DFS Roster Builder

## Intro

The DFS roster builder is a program that fully automates competing in DFS completions. This document outlines the structure and functionality of the program. Where possible, the current status and planned development of features not yet built are outlined.

## Program Overview

The DFS roster builder program scrapes data from various sources, builds a player universe of available players for daily fantasy contests, models the expected fantasy points for each player in the universe, finds the optimal roster given the constraints of the contest and enters the contest based on historical winning contest criteria. The below program flow diagram outlines the algorithmic steps of the program. Note that this is an outline and not a comprehensive list of every step performed by the program.

Legend:

**Function**

**Parameter**

**Output**

Sudo-code

**Class**

In Dev

**update\_model\_interval** – as input parameters might change during the day (ie weather,lineups), this is the duration in minutes between re-modelling a lineup.  
ex. 30

In Test

In Prod

**run\_program**

**max\_bet** – the daily maximum bet the program will enter  
ex. 100

**sport\_list** – a list of sports to build rosters and enter contests for  
ex. [“MLB”,”NBA”]

**sport\_name**

**Check\_db\_update** – check db for last hist date, compare yesterday, if same return True elseFalse

**False, last\_date**

**True, last\_date**

**True**

**False**

**True**

**Sport**

**last\_date**

**store=True**

**update\_daily\_game\_data**

**date**

**Sport.events = XMLStats.main(‘events’,sport\_name,date)**

for date in dates(last\_date,yesterday)

**event\_dict\_list**ex. [{event\_id:1234,event\_data:ARI}]

**date**

**parse\_event\_data**

**date**

**mlb\_starting\_lineups**

**team\_lineup\_dict**ex. {team\_abr:[gametime,weather,lineup]}  
player\_lineup\_dict  
ex. {player:[gametime,weather,team\_abr]}

**Insert\_mysql**

**data,columns**

**sport\_list** – a list of sports to build rosters and enter contests for  
ex. [“MLB”,”NBA”]

**Check\_db\_update –**check last date in db, compare to yesterdays date, return True is same else False

**max\_bet** – the daily maximum bet the program will enter  
ex. 100