entities: horse, race, jockey, trainer, owner, track

Horse

* Name
* Total races
* Win rate
* Place rate
  + how often horse gets 1st or 2nd
* Show rate
  + how often horse gets 1st, 2nd, or 3rd
* Avg final position factor
  + position factor represents final position relative to # of horses in the race
  + [0-1], position factor = (final position - 1) / (total horses – 1)
  + can’t do final pos / total horses because that would lead to different values for wins with different horse counts
* standard dev of final position factor
* avg positions gained from start
  + positions gained from first available position marking, NOT from post position or program number
* standard dev of positions gained
* avg positions gained in last 2-3 legs
* avg positions gained in last leg
* median performance factor (hopefully beyers speed figure)
* most recent performance factor
* surface median performance factors
  + Dirt median performance factors
  + Turf median performance factors
  + AWT median performance factors
* distance factor
  + this will be a sort of weighted average of performance factors and distances, so this number should be close to the distance that the horse has performed the best at

Race

* date
* location
* race number
* horses
* race type
* surface
* weather
* temperature
* track state
* distance
* fractional times 1-6
* final time
* split time 1-6

Jockey

* name
* total races
* win, place, show rate
* avg and st dev final position factors
* median performance factor
* avg, st dev positions gained from start
* avg positions gained in last 2-3 legs
* avg positions gained in last leg\

Trainer

* name
* total races
* win, place, show rate
* median performance factor
* surface median performance factors
  + Dirt median performance factors
  + Turf median performance factors
  + AWT median performance factors

Owner

* name
* total races
* win, place, show rate

Track

* name
* track speed factor
* surfaces (dirt, turf, and/or AWT)