Time guideline: 12 minutes + 3-5 min Q&A

| **#** | **Title** | **Content** | **Slide Designer/ Speaker** | **Time** |
| --- | --- | --- | --- | --- |
| 1 | Title |  | Uriel |  |
| ~~2~~ | ~~Team Intro~~ |  | ~~(All)~~ |  |
| 3 | Problem/Purpose |  | Uriel |  |
| 4 | Dataset | * Most important features and what they mean * What can we learn from it * Possible paths we can take | Francisco |  |
| 5 | Research | * Justification for taking the customer’s perspective * Standard methods for talking about delays (arrival vs departure, what counts as a delay, etc) | Zac |  |
| 6 | Preprocessing | * Data cleaning and visualization of choices * Show graphs and number that explain certain correlation * Shrinking the dataset | Francisco |  |
| 7 | Model accuracy table | * Naïve Rule/baseline | Uriel |  |
| 8 | Methods that worked best & worst | * MSE for KNN: (01: 0.18834), (15+: 1682.78), (15+ reclassified as 0/1: 0.35) * MSE for Boosting: (01: 0.13257), (15+: 1304.73) * MSE for LinReg: (01: 0.13753), (15+: 1337.76) * MSE for NN: (01: 0.13722), (15+: 1312.57), (15+ reclassified as 0/1: 0.25) * MSE for RF (01: 0.1415), (15+: 1323.63), (15+ reclassified as 0/1: 0.31) | Albert |  |
| 9 | Challenges faced | * Difficult to predict higher delays * Difficult to choose best params for neural nets * Dataset excludes variables that may significantly impact delays (inbound flight data, if maintenance needed, airport construction/closures) * Large dataset computationally demanding (shrunk set) * RF was computationally expensive (shrink tree depth) * Boosting couldn't add categorical (changed to light gpm library) * Categorical variables couldnt be included (one hot encoded airlines, dropped others) * Were using actual elapsed time rather than predicted (leaky variables) - switched to CRM (estimated) | Zac |  |
| 10 | Conclusion | * Future improvements | Vivian |  |
| 11 | Thank you/Questions? |  | Uriel |  |