Alexander Pacheco - AJP20C

Nathan Conway - NAC20A

Thomas Vogt - TDV19

Stage Two Report

The domain of our application will be a college wide receiver that is expected to be picked during the following year's NFL Draft. What we want to focus on is a database that makes many statistics for each wide receiver easily accessible to the public. Our application will include a mix of basic and advanced statistics that are focused on wide receivers and their production throughout their entire college career. Our application will be useful to the public as some of the basic statistics are not usually shown all together on common statistical websites, and most of the advanced statistics aren’t even shown on most websites and can even be hidden behind paywalls. Our hope with this database is that people can use it as a “one stop shop” to do all their statistical research on upcoming wide receiver draft classes. Some similar web applications include “ESPN, NCAA, and Sports-Reference”. These websites solely focus on wide receivers yards/touchdowns and their per game splits for these statistics. For our application we are expecting to contain about 15 different attributes focused on wide receivers. We are planning on having 3 entities in our database and these include Player, Position, and Team. These entities will then have specific attributes attached to them which you can find in our ER Diagram below. Some examples of basic attributes include Yards, Receiving Touchdowns, Name, Age, Height, Weight, YPR (yards per reception), Team Name, and Conference Name which we will find from NCAA.com. The first advanced attribute we will contain is “RAS” (Relative Athletic Score) which compares their physical measurements from the NFL combine to previous players from their position group back until 2000 and gives them a relative score based on how they compare (<https://ras.football/>). Next is “3rd Down Usage Rating” where a number is given based on the Wide Receivers efficiency to get open on a must-pass down and gain yards on this play (<https://collegefootballdata.com>). Finally we have “Dominator Rating” which considers how dominant a receiver is inside of their own offense, and “Breakout Age” which is how old the receiver is when they have a 20% dominator rating for the first time. Our basic functions will allow the user to add/search/delete/update any of these statistics to their liking. As for our advanced function we hope to develop our own formula to rank these wide receivers in order of how productive they will be their rookie year in the NFL focusing solely on fantasy football. During their rookie year these players will gain “fantasy points” for every catch, yard, and touchdown they have. We will try to assign rankings to each receiver using a formula made up of all the statistics in our database, so our users will have extra resources to help win their own fantasy football league. There are minimal fantasy football ranking predictions based solely on statistics available especially including some of our advanced statistics. These will allow our users to combine this with their own film research and opinions to formulate the most accurate rankings possible.