**Group Project Proposal**

**Data Programming in R**

**Group Members**

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**The Situation**

We’re going to analyze high school football recruiting rankings and college football statistics for offensive skills players from 2006 to 2014 to answer the question, “Do expert grades for high school football recruits correlate into success at the collegiate level?” We are going to import and combine recruit rankings from ESPN with college season stats from cfbstats.com to determine if there is a correlation between the two. We are focusing on offensive skill position players because that is a group that lends itself to accurately quantifying season performance. We will be using a standard fantasy style scoring system, adapted from ESPN’s fantasy football site ([http://games.espn.com/ffl/resources/help/contentw?name=scoring-formats](http://games.espn.com/ffl/resources/help/content?name=scoring-formats)), to normalize their performance. The result of our analysis will be multiple charts and graphs comparing correlations across seasons and positions, as well as other analysis as needed.

**The Data**

Our source of data for the college football statistics is cfbtstats.com. It is located in about 17 csv files per season, and we will use R to import, merge, and clean the files. Our source of data for the high school recruit rankings is <http://www.espn.com/college-sports/football/recruiting/databaseresults/_/sportid/24/class/2006/sort/grade/order/true>, with the year ‘2006’ being replaced for each year we collect data. For our analysis we will be focusing on recruits from 2006 through 2014 as we will also have corresponding season stats for those recruits. We will be using R to import the data directly from ESPN into a data frame. We will then clean the data, trim it to only offensive skill players, and merge it with the college football stats that we have from the other data source. We will also use R to replace any NR (not ranked) grades with a 49, as the grades only go as low as 50.

**The Question**

Do expert grades for high school football recruits correlate into success at the collegiate level? Our guess is that the grades will accurately predict success at the collegiate level for most athletes, with an acceptable number of outliers to be expected.