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Introduction

The concept of pitch levels can be used to rank pitchers based on what kind of contact batters make against them. Are they inducing weak contact? Or are they giving up hard contact? In practice, MLB pitchers have been shown to follow patterns where good pitches lead to better performances than bad pitches overall. A pitcher's ability to throw strikes and avoid walks will always matter when it comes down to making quality pitches.

Dataset

PITCHER_KEY: Unique pitcher ID

B: If the pitch resulted in a ball

S: If the pitch resulted in a strike

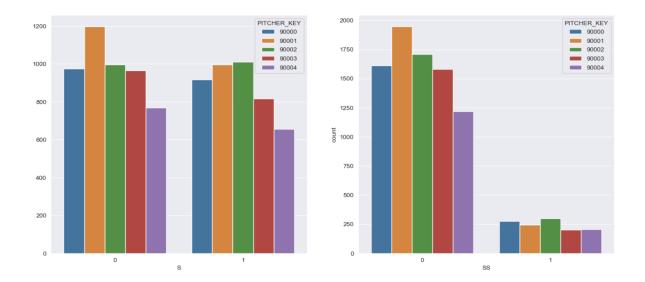
SS: If the pitch resulted in a swinging strike

CONTACT_QUALITY: If the pitch resulted in good contact quality for the batter (positive run value; e.g. hit events, home runs, scoring plays, etc), bad contact quality for the batter (negative run value; e.g. outs, fouls, etc), or if no contact was made at all (represented by NULL).

Analysis

Based on domain knowledge, we infer the following with respect to the data available to us:

- Ball is not desirable for a pitcher. (For a good pitcher, B = 0 is desirable).
- Strike is desirable for a pitcher. (For a good pitcher, 'S = 1' desirable)
- Swinging strike is good for a pitcher. (For a good pitcher, `SS = 1` desirable)
- Bad/Null contact quality desirable to pitchers. (For a good pitcher, `Contact quality = bad` desirable)



- Pitcher 90002 has delivered the most strikes and swinging strikes.
- Pitcher 90001's pitches have received the most bad quality contacts, but that is not necessarily more desirable than a strike.

When a pitcher is in the middle of a game, they always have one goal in mind: to strike out batters. It is important for pitchers to be able to pitch effectively as soon as they throw the ball. It is often said that you can't win a game without striking anyone out; even if the pitcher has good control over his pitches, it is still ideal to strike out a batter before the opposing team has gotten on base. Based on this logic, we can see that the best way to win a baseball game is to strike out as many batters as possible.

Pitcher ID	Rank
90002	1
90001	2
90000	3
90003	4
90004	5