**Moneyball Excel Assignment**

Please use the following websites to find the data needed for your spreadsheet:

• Player Salary Database: <https://www.usatoday.com/sports/mlb/salaries/2017/player/all/>

• Player Performance Database: <http://www.baseball-almanac.com/players/ballplayer.shtml>

• Team Pitching Statistics: <http://www.espn.com/mlb/stats/team/_/stat/pitching>

• Team Attendance Statistics: <http://www.espn.com/mlb/attendance/_/year/2017>

• Team Standings: <http://www.espn.com/mlb/standings/_/season/2017>

• Team Average Ticket Prices (for the 2016 season): <https://www.vividseats.com/blog/mlb-ticket-prices-2016>

**Here is what to do:**

***Team Sheet:*** The first sheet will relate the team’s pitching effectiveness to winning percentage and revenue.

1. Data Entry (Title Headings)
   1. A1: team name
   2. B1: total number of wins
   3. C1: opponents’ OBP (On-Base Plus)
   4. D1: opponents’ SLG (Slugging Percentage)
   5. E1: leave blank for now
   6. F1: team ERA
   7. G1: total game attendance
   8. H1: average ticket price
   9. I1: calculate total team ticket revenue
2. For each team, record their opponents’ OBP (On-base Plus) and SLG (Slugging Percentage) from the team pitching database above, along with team earned run average (ERA), attendance, winning percentage, and the average team ticket price, from the appropriate links. (all links can be found above)

\*\*\*Hint: OBP and SLG can be found on the following link: <http://www.espn.com/mlb/stats/team/_/stat/batting/year/2017/seasontype/2>

1. The Moneyball Theory indicated that OBP was twice as important as SLG in producing runs and wins. Create a simple “index” of the offensive production of the opposing teams, 100\*[2\*OBP + SLG] (**this formula will go in the 5th column)**. Multiplying by 100 just makes the numbers easier to read and interpret.
2. Include a chart to showcase any section of data on your spread sheet.
   1. This chart should go on its own sheet and the tab should be labeled Team Chart.

***Player Sheet:*** The next sheet of your spreadsheet will relate pitcher salaries to pitcher effectiveness.

1. Choose 20 different free agent pitchers randomly. Please make sure these pitchers are from at least 10 different teams.
2. Data Entry
   1. A1: Player name
   2. B1: Player ERA
   3. C1: Player 2017 Salary
3. Obtain each pitcher’s 2017 ERA from the performance database above.
4. Obtain those players’ 2017 salaries from the salary database.
5. Include a chart to showcase any section of data on your spread sheet.
   1. This chart should go on its own sheet and the tab should be labeled Player Chart.

***Entire Spreadsheet:***

Please include the following items somewhere on your spreadsheet.

1. Change the tab colors to be the same for the Team Tabs and the same for the Player Tabs.
2. Include a header with your name, class hour, and date.
3. Include titles for your charts.
4. Use 2 different styles of charts for your Player and Team tabs.
5. Change the font and design of your spreadsheets.
6. Enter a total style cell on one of the spreadsheets.
7. Enter a formula for average pitcher salary.
8. Enter a formula for average attendance of all teams.
9. Enter a formula to identify the minimum ticket price and the maximum ticket price.
10. Enter a formula to identify the minimum, maximum, and average number of wins.
11. Enter 1 additional formula and highlight this formula result in red.
12. Demonstrate 5 additional tools in Excel somewhere on your spreadsheets.
    1. Explain what 5 tools you used somewhere on the spreadsheets.

***Drawing Conclusions:***

What conclusions can you make from the data you entered? Which of your pitchers on your spreadsheet are the most valuable for your team?