



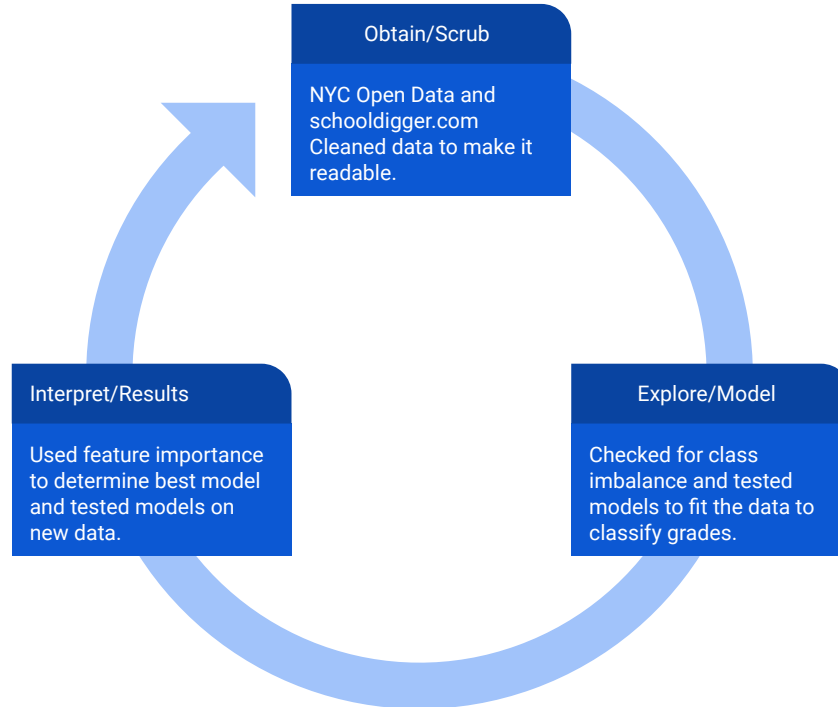
# NYC School Grades

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.**

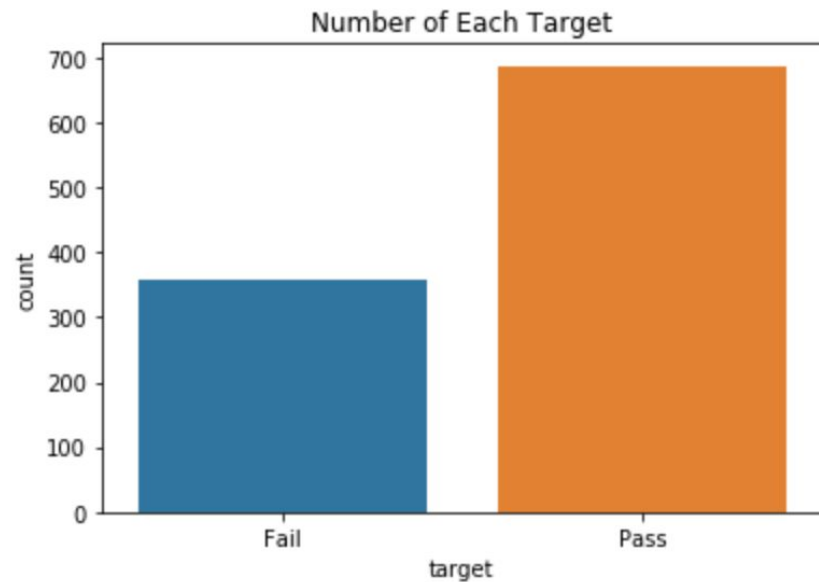
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# Methodology





# What are we trying to predict?



# Prediction Model Comparison

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

**14 out of 15  
correct new  
predictions**  
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# 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

**Thank you.**  
**Q & A**

