**Peer Evaluation Form for Group Work**

Your name \_\_\_Sean Kennedy\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Write the name of each of your group members in a separate column. For each person, indicate the extent to which you agree with the statement on the left, using a scale of 1-4 (1=Strongly Fail; 2=Fail; 3=Pass; 4=Great Job!). Depending on the results from everyone, additional details may be asked.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Evaluation Criteria | Yourself: | Group member 1:  Sachin Chavan | Group member 2:  Kevin Thompson | Group member 3: |
| Attended group meetings regularly and arrives on time. | 4 | 4 | 4 |  |
| Completes group assignments on time. | 2 | 4 | 4 |  |
| Prepares work in a quality manner. | 4 | 4 | 4 |  |
| Demonstrates a cooperative and supportive attitude. | 4 | 4 | 4 |  |
| TOTALS | 14 | 16 | 16 |  |

\*The professor has the ultimate call on all final decisions (reduction of grade or failing of project.)

Feedback on team dynamics:

1. How effectively did your group work?

I thought we did an effective job of collaborating and cooperating together (Zoom/Trello/Github) - up until the end of the project where we lost track of our goal and focused too much on increasing the R-squared in a problem that turned out to be very difficult to solve.

In the end, a simple solution was best – but it took more heavy lifting than anticipated in data wrangling and manipulating. As the de-facto team leader, I take responsibility for the delay in producing meaningful results. Ultimately, I think we did an awesome job and learned a ton of new things but we could’ve planned better to avoid pitfalls – again on me.

Sachin was instrumental in spinning up some nice visuals and assisting with data cleanup and Kevin showed me some new things about working in the R environment than I had previously been unaware of – using a makefile, for example. A great idea in principle, but it left me longing for my home turf of python dev and the joys of virtual environments. I spent a lot of effort getting the build process to work in R-studio. Not wasted effort – since I’ve enjoyed learning the Tidyverse enough to start using it at work (despite my love for all things pandas/python), but wasted time nonetheless (since I ended up porting all the code I had written back into one file so as to get it to Knit properly….)

I developed a new appreciation for ggplot() and now prefer it to Matplotlib (still on equal footing with Seaborn 😊)

I found the most rewarding part of our research to be the fact that our custom metrics performed well statistically. Our quantification of passing defense was effective at discerning tough passing matchups, our simple stat of whether a QB had thrown for four TDs or more was also effective at predicting upside potential and was arrived at through investigating interactions. Doing more of this analysis could only lead to better results.

Would’ve loved to run this as a series of QB specific models – I actually had the inspiration to try and work on this problem from a podcast I listened to on building a model for each player and a more panel-oriented model and taking the weighted average of the predictions to come up with a better approximation for QB prowess. Obviously that model had a lot more features, but I’m sure there were some that were similar to ours. We have the dataset to run some more matchup specific data – which I think would’ve been awesome (passes thrown to WRs/RB/TE splits, bye week effects, even weather would’ve been great) – but there was just not enough time for that.

I can think of 50-60 metrics off the top of my head that we could’ve added to make our model better and increase R-squared. But ultimately, there are waaayyyyyyy too many variables in this problem for us to handle in the time required to make a significant impact on our R^2 and prediction accuracy. That’s also on me – it was my bright idea to pick the problem.

All in all – it was great working with the team and I think everyone learned something – at least I know I did. I have tons more experience coding in R than I ever did before.

I know that Sachin didn’t know anything about American football before this project and I hope that he becomes a fan – as long as he’s not a Cowboy fan.

1. Were the behaviors of any of your team members particularly valuable or detrimental to the team completing their goals? Explain.

Covered in 1) – but more than happy to discuss further if required.

A good history of our project – and pretty good proof that we have been working on it for quite a while, diligently, can be found on GitHub (which I kinda had to teach to some team members as we went along…….. 😊)

<https://github.com/ethereum-ninja/stats_2_project_1/tree/sk/temp>

(note that it’s in a temp branch….. master wasn’t in a good place and I was too tired/busy to fix it… again)