## Data Ingestion and Wrangling

### Data Ingestion:

* Import all data using an executable python script, not a Jupyter Notebook
* Feature explanations:
  + Time-aware features:
    - *time\_of\_day* (integer, values: 1 – 23): the hour of day at which the game started in local time
    - *player\_age* (integer): age (in years) of player on day of game
    - *hours\_outside\_time\_zone* (integer): number of hours player is outside of home time zone
    - *day\_of\_week* (integer, values: 1 – 7): the day of week of the game (1 = Monday)
    - *days\_since\_last\_game* (integer): number of days since player last played in a game
  + Weather features:
    - *temperature* (integer): degrees (in Fahrenheit) at beginning of game
    - *precipitation* (float): inches of precipitation expected during game
    - *precipitation\_type* (integer):
      * 0 = none
      * 1 = rain
      * 2 = sleet
      * 3 = snow
      * 4 = wintry mix
  + Injury features
    - *injury\_status* (integer):
      * 0 = not injured
      * 1 = questionable
      * 2 = out
    - *injury\_type* (integer):
      * 0 = none
      * 1 = head/neck/spine
      * 2 = arm/wrist
      * 3 = leg/ankle
  + Receiving features:
    - *targets* (integer): number of times targeted for a pass
    - *receptions* (integer): number of times pass was received
    - *receiving\_touchdowns* (integer): number of times pass was caught for a touchdown
    - *receiving\_yards* (float): number of yards player received for
  + Passing features:
    - *passing\_touchdowns* (integers): number of times player threw a touchdown pass
    - *passing\_yards* (float): number of yards a player passed for
    - *passing\_attempts* (integer): number of times player attempted to pass
    - *passing\_completions* (integer): number of times passes were completed
    - *completion\_percentage* (float, value scale: 0 – 1.0): number of passing attempts divided by number of passing completions
    - *interceptions\_thrown* (integer): number of times an interception was thrown
  + Rushing features:
    - *rushing\_touchdowns* (integer): number of rushing touchdowns
    - *rushing\_yards* (float): number of yards player rushed for

performance in high stakes situations,

number of snaps played, fumbles committed, and opponent faced.