1. Who is it built for?
   1. I will be taking the position as a ‘Crop Yield Analyst’ for an Agriculture Company and present my findings to leadership that would be involved in strategic decision-making. These individuals might be a Farm Operations Manager, a Chief Agronomist, a Sustainability Manager, or am Agricultural Science Manager. I am essentially presenting my findings to leadership in a toned down analysis so they will be informed to make the proper business decisions.
2. Why is it being built?
   1. I am building this dashboard to focus on the key metrics of crop yield to save time and allow leadership to concentrate on strategic decisions. I want the dashboard to be an interactive exploration so leaders can interact with the data to allow flexibility for exploring specific areas of interest, leading to more informed decision-making.
3. What will it consist of?
   1. Story Point 1 – Introduction:
      1. Introduce the data set and how its use is for modeling crop yield based on factors such as rainfall, soil type, crop and so on
      2. Main object of interest: what contributes the most to crop yield?
      3. Key variables: summarize the primary metrics
      4. Quality and limitations: discuss synthetic data generation and assumptions tied to that (move to end)
   2. Story Point 2 – Exploratory Analysis:
      1. Overview of data distribution
         1. interactive
      2. Review the correlation heatmap
         1. Show that rainfall has the strongest correlation
      3. Hypothesis
      4. Maps of different variables
   3. Story Point 3 – Linear Regression:
      1. Yield vs Rainfall
      2. Scatterplot
      3. Regression line
      4. Explanation of R2 score
      5. Explanation of slope
      6. Note any limitations
   4. Story Point 4 – Cluster Analysis:
      1. Yield vs Rainfall cluster
      2. Discuss clusters created
      3. Have a box and whisker of fertilizer and irrigation used in the pink (low) rainfall section
   5. Story Point 5 – Final Results and Recommendations
4. When will it be used?
   1. It will be used as a one-time presentation to show the importance of rainfall on crop yield and how to increase the yield in low rainfall areas
5. Where
   1. Tableau Public