**Homework Team Orange 2**

**Minutes: September 12, 2019 -2:30pm**

1. Visualizations (Linear Algebra & Time Series)
   1. **Time Series**
      1. Consistent Labels across 4 graphs
         1. Do it manually for STL plot
   2. **Linear Algebra**

Change colors

Label the index in the ggplot

1. Proofreading Linear Algebra email and submit

Adjust graphs, submit today

1. Logistic Regression HW2
   1. *Go through the steps together* 
      1. Use the new training dataset
      2. Check missing values again for each variable
      3. Separation concerns?
   2. *Assign pairs: Evan 🡪 Grant 🡪 Sufyan 🡪 Cathy 🡪 Price 🡪 Evan*
   3. *Look at the following bullet points (by tomorrow)*
      1. Evan will **impute and create a new dataset**
      2. Run **backward** selection logistic regression model
         1. Sufyan & Price: do all variables
         2. Cathy, Grant, Cathy: do all significant variables
      3. Run **forward** selection to find any interactions
2. Time Series Outline – Questions?
   1. Executive Summary (Sufyan) – “give context”
      1. Look online (some stats: how’s wake county doing) – context
      2. BLUF: the model we choose is about 79% accurate in predicting
   2. Results (Cathy)
      1. Results
         1. Which model we chose
         2. MAE & MAPE (make sure how to interpret)
      2. Time plot (actual vs. prediction) & detailed interpretation (eg: trend, spikes, how the prediction goes)
   3. Recommendations (Price)
      1. Do more research the cause of irregularities in the data
      2. Refer back to graph on the result section to show why
      3. How we aggregate the data *(depends on future questions we try to answer)*
   4. Methodology & Analysis (Evan)
      1. Dataset (we confirm that the data is normally distributed)
      2. STL decomposition graphs & interpretation (**how** we choose the model)
      3. Do a table for accuracy statistics for all 5 models (Appendix)
   5. Conclusion & Visualizations (Grant)
      1. Next step: random walk/ ARIMA (refine our model) since we do see irregularities in seasonality
   6. **Appendix**: a table for accuracy statistics for all 5 models (Appendix)
3. Before Next Meeting (Thursday 09/13 1:30pm)
   1. Logistic Regression HW2
      1. How’s paired check-in for 1st bullet
      2. Go through individual work of last night
         1. Find out final variables & possible interactions
   2. Confirm when to meet over the weekend