The Team   
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Problem Statement a.k.a Decompose The Ask  
­­Does ranking necessarily correlate to graduation rate, completion rate, acceptance rate, tuition fees, SAT/ACT score requirements?   
Does a higher cost correlate to a brighter future?  
Does acceptance and ranking correlate to graduation rate?

Identify Data Sources  
<https://www.kaggle.com/theriley106/university-statistics>

<https://www.collegeraptor.com/find-colleges/articles/college-comparisons/2-key-statistics-for-comparing-colleges-graduation-rate-and-retention-rate-explained/>

<https://poetsandquants.com/2017/06/26/draft-job-placement-rates-at-the-top-schools/>

Data source will be from Kaggle.com. Kaggle.com has a data set of US World and News Report’s college ranking data of about 300 universities taken from U.S. News.

Data is available in CSV and JSON format from Kaggle.com.   
Supplemental data can be found at World Bank.

Define Strategy and Metrics   
Hypothesis 1: There is no correlation between the cost of attending highly ranked college vs. lower ranked college. To investigate this, we hope that a scatter plot of cost of tuition to ranking of school will demonstrate that this is not a relevant correlation.  
Null Hypothesis 1: ­There is a correlation between cost of tuition and ranking.

Hypothesis 2: Higher ranking colleges do not always require higher SAT/ACT scores. To do this, a simple scatter plot of college rank by SAT and college rank by ACT will suffice to demonstrate that the data either does point to a correlation or proves it does not.  
Null Hypothesis 2: There is evidence of college rank and higher SAT/ACT scores.  
  
Hypothesis 3: Colleges where more students receive aid are less prestigious. The “percent of students receiving aid” vs. the business ranking and the engineering ranking would be enough to demonstrate any such correlation. A scatter plot of the relevant data will either show this or not.  
Null Hypothesis 3: Percent receiving aid and ranking in business or engineering are not related.

Description of Data Analysis Tools You Plan to Use  
We plan to use Python’s PANDAS, MATPLOTLIB, NUMPY and other modules to extract and analyze the data.  
We will use PowerPoint to present the data findings.

Describe the Data Products Your Project Will Produce  
We will be using various statistical and analytical methods to illustrate our findings. Each of our hypotheses will require at least one visualization, as outlined above.