The new statistic that I am going to create to evaluate players is going to be of the same nature as slugging percentage, but it will be for evaluating pitchers rather than hitters. I am thinking I will calculate it the same way that slugging percentage is calculated for hitters, but for pitchers, the lower the score the better, similar to ERA. As of now, I am planning on making the weights for each hitting event the same as slugging percentage: doubles are weighted twice as much as singles, triples weighted three times as much, and home runs weighted four times as much. In addition to these stats though, I will also add earned runs into the statistic. I plan to weight earned runs relatively high as well (probably on the same level as home runs). I feel that this would be an important addition to a “slugging” percentage for pitchers. For example, a pitcher could allow a lot of base runners, but if those baserunners do not score, those events ultimately will not affect the outcome of the game. If this were to happen, a pitcher could have a high “slugging” percentage but could still be an effective pitcher, striking out many batters and getting wins. So, adding in earned runs should help account for this. I am also considering adding in strikeouts to this equation, as many of the dominant pitchers of today’s game put up great strikeout numbers. However, it is certainly possible to be a great pitcher and not have great strikeout numbers. Because of this, strikeouts will not be weighted as heavily as earned runs. One thing to note with strikeouts is that unlike any kind of hit and earned runs, more strikeouts is a positive thing. So while every other stat will increase a pitcher’s “slugging percentage”, strikeouts will help reduce the percentage, thus the weighting of strikeouts must be negative.

I am planning on obtaining most of the data for this statistic from our Retrosheet database. One main reason I will be using Retrosheet is because I will be able to compute how many of each type of hit a pitcher gives up. The Lahman database shows how many total hits a pitcher gave up, but it does not specify what type of hits. With Retrosheet, I will be able to look at all events and find each specific type of hit.

My plan for presenting the statistic is just through a simple web application. HTML and CSS are definitely not a strong suit of mine, so this will definitely be the most difficult part of project for me. But as a general layout, I plan on having a home page that describes the statistic and how it is calculated. Then I plan on having a drop down table of all the pitchers in the database. When the user selects a pitcher, that pitcher’s “slugging percentage” will come up on the page. For comparison, next to the “slugging percentage”, I could add in that pitcher’s ERA, wins and losses, innings pitched, and other benchmark statistics that are well known. Doing this could be used to show how the pitcher’s others stats compare to their “slugging percentage”.

I feel that this would be a good statistic for pitchers because it combines several aspects of pitching. Many stats for pitchers like ERA and strikeouts, two stats that are commonly looked at to compare pitchers, compare only one thing. I am hoping to create a statistic that helps tell more of the full story of a pitcher by combining several statistics into one.