

Discussion: Adding Strength Info and Extra Features

Problem right now:

In the data, the "strength" field only shows up for goals, not for shots. Even then, it doesn't tell us the exact numbers on the ice (like 5v4 or 5v3).

My idea for fixing this:

1. Track what's happening in the game

- Don't just look at shots and goals, also follow penalties and goalie pulls.
- This way we always know who's in the penalty box and if there's an extra attacker.

2. Count players on the ice

- Start with 6 players for each team (5 skaters + 1 goalie).
- If a player gets a penalty, subtract them.
- If a goalie is pulled, add an extra skater.

3. Write down the strength situation

- Compare home vs away players.
- Examples: 5v5, 5v4, 4v5, 6v5, 5v3, etc.
- Save it as a code like "5v4" so we can attach it to events.

4. Add this info to every event

- Not just goals but also shots, so we know the real game state for each play.

Extra Features We Could Add

1. Rebound shots

- Shots that come right after another shot.
- Rule: same team, within 3 seconds, and less than ~20 feet away.

2. Rush shots

- Shots taken quickly after entering the offensive zone.
- Rule: within 5 seconds of zone entry, no stoppages before the shot.

3. **High-danger shots**

- Shots from dangerous areas, like right in front of the net (the slot).
- Could also include tips/deflections or passes across the crease.