



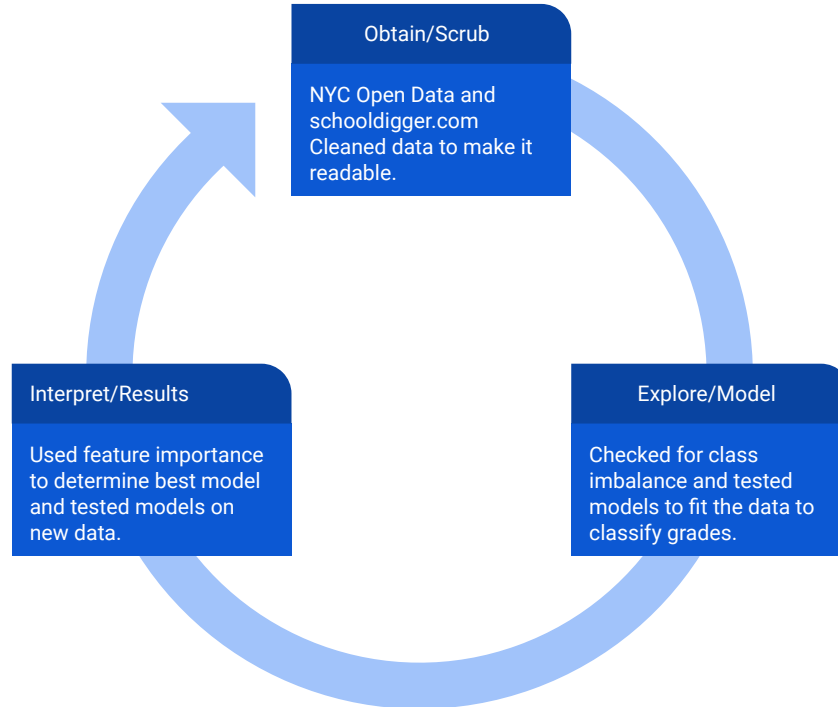
NYC School Grades

What grade would a NYC school get based on given features and what factors influence the grade?

**The objective is to use the
2006-2007 school report to
build a model that can predict
a passing or failing grade of a
school.**

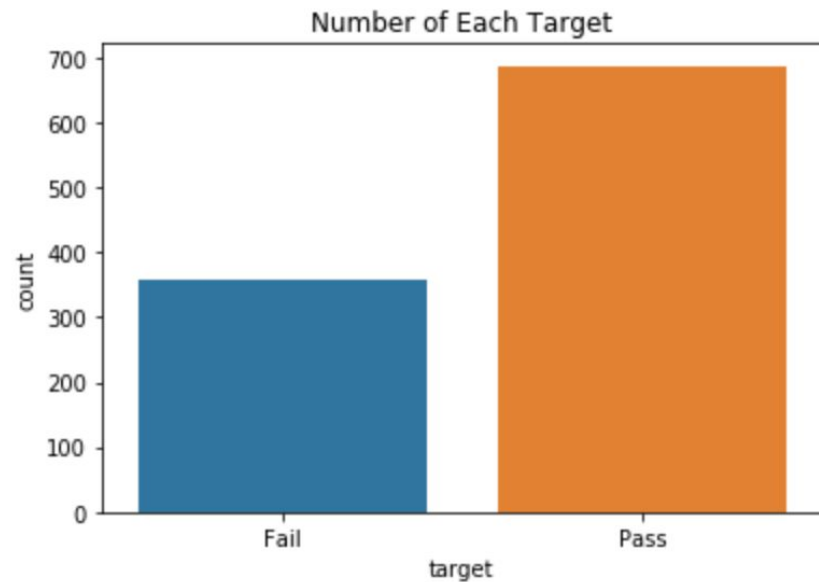
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Methodology





What are we trying to predict?



Prediction Model Comparison

99%	Decision Tree	<ul style="list-style-type: none">• Overall Score - Most important feature• Only used 4 out of 11 features to construct model
98%	XGBoost	<ul style="list-style-type: none">• Overall Score - Most important feature• Used all features to construct model• Features were distributed unevenly
97%	Gradient Boost	<ul style="list-style-type: none">• Overall Score - Most important feature
97%	AdaBoost	<ul style="list-style-type: none">• Overall Score - Most important feature• Most evenly distributed importance of features
96%	Random Forest	<ul style="list-style-type: none">• Overall Score - Most important feature

**14 out of 15
correct new
predictions**



Future Work

- Gather more information:
 - More variety of school levels
 - More features:
 - State test scores
 - Number of teachers
 - School budget
 - Percent of boys vs. girls
 - Attendance rates
- Real-estate
- Business
- Send support