

A simple notebook to display the feature importances for the UCI Student Performance Dataset. These indicate how important the various attributes are for in the overall model build on historical data. See [UCI Student Performance Dataset \(https://archive.ics.uci.edu/ml/datasets/student+performance\)](https://archive.ics.uci.edu/ml/datasets/student+performance) for a description of the features.

Set data_file in the next cell.

In [1]:

```
data_file = r'Student_Prepared_FirstTerm.csv' # Student_Prepared_FirstTerm.csv or Studen
```

In [2]:

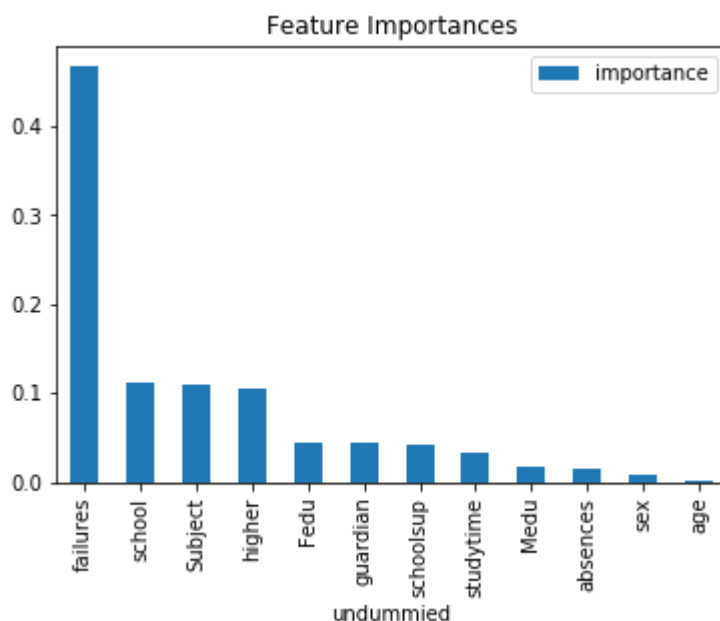
```
%run "Prep Student Classifier.ipynb"
```

```
pred_class = clf.predict(data)
target_scores = clf.predict_proba(data)[: ,1]
pd.DataFrame({"actual": cls, "predicted": pred_class, "score": target_scores})
```

Non-Zero Feature Importances

In [6]:

```
# from training notebook
undummied_nz_importances.plot(kind='bar', title="Feature Importances");
```



In [4]:

```
undummied_nz_importances
```

Out[4]:

importance	
undummied	
failures	0.466924
school	0.112494
Subject	0.110289
higher	0.104549
Fedu	0.044896
guardian	0.044744
schoolsup	0.040988
studytime	0.032490
Medu	0.017014
absences	0.015589
sex	0.008355
age	0.001668