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Course : DSC 640 – x

**Dashboard**

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**The Scenario/ Business Problem**

Due to recent unfortunate airline crashes, the media has been promoting statistics stating air is no longer a safe way to travel. The news and media outlets have been bombarding the public with reports and figures about the trends of airline safety and that things are not looking good. What was previously thought as the safest way to travel, especially when compared to automobiles, is now being presented as one of the most dangerous to the public.

**Objective**

Explore available data to present facts /trends to present airline’s side of the story.

**Design Tool**

I will be using Tableau with excel data source to present various facts through visualization

**Data Source**

To proceed with my study, I have referred “**Aviation Safety**” as core data source which is found in below link:

<https://aviation-safety.net/statistics/>

I also used supplemental data to look at existing flight statistics in US. Supplemental source is available in following link:

<https://www.transtats.bts.gov/Data_Elements.aspx?Data=1>

**Data Exploration**

In the process of exploration, I began with looking into following trends:

1. Existing Flight Volume (US Region) : exploring what is the flight volume trend to establish a correlation with volume of flights and accidents.
2. Flight Accidents By Nature: Primarily domestic vs International flights aong with other modes like “charter”, “Ferry” or “Training” etc.
3. Flight Accidents By Phase: En Route is highest followed by approach besides landing, take off and taxi
4. Airline Fatalities: Significant spikes in year 2005 with gradual decrease but 2010 , 2014 and 2018 still have significant volume of fatalities.
5. Worst Accidents in Airline History: Spain has biggest one (close to 2K) in year 1977. Recent 5 years have an average 200 fatalities.
6. Revenue Stream (US Region) : Sample of US region alone doesn’t show very encouraging revenue with lot of volatility especially 2020 due to COVID hit -30 M. There are similar negative streams with more than -20M in year 2004 and 2008