AUTO FANTASY MANAGER IN PROGRESS

The **Auto Fantasy Manager,** automates the process of making streaming pickups in order to maximize points, and give your fantasy team the best chance at winning each week. This process follows the steps listed below:
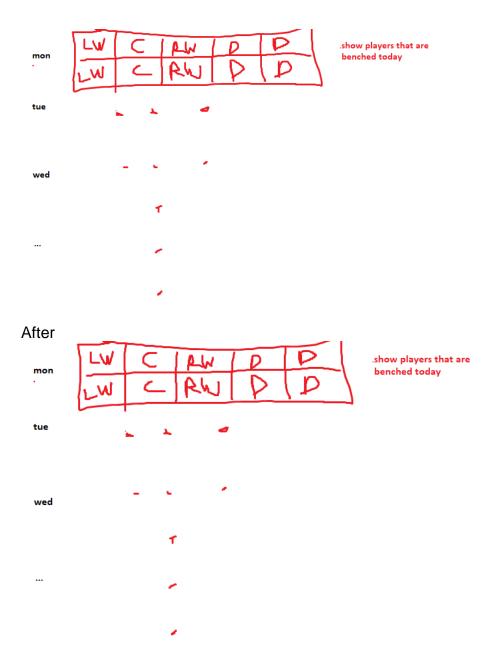
- Download data specific to your fantasy leagues using the Yahoo Fantasy Sports API. Ex. Your current roster, free agent players, player statistics
- Assign a rating to players based on custom criteria
- Start your active roster based on highest ratings
- Determine the 4 best player pickups to make. Create a schedule for when the pickups should be made. Best pickups are defined by:
    - First: Maximizing GP by your roster
    - Tie breaker: Highest rated available free agent
- Automatically add/drop players on the dates set in the schedule using the Yahoo Fantasy Sports API

Context
A common format in fantasy sports is that everyday you can only start a certain number of players at each position each day. In my hockey fantasy league, that is: 2 C, 2 LW, 2 RW, 4 D. If these slots are full you may have players that are playing, but not actually contributing points to your team, since they must be placed on the bench. Because of this it is advantageous to have players from teams that play on different days of the week, in order to avoid losing games to the bench.

Although most of the players on your team will be too valuable to drop. The bottom tier players on your team are usually replaceable, and can be exchanged for free agents each week through streaming pickups. Streaming pickups may target hot streaks, favourable matchups, or other factors, but in **NAME PROJECT** I focused on minimizing benched players, and maximizing GP.

Graphic example of lineup before and after streaming pickups decided by the program.
Before

LW	C	RW	D	D
LW	C	RW	D	D

mon .show players that are benched today

tue

wed

...

After

LW	C	RW	D	D
LW	C	RW	D	D

mon .show players that are benched today

tue

wed

...

In this example week the GP were increased by XX, and the games lost to the bench were decreased by XX. This resulted in an addition of +X goals, +X assists… and overall change the result of my week from a 5-7 Loss to a 7-5 Win.

Testing if i would have run this program over the entire course of the season this would have increased my stats by +X GP, +X G, …. Overall it would have improved my season record from X-Y-Z to X-Y-Z.

This was a really fun project to work on and theres still a lot of features that I would like to look into adding such as:
- Using Bet365 API to project points and rankings based on player props
- Use Yahoo Fantasy Matchup Score data to make smarter decisions.

- o (Ex. If your matchup is close in SOG prioritize pickups and start active roster based on players with high SOG projections)
- Improve pickup decision algorithm
  - o Currently is a greedy algorithm making the best pickup one at a time
  - o Not guaranteed that the best combination of 4 pickups will contain the first best pickup