SLUGGER Stats Widget

Dayana Matamoros Ramos
Mentors: Anton Dahbura

JOHNS HOPKINS
WHITING SCHOOL of ENGINEERING

Introduction

The SLUGGER Stats Widget is a baseball analytics tool designed for coaches in the Atlantic League of Professional Baseball. It provides both season-long and game-by-game statistics for pitchers and hitters across all ten teams, enhanced with percentile-based "hot" and "cold" performance indicators.

The widget offers a fully customizable experience, allowing coaches to filter and select the exact metrics they want to analyze. In addition, coaches can generate clean, printable PDF reports of the displayed tables, making it easy to reference key insights in the dugout during games.

Objectives

The objective of the widget is to make it easier for coaches to access and interpret key information about opposing players, both in pregame preparation and throughout live gameplay.

Materials and Methods

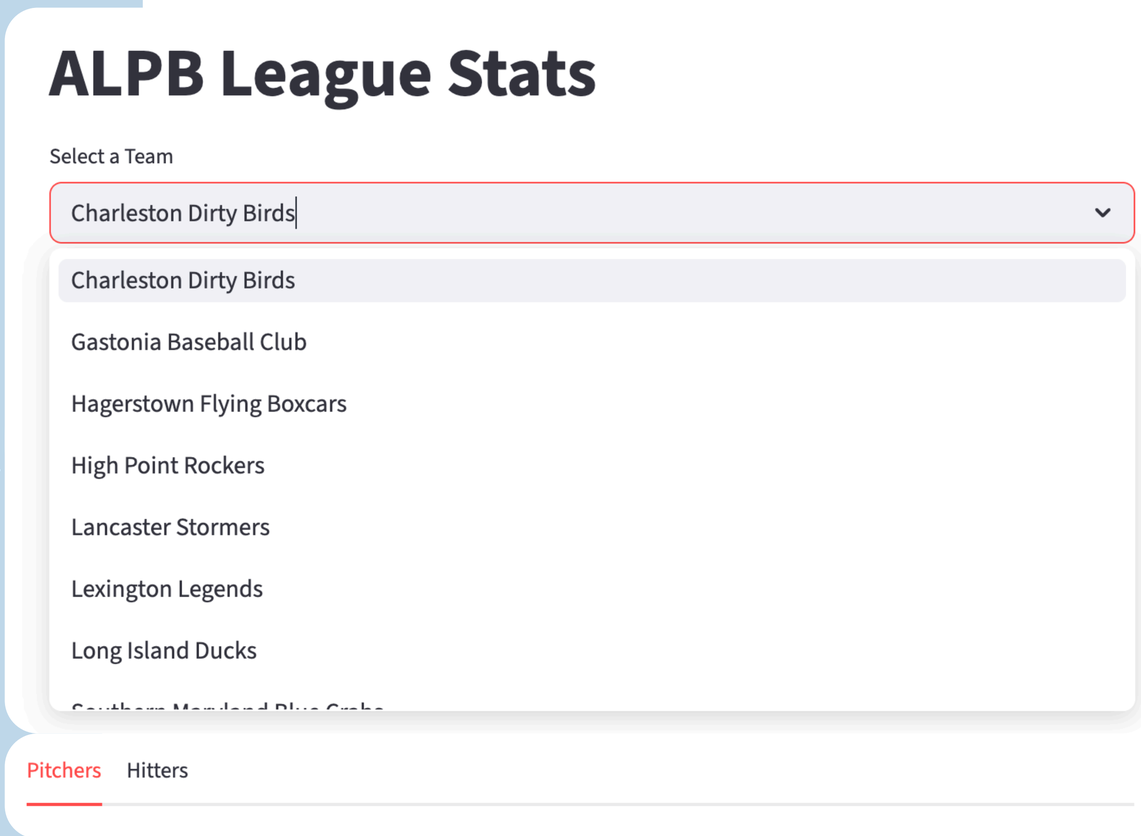
The widget pulls player performance data from the Pointstreak API. The statistics currently displayed come from ALPB's 2024-2025 season. As the 2026-2027 season begins, the widget will pull new performance data from iScore Sports. The pulled player statistics data was cleaned by filtering out missing values.

Percentile Rankings:

- Calculations are based on each player's five most recent games.
- Pitchers are evaluated relative to all pitchers over their last five games.
- Hitters are evaluated relative to all hitters over their last five games.
- Players are ranked within each statistical category.
- Players in the top 25th percentile are labeled "hot," while those in the bottom 25th percentile are labeled "cold."

The Widget

1 Choosing a Team
Coaches are first met with a dropdown menu featuring the league's ten teams.

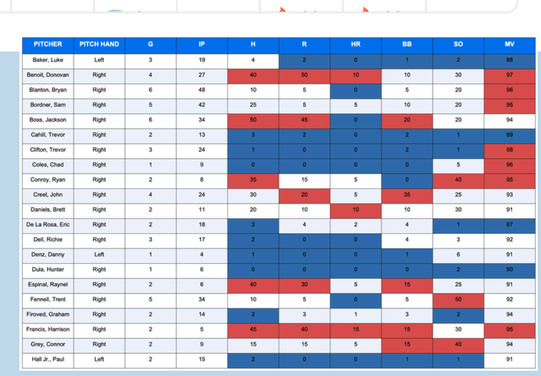


2 Selecting Pitchers vs. Hitters
Coaches can then select whether they want to view that team's pitching or hitting statistics

3 Filtering Statistics
Coaches can choose to view either a team's season overview or an individual player's game-by-game statistics, and then tailor the displayed information and metrics to their preferences.

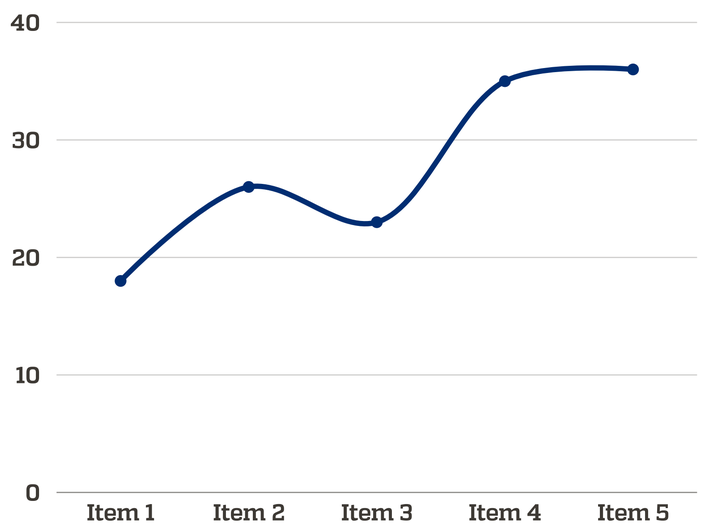
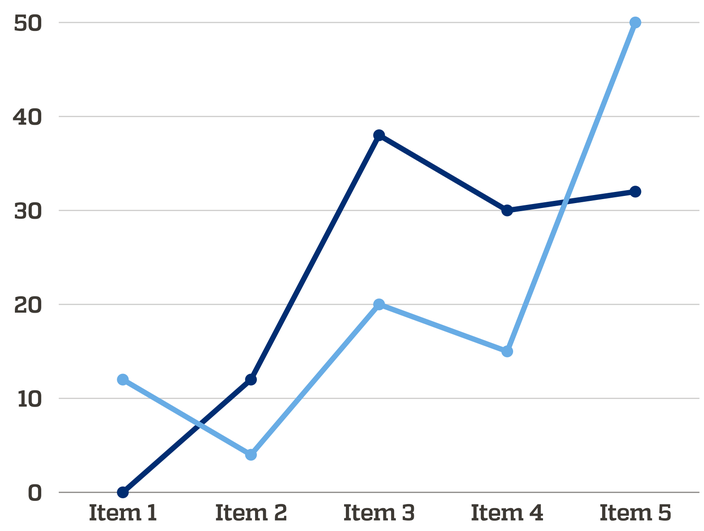
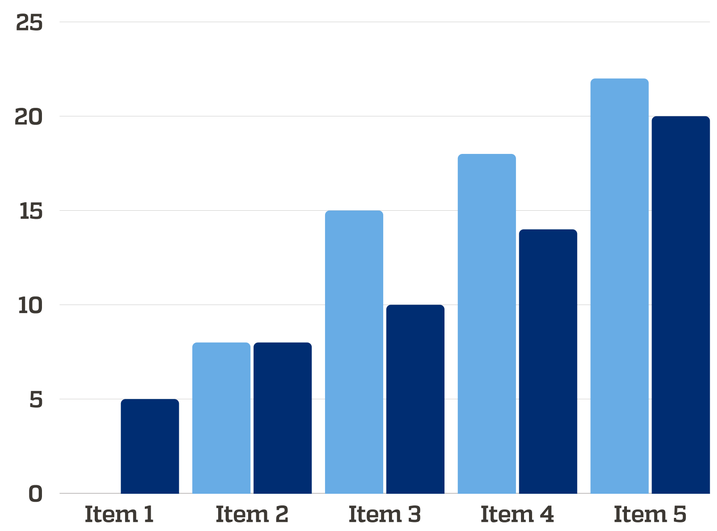
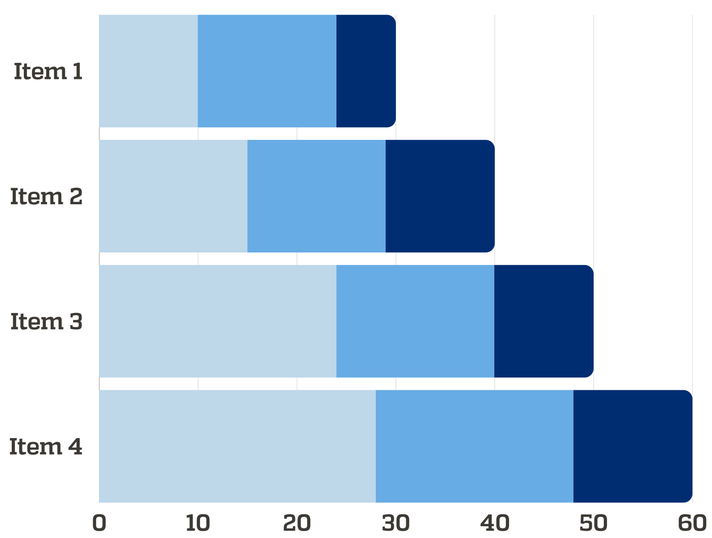
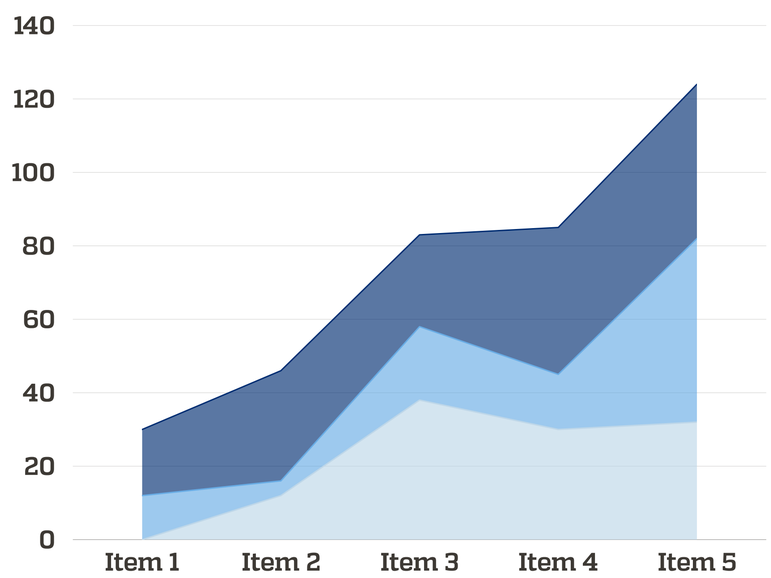
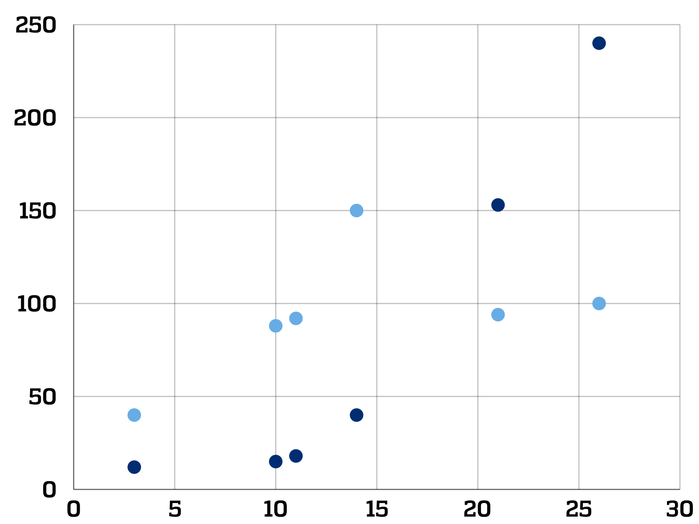
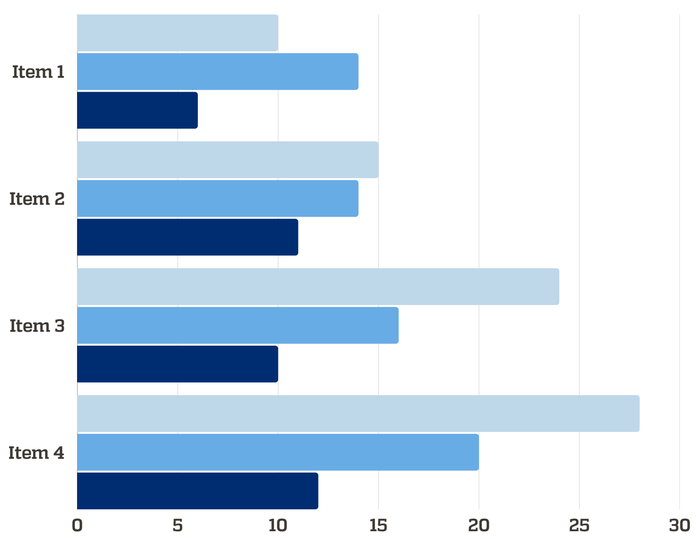
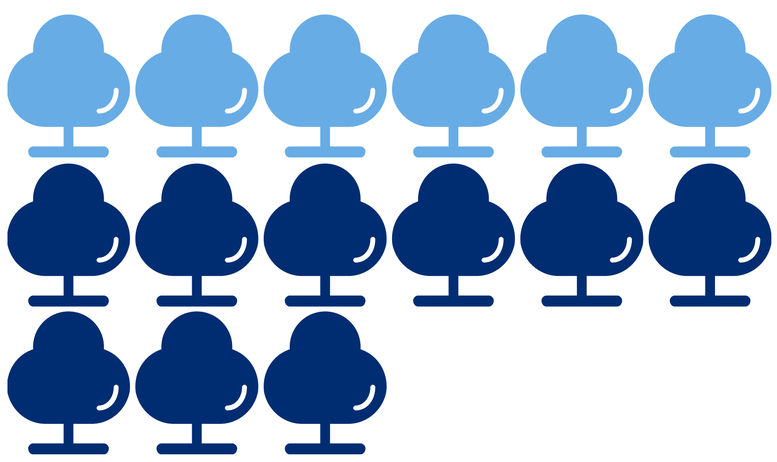
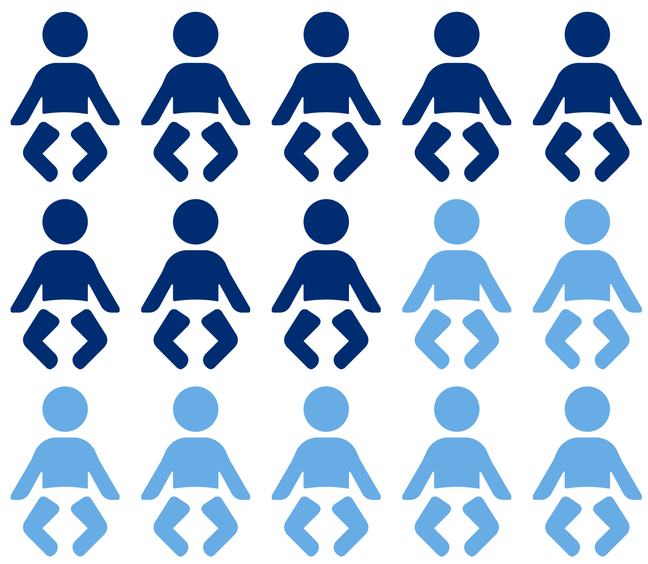
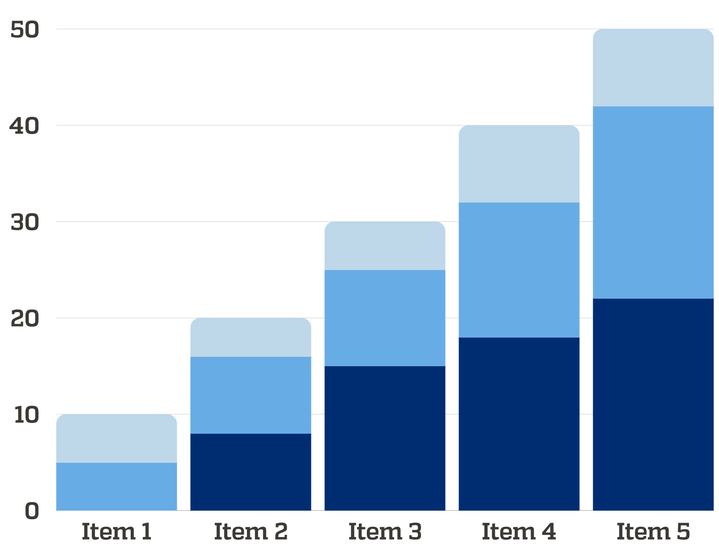
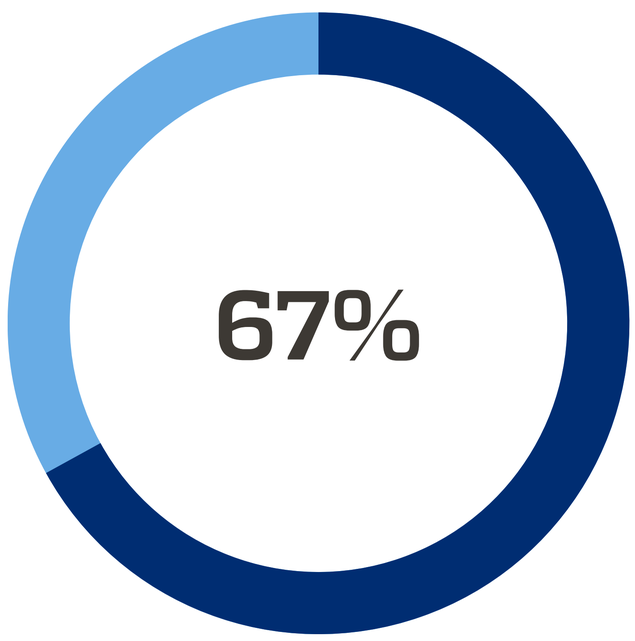
4 The Table
Based on these selections, coaches can view a table containing their chosen statistics and metrics, which can then be exported as a PDF, printed, and used in the dugout during games.

PITCHER	PITCH HAND	G	IP	H	R	HR	BB	SO	MV
Almeida, Adrian	Left	2	9	🔥 35	🔥 25	0	10	🔥 30	🔥 95
Bautista, Jorge	Right	2	7	🔥 35	🔥 35	🔥 15	20	25	🔥 97
Campbell, Maceo	Right	5	32	🔥 30	10	0	15	🔥 30	92
Cobb, Casey	Right	2	14	25	5	0	5	🔥 40	92
Diaz, Juan	Left	1	6	🧊 2	🧊 0	0	🧊 1	7	🧊 90
Fox, Mason	Right	2	15	🧊 0	🧊 0	0	🧊 0	🧊 2	🔥 95
Horvath, Nick	Left	3	15	🧊 4	4	1	🧊 0	🧊 0	94
Lebron, David	Right	2	7	10	🧊 0	0	🔥 25	🔥 45	🧊 91
Ledesma, Stevie	Right	2	10	25	10	🔥 5	20	25	93
Lemieux, Mack	Left	2	8	20	🔥 15	🔥 5	15	🔥 30	🧊 88



Conclusion

The SLUGGER Stats widget is an analytics tool built to support decision-making in game settings, where coaches need to access and analyze information constantly. To support individualized strategy deployment, the statistics and metrics within the tables are fully customizable, allowing each coach to tailor the data to their specific approach. The interface is designed for ease of use, ensuring that the desired information can be accessed, tailored, exported, and printed easily and smoothly before games. The centralization of metrics and statistics into a single table also eliminates the hassle of organizing the stacks of paper that ALPB coaches traditionally bring into the dugout.

Chart Gallery

Click on a chart below and click edit in the tool bar to customize with your data. You can also change the color scheme to match your poster content.