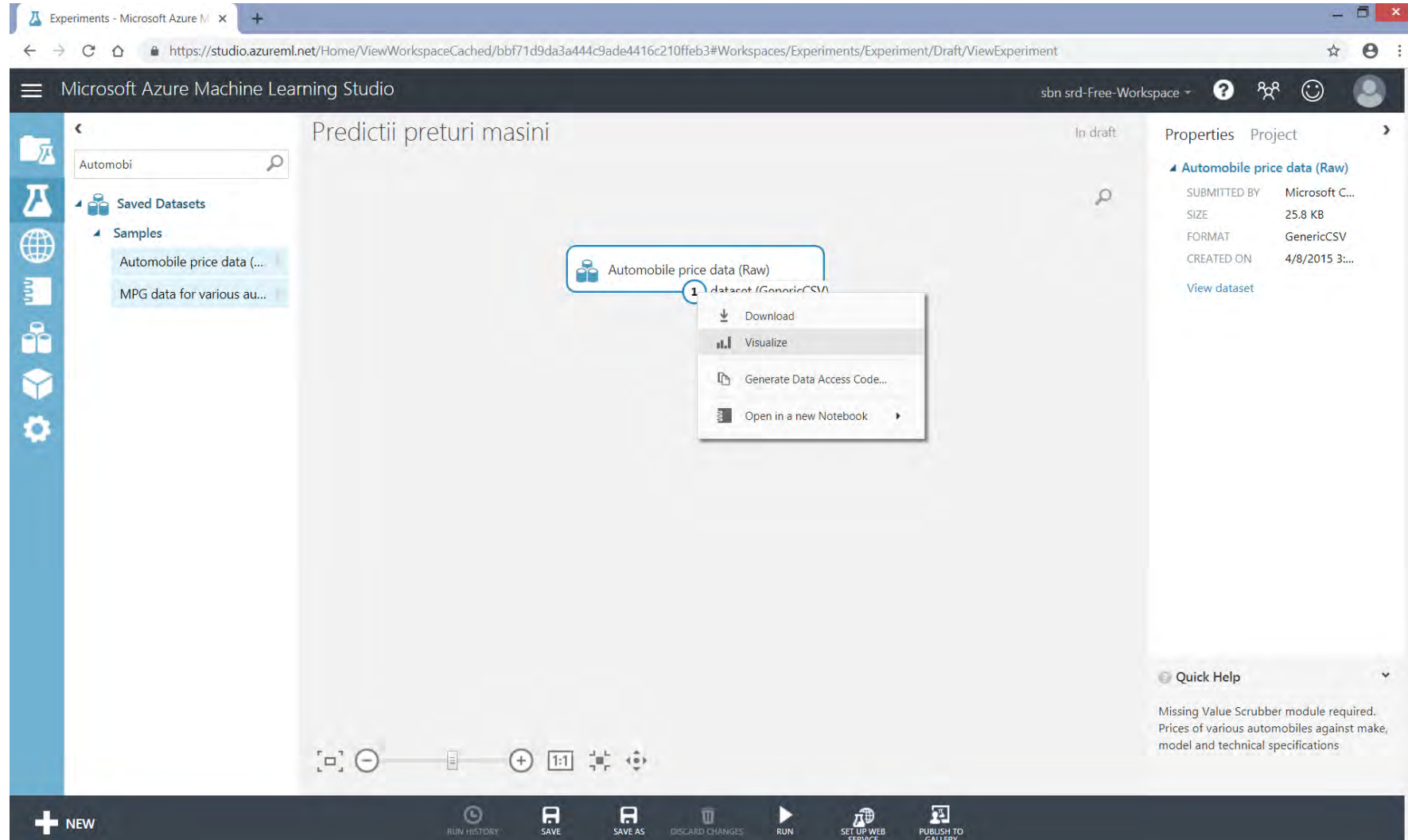   • drag & drop dataset *Automobile price data (raw)* onto the canvas
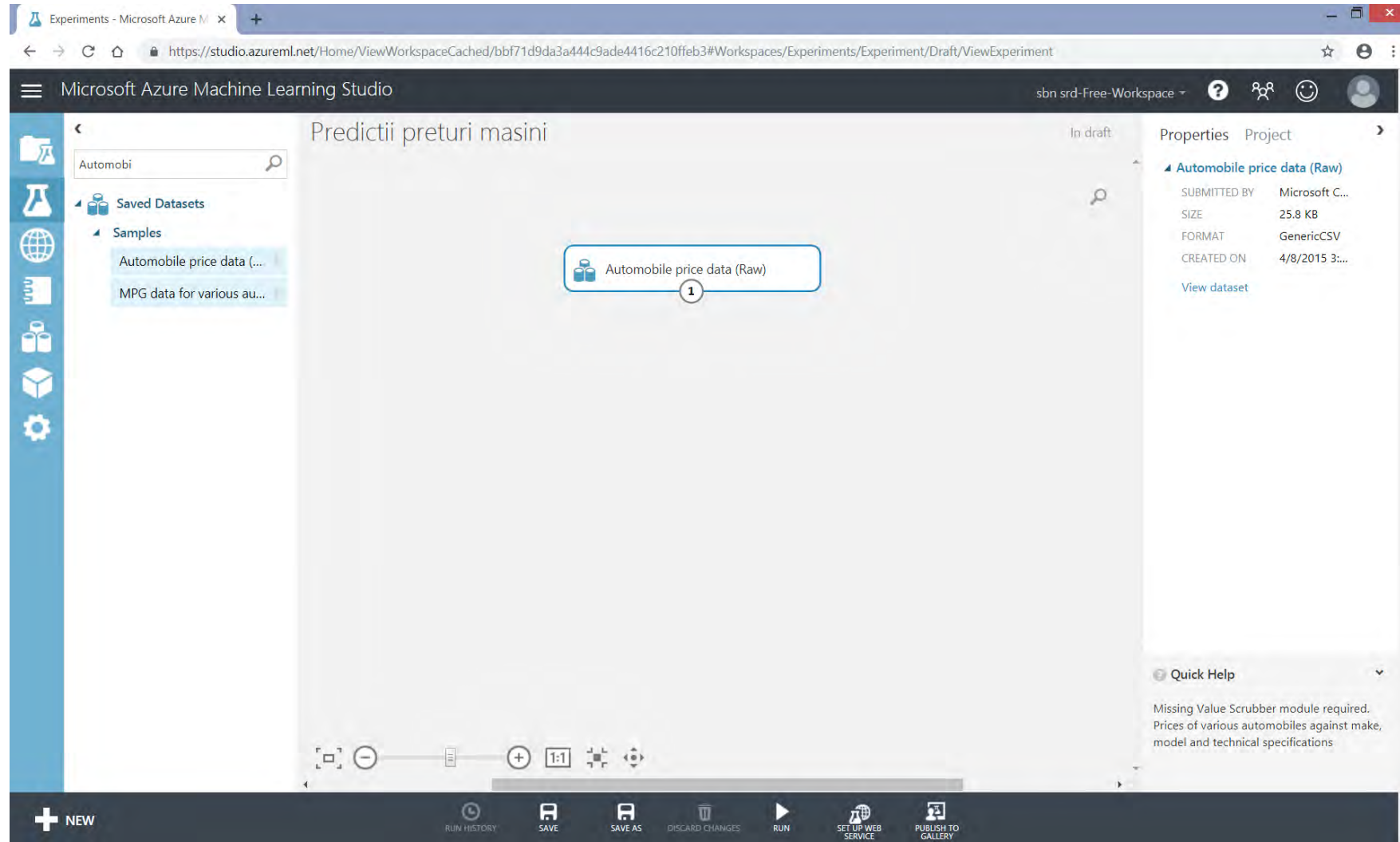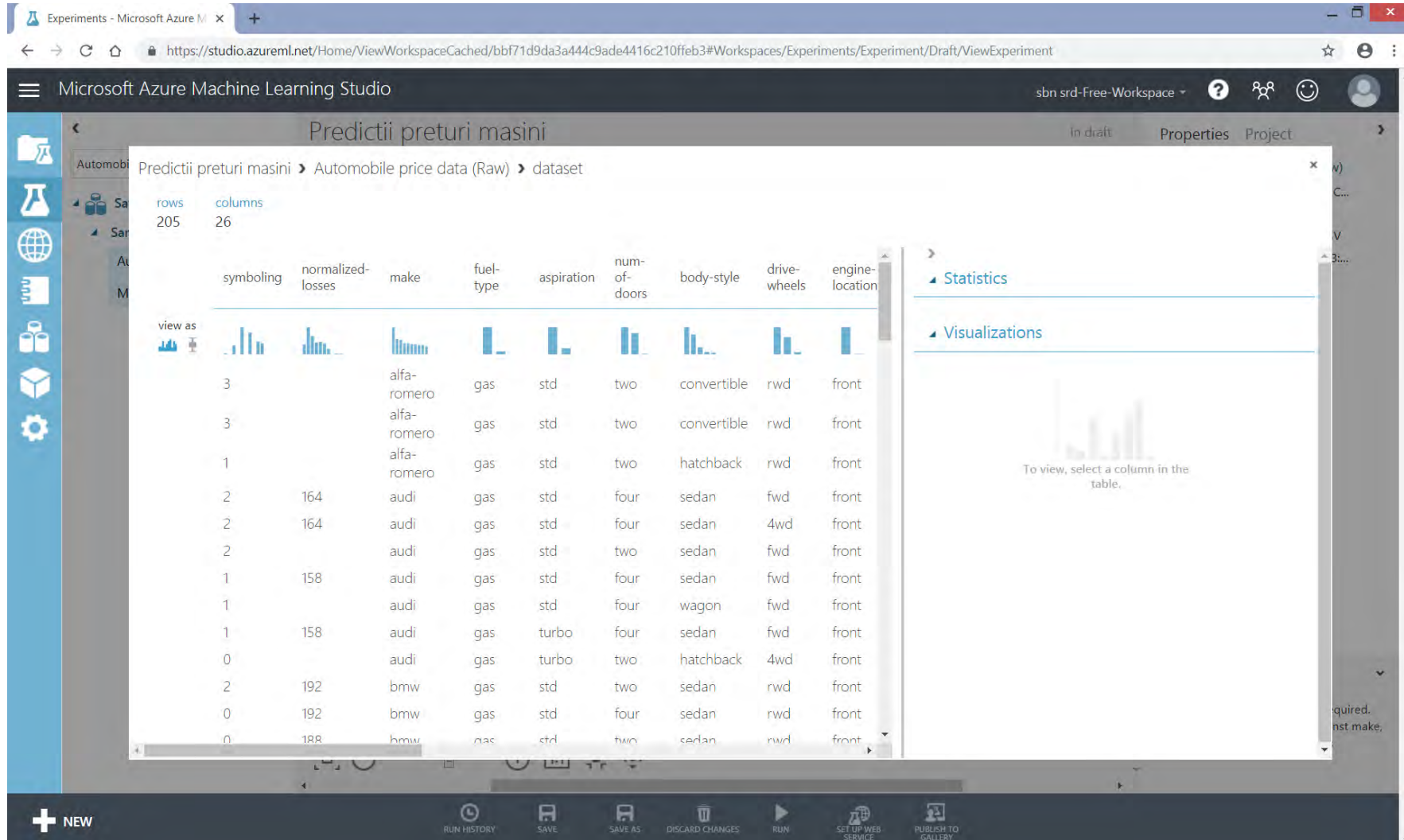
Car Price Prediction

* displaying the data

- dataset output port -> *Visualize*

Car Price Prediction
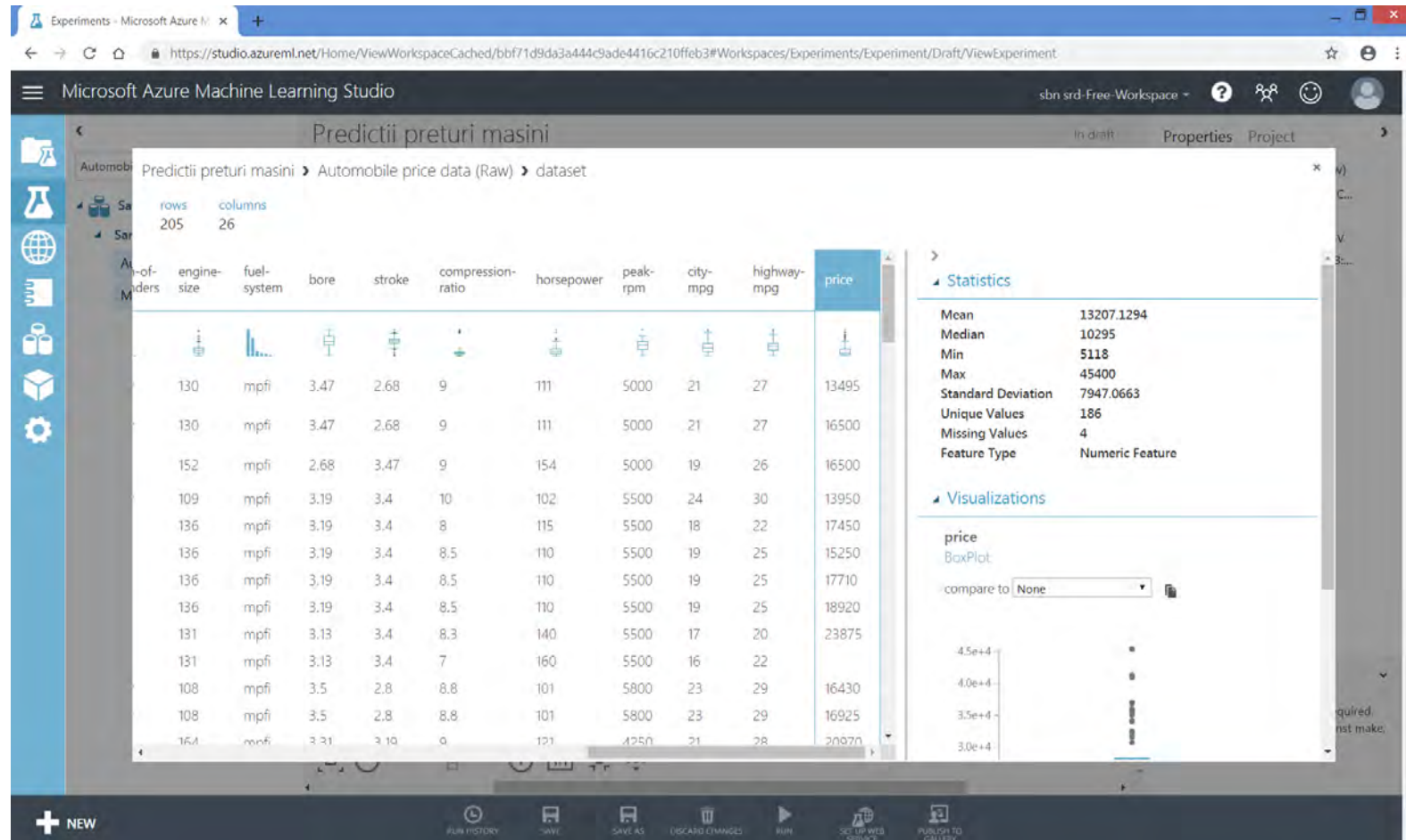
* displaying the data

- row – data about a car
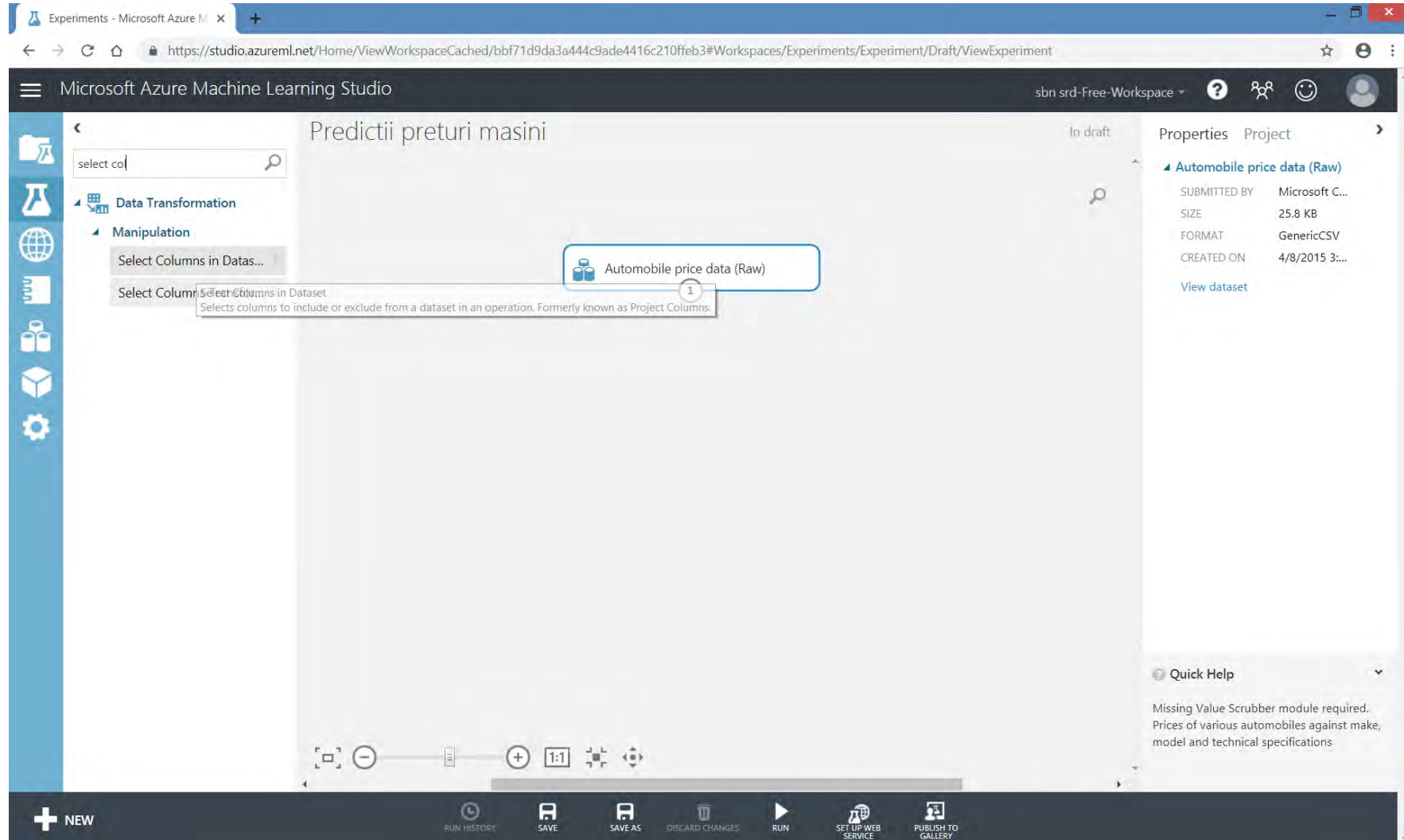
Car Price Prediction

* displaying the data
  - columns – variables
  - *target* column - *price*
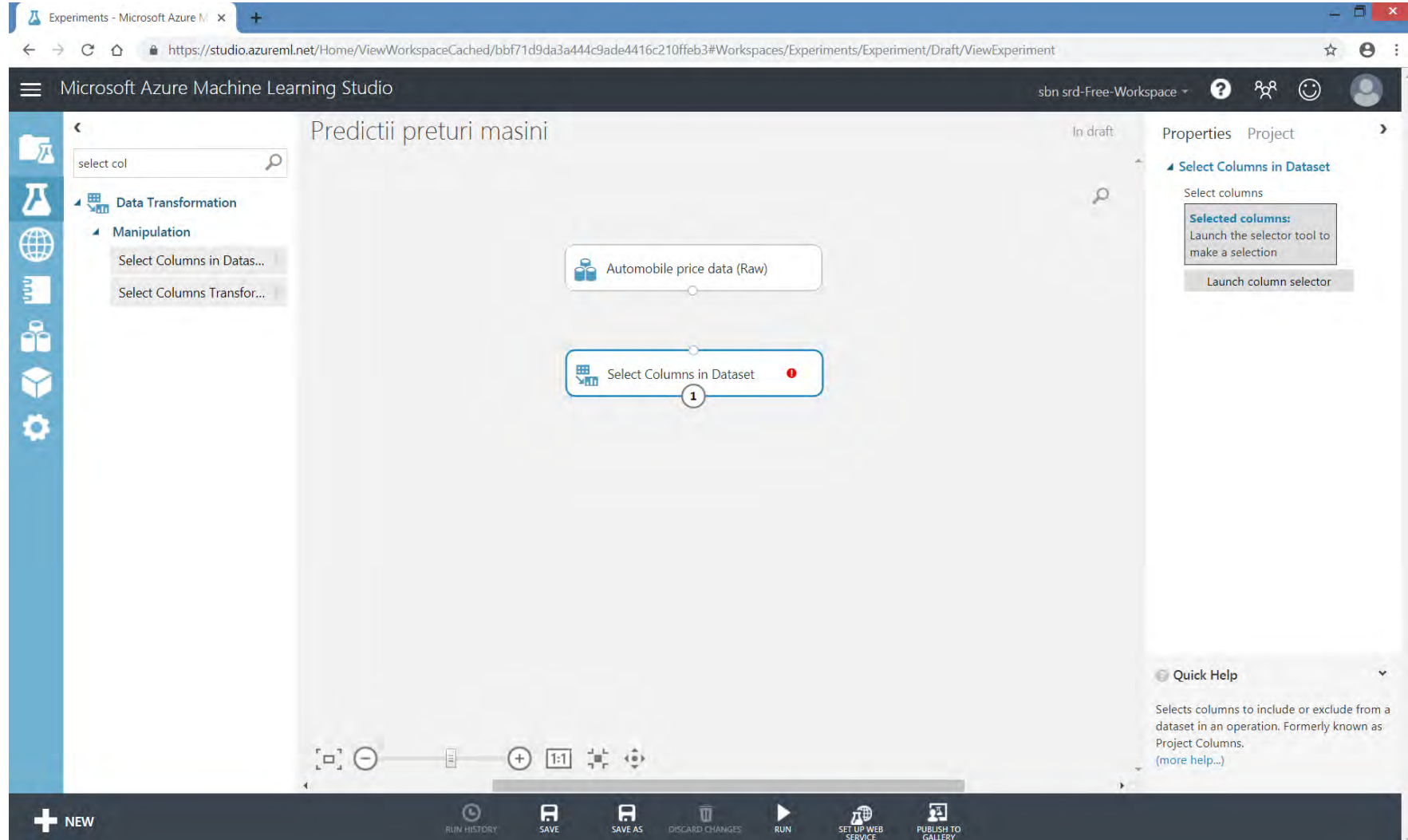
Car Price Prediction

* preparing the data
  * eliminate column with missing values – *normalized-losses*

Car Price Prediction

* preparing the data
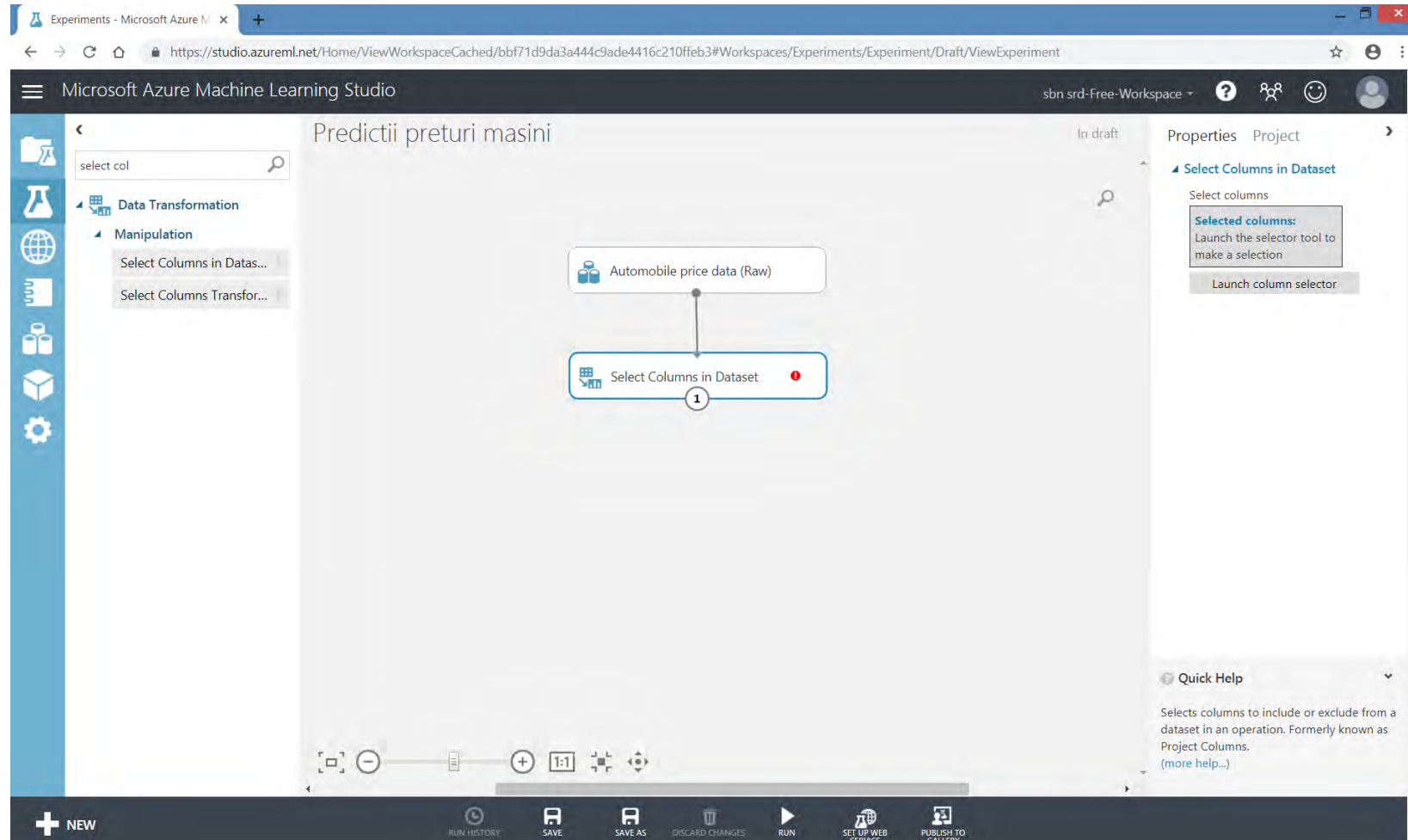 - eliminate column with missing values - *Select Columns in Dataset* module

Car Price Prediction

* preparing the data
  - eliminate column with missing values

Car Price Prediction

* preparing the data

- eliminate column with missing values

- *Select Columns in Dataset*
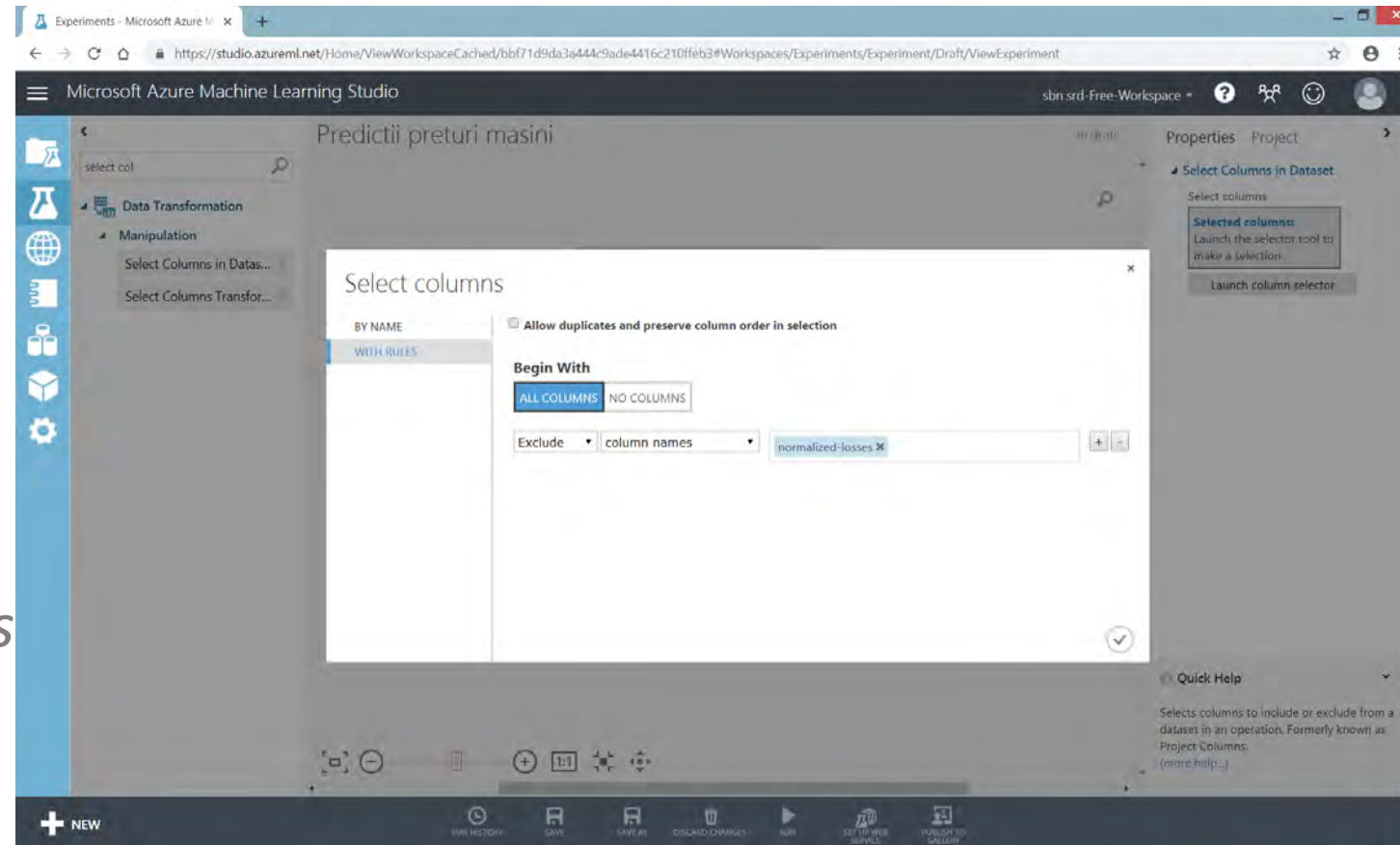 - *Launch column selector*
    - *With Rules*
      - *Begin With*
        - *All Columns*
      - *Exclude*
        - *normalized-losses*

Car Price Prediction

* preparing the data
  - eliminate rows with missing values – *Clean Missing Data* module

Car Price Prediction

* preparing the data
  * eliminate rows with missing values

  * *Clean Missing Data*
    * *Cleaning mode*
      * *Remove entire row*