# Capstone Project

## Overview

A fantasy football team is usually made up of 1 quarterback, 2 running backs and 2 wide receivers. Their statistics are gathered for each game and summed toward a single total for each player in the fantasy football league. A fantasy football league usually includes 5 to 10 people picking players prior to a season and then measuring their performance over a season. The players are selected during a draft when each member of the league picks one player per round for up to 10 rounds. The order of picking is determined in some manner, such as drawing a number from a hat, and the order of picking goes from first to last for odd number rounds and last to first on even number rounds.

Questions

Can you predict if a currently playing American football player would be a good pick for a fantasy football team?

Can you develop a general profile of how a player develops over their career, such as showing improvement over the early part of their career, a level of competence, and then a decline as they get older? Could this profile be used to help predict future performance of a player?

Can the data help build the mix of players that would give the greatest chance for success?

## Clients

The output could be available as an openly available tool for anyone with an interest in exploring the results.

## Data

Wanting consistent data source, the footballdb.com website was chosen because it not only had data for current players, but also stored data for all players from 1997 to the present. Initially the data was yearly data by player from 2011 through 2016. It was decided this was not going allow sufficient flexibility and detail to investigate the player’s performance over their career.

Game level data by player did not exist in any single repository and it was impractical to try and manually gather it, so there was a need to develop code that could scrape the data from the website. The code is available on Github at the following URL:

[Get Player Data](https://github.com/JohnPHogan/FantasyFootball)

This site contains a README entry that explains the basic functionality of the code. With this code, roughly 35,000 rows of data have been extracted from the footballdb.com website and stored in CSV files.

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