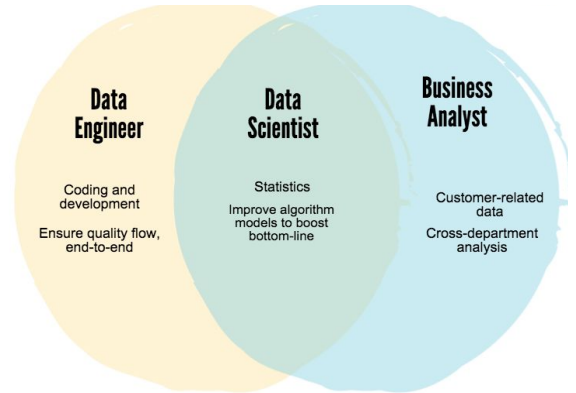Nick A, Nick D, Noah, Dominic, Emma, Angel

Food For Thought
What kinds of data-driven careers are available in the information age?
What jobs can someone with a background in machine learning get?
How hard is it to stay up-to-date in such a rapidly advancing field?

Difference between Data Analyst, Data Scientist, and Data Engineer:
- *What is a Data Analyst?*
  - Summary: Data analysts collect, organize and interpret statistical information to make it useful for a range of businesses and organisations.
  - Skills Required:
    - A high level of mathematical ability, SQL, Oracle and Python, the ability to analyze, model and interpret data, problem-solving skills, a methodical and logical approach, and accuracy and attention to detail.
- *What is a Data Scientist?*
  - Summary: A data scientist "has the knowledge and skills to conduct sophisticated and systematic analyses of data." (Big Data Made Simple)
    - Knows more computer science than a statistician and more statistics than a computer scientist (Ann Cannon)
  - Skills Required: Programming (notably SQL, Python, R), math/statistics (advanced calculus, linear algebra), background in machine learning, data wrangling and visualization
- *What is a Data Engineer?*
  - Summary: A data engineer is responsible for creating data pipelines that pulls information from different systems and structuring it so that data scientists/analysts can write queries
  - Skills Required: SQL, Hadoop, Spark, AWS Cloud Services, MongoDB

Examples of Interview Questions:
How could you collect and analyze data to use social media to predict the weather?

In The News:
- AI and Machine learning have become very prevalent in sports
  - Used in baseball all the time, used in football to help analyze stats and determine play calls.
  - Used in vegas for bets.
- Machine Learning is being used to save businesses money
- Being used to determine what is and isn't spam in google, what ads people get.

Resources:
https://bigdata-madesimple.com/what-is-a-data-scientist-14-definitions-of-a-data-scientist/
https://targetjobs.co.uk/careers-advice/job-descriptions/454089-data-analyst-job-description
https://github.com/kojino/120-Data-Science-Interview-Questions/blob/master/predictive-modeling.md
https://blog.udacity.com/2014/11/data-science-job-skills.html