Cory Flynn

Final Project Writeup:

* 1. Statistic

The statistic I will produce for this project will be a numerical representation of individual players’ athleticism. To create this statistic, I will pull measurements from specific aspects of the game that strongly represent athleticism, or represent more it more so than baseball specific skills. These measurements will be combined through a formula to determine rankings in three main categories; strength, speed, and acrobatic ability. The three of these categories will be combined to produce an athletic ability above average metric (AAA).

Acrobatic ability will be used to represent the play making capabilities of players. For this metric, we will look at catch probabilities under 50% and 25% and calculate the ratio of catches made to opportunities. Also included in this metric will be arm strength measurements. This stat alone will attempt to put a number on game changing plays, like throwing out a player at home or robbing a home run.

The speed category, as broadcasted by the name, will rank players based on their speed which can influence the game in a number of ways. This metric will look at sprint speed as well as splits for the first five and ten feet of base running. The splits will be used to calculated explosiveness off the bag which help with stealing and fielding ability.

The strength category will provide a metric combining measurements of arm strength and batting power. Batting power will be calculated by looking at the exit velocity on well hit balls, namely barreled balls or balls hit with solid contact. Average exit velocity will be calculated and weighed, then added to a weight of the maximum exit velocity achieved.

* 1. Data Source

Statcast will be the data source of choice for this project. This database will be used because of its extensive statistical coverage and the fact that most other data sources are not open to for free use.

* 1. Presentation

The final form of my project will be a website. The website will present you with a search bar, and some top player names, allowing you to search for your intended player. Players will be presented on screen with four sliders, one for each category and one for overall athletic ability. Upon click of a slider, the formula for the calculation will be shown as well as the players statistics in relevant categories. A WAR gauge will also be shown next to my determined statistics to give a comparison to a more recognized statistic.