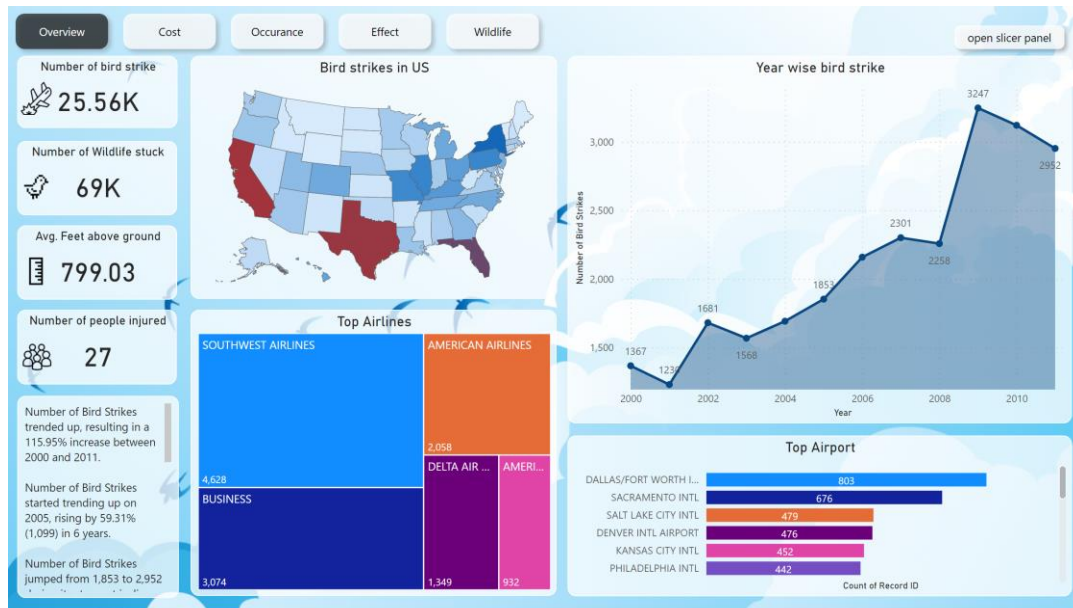# Wireframe Document

Data Visualization of Bird Strikes between 2000-2011

Sudarshan Chauhan

As per the problem statement, we have divided analysis into five sections: -

1. Overview

Contents:
- Cards:
  - Number of bird strikes
  - Number of wildlife stuck
  - Avg. Altitude (Feet above the ground)
  - Number of people injured
- Data insights
- Map of US states showing bird strikes
- Top Airline by number of bird strike
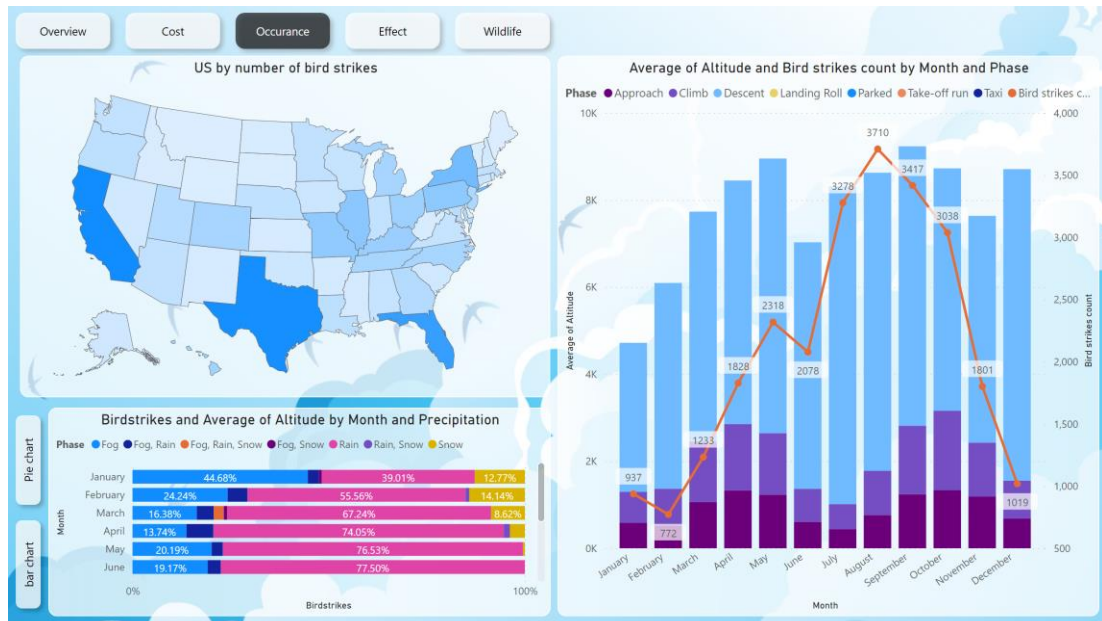- Number of bird-strikes vs time
- Top Airports by bird strikes

2. Cost

Contents:
- Cost vs time
- Data insights
- Cost pie chart by Aircraft size
- Decomposition tree showing high-cost path
- Relationship between cost and number of bird strikes for all states
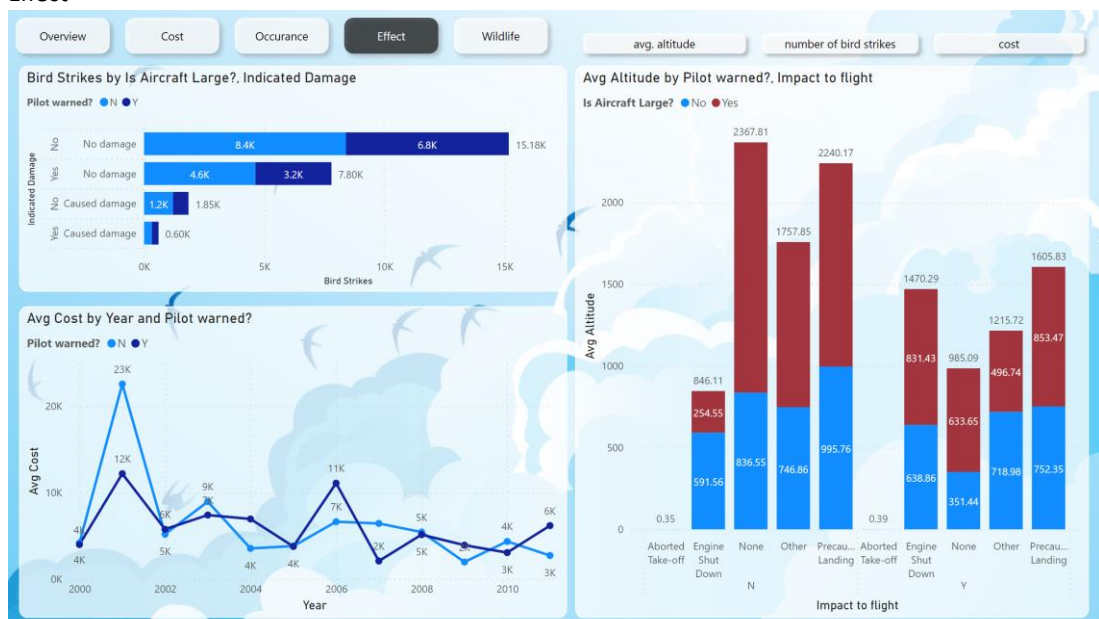- Top 5 states ranking by cost vs time

3. Occurrence

Contents:
- US map colour saturated by number of bird strikes and custom tool tip with additional info
- Pie chart of Bird Strikes by sky precipitation
- 100% stacked bar chart showing Bird strikes by sky precipitation through time
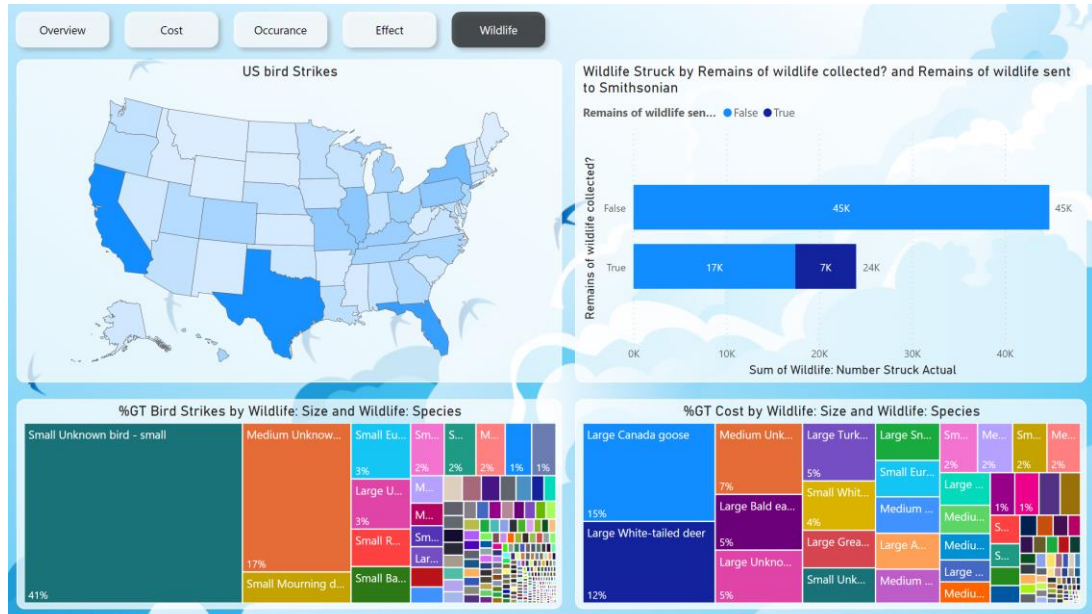- Average altitude during a strike at different phase of flight and bird strike monthly pattern

4. Effect

Content:
- Bar chart showing effect on damage by warning the pilot on large and small aircrafts
- Line chart comparing average of Cost over time between the cases were pilot was warned
- Bar chart showing impact to flight considering size of airplane and warning of the strike and altitude at the time of the strike
- Bar chart showing impact to flight considering size of airplane and warning of the strike and percentage share of each of the different cases
- Bar chart showing impact to flight considering size of airplane and warning of the strike and damage it cost to the aircraft

5. Wildlife

Content:
- US map colour saturated by number of bird-strikes and custom tool tip with additional info
- Bar graph showing number of wildlife structed and if their remains where sent to museum
- Tree chart showing which are the top wild life by number of cases
- Tree chart showing which are the top wild life by amount of damage cost to the aircraft